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Special Report

Rethinking Operations for a Two-speed World

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Special Report

Rethinking Operations for a Two-speed World

Global companies face a radically altered business landscape following the Great Recession, most notably a slowdown in world economic growth compared to levels predating the global financial crisis. What's more, the growth pattern is uneven. A "two-speed" world is emerging, characterized by slow growth in the developed countries of Europe, North America and Japan, and faster growth in rapidly developing economies such as China, India and Brazil. To succeed in this "new normal," companies must develop different strategies, new products, and innovative, low-cost operating models. This special report explores how companies must re-think every aspect of their operations to compete in two fundamentally different environments.

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Competing successfully in this new decade requires companies to meet the needs of both low-growth and high-growth markets while differentiating themselves from foreign and local competitors. Building a low-cost global production network that taps into the strengths of each geographical region is critical. Also crucial to success: innovating products, processes and business models to increase margins wherever possible – and to gain market share. Key decisions will involve looking at profit vs. growth, best price vs. best value, and new rewards systems.

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Whether a company operates in a high-growth or slow-growth market, lean products and systems are a must. They allow companies in low-growth markets to respond quickly to customer needs, and in high-growth markets they keep costs down while supporting customization and rapid increases in output when needed. Another step up in efficiency: shared production platforms that allow high-end and low-end products to be built at the same facility – sometimes even on the same assembly line. But all of these considerations – including geographic location and labor costs – must be balanced against logistical costs and risks. Customers want lower cost and quick delivery.

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Companies must create adaptable supply chains in a two-speed world that work for both slow- and fast-growing markets – without sacrificing sales volumes or margins. In high-growth emerging economies, this often means creating high volumes of low-cost – and sometimes low-margin – products, and distributing them at the lowest possible cost. In low-growth developed economies, supply chains must enhance efforts to defend or steal market share through better and faster innovation, and exceptional service.

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It takes a lower price or a better mousetrap to win over potential customers. This is especially true in the developed world, but to gain a foothold in rapidly growing economies, successful multinationals increasingly will have to unleash new products and services while paying strict attention to costs. "We need better products, faster, at a lower cost," says Joe Manget, global leader of The Boston Consulting Group's operations practice. In a break with the past, many ideas for these new products and services now originate in developing countries. Watch for more successful global companies to take this approach.

Strategies for a Two-speed World

Manufacturers from developed nations have been capitalizing on the low labor costs of emerging economies for a long time. It's a familiar story: Product design happens in, say, the United States, and manufacturing gets cranked out in Southeast Asia. Then the products are shipped to the developed world for final sale. But in recent years a new trend has emerged. Many of these same companies are now moving R&D, distribution, and sales to China, India and elsewhere in the developing world because they see market opportunities where the GDP is growing dramatically and household incomes are on the rise. For example:

- GE CEO Jeffrey Immelt said recently that he expects 60% of company revenue growth to come from emerging markets over the next 10 years.
- Big Pharma expects about 70% of future business to flow from developing countries, says Adam Farber, partner and managing director at The Boston Consulting Group (BCG).
- S&P 500 large-cap companies that break out sales and profits earned abroad (roughly half of that group) reported that 47% of 2009 sales (some $2 trillion) originated outside the U.S., up from 45% in 2007. Many analysts expect to see 50% soon.
- China, in 2009, surpassed the U.S. for the first time to become the world's top market for new vehicles, according to the market research firm ReportsandReports.
- The growth of China's middle class is expected to increase at an 11% compounded rate over the next five years, according to independent brokerage and investment group CLSA. That's more than $2 trillion in incremental discretionary spending capability.

Welcome to "the new normal" – a two-speed world in which two types of economies are emerging: low-growth and high-growth. On the one hand, rapidly developing countries such as China, India and Brazil are characterized by high growth but low average household income. With GDP ranging from 8% to 12% and some 2.6 billion people, these markets are hard to ignore.

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>
> –Adam Farber, partner and managing director, The Boston Consulting Group

By contrast, the low-growth countries – most of the U.S. and Western Europe, for instance – have a slower rate of economic growth but higher household incomes. With GDP growth of only 1% to 4%, these economies are expanding more slowly but their populations have higher salaries – and more to spend.

The two types of economies present two very different business environments, each with different needs and challenges. Success in each

market requires different products, different ways of operating, and different ways of looking at the world. In this article, business leaders, Wharton professors, and experts from BCG consider how this two-speed world will affect global business strategies – and what it will take to thrive.

To compete successfully, companies must understand the needs of each market and create a strategy for meeting those needs cost effectively, all while differentiating themselves from their competitors – both local players and multinationals. Building a low-cost global production network that draws on the strengths of each geographical region is critical. So too is innovating products, processes, and business models to stay one step ahead and increase margins wherever possible.

No Step-by-Step Process

There's no step-by-step process for positioning a company to excel in both worlds, no one-size-fits-all strategy, even for players in the same industry. The key is to retool strategies when necessary, implement lean principles, and rethink where and how to conduct value-chain activities such as manufacturing and R&D. For instance, GE Healthcare designed, developed, and built budget-priced MRI machines in India and China for sale in India. But potential demand for the machines proved strong in the U.S. as well, so the company is currently awaiting FDA approval to begin selling them.

According to Joe Manget, BCG senior partner and global leader of the firm's operations practice, the two-speed economy is forcing companies to develop new operating models to successfully compete. "Take Tata Motors' launch of the Nano car," he says. "The rapid pace of product development and the extremely low product cost will have Western companies struggling to improve their operating models to catch up."

Ultimately, success in a two-speed world depends on having a flexible organization – one that can tailor different approaches on the basis of market needs, product characteristics, cultural differences, available resources and strategic goals, according to experts at Wharton and BCG.

Wharton management professor Lawrence G. Hrebiniak believes that the two-speed equation should always begin with senior management decisions about which countries are attractive and which are not. "Corporations have to decide which countries to invest in," he says. "If we focus on developing countries, how? Strategic alliances? Acquisitions?" It depends on the attractiveness of these countries in terms of their laws and regulations – and whether there's already a market to tap.

Corporate strategy, as well as an organization's architecture, helps senior management focus on what is critical, explains Hrebiniak. "If the product is big enough, you focus on the product," he says. An Apple product, for example, is the same everywhere. Before selling it in China, India, Brazil, or any other high-speed economy, Apple will invest in customer segmentation and market analysis to see if will fly. But if your product can be customized for different markets it becomes a question of where you focus. It starts with due diligence at the corporate level, says Hrebiniak. "Business leaders must decide how to organize to do this – by country, by product, by strategic business unit."

Sometimes, gaining market share fast is paramount, says Gang Yu, PhD, chairman of The Store Corporation – China's fastest-growing e-commerce company – and former vice president of Amazon.com's supply chain. Amazon wanted to gain market share quickly in China, but building its brand there would take too long. "Amazon felt it was easier to enter China [through a partner] that already had a large market share," says Yu. So instead of starting from scratch in a country where it was not well known, the e-commerce giant acquired Joyo (which means "excellence" in Chinese) in 2004 when e-commerce was revving up in the developing world. At the time, however, Joyo didn't meet Amazon's quality standards. So at first the partners operated as two separate businesses. Eventually, when Joyo improved its service level to Amazon's standards, they integrated their two Websites. In other words, Amazon took a two-stage approach. First it grabbed market share by acquiring a local partner. Then, it built its brand. "It uses both names right now," says Yu. "People

know that Joyo is Amazon." Web shoppers can go to either site today.

The key lesson: Amazon didn't follow a prescribed rule for winning in a high-growth economy. It looked at the market where it wanted to gain share and crafted an acquisition strategy based on its existing strengths, weaknesses and target time frame.

Companies should expect to fine-tune their strategies if they want to change speeds, just as racecar drivers must adjust their strategies for different tracks. According to Benjamin Pinney, a principal in BCG's Shanghai office, what works at one speed won't always work at another. As an example, he mentions a fast-moving beverage company that built a strong position in China through acquisition. In the past and in other markets, the company had succeeded through disciplined integration and cost-cutting, driving lean operations and standard sales-and-marketing playbooks into acquired companies.

But the company had to adjust its approach in China: "When you bring business systems, mindsets, and behaviors driven by cost and efficiency into a high-growth, dynamic market, you're setting yourself up to lose," Pinney notes. The playbook for winning in developing market is different. It's not that efficiency doesn't matter, but if a management team in a fast-growing economy turns inward and spends its time installing structures and systems mandated by headquarters in the developed world, it takes its eyes off the market. In a slower moving market, this might not matter. But in this case, it took many quarters and decision cycles just to get permission to re-focus on growth. And in each quarter that passed, more agile competitors were taking market share. In effect, each passing quarter diminished the value of the company's costly acquisitions.

"China's in a go-go-go mode, especially in consumer markets," says Pinney, comparing the situation to a U.S. land rush in the 1880s, when 50,000 people lined up on the Missouri border to get free homesteads. "When the bell rang, everyone grabbed a parcel of land." Of course, this era won't last forever in China any more than it has in other economies. In some industries, consolidation and efficiency are already the name of the game as policy makers in Beijing focus on economic restructuring and factor costs. Companies need to be operating at multiple speeds even just within China.

Balancing fast- and slow-growth markets demands different skills and new approaches. Companies that do it successfully are able to differentiate themselves at both speeds. "Companies that want to win at two speeds may need to adjust basic strategies," says Pinney, "even choosing where lean products and processes considered part of the 'company DNA' are not the right answer." The question, he says, is how to design your operations to compete in fundamentally different markets against competitors from both low-cost countries and developed economies. When it comes to manufacturing, you need to "clutch" between different approaches.

For instance, some companies use the same facilities to manufacture parts or sub-assemblies that are later customized according to market need and demand. "Postponement strategies such as delaying customization allow companies to buy time until demand signals are clearer," explains Pinney. Based on specific orders and close-to-market signals, they often do assembly for high-end and low-end products at the same plant, then customize for either high-growth or slow-growth markets in a different facility. With this approach, final assembly, finishing, or packaging can be done separately – and closer to the end-market. This requires attention to detail, a careful analysis of every step of the process, and a thorough knowledge of the markets served. The worlds of the small craft shop and the mass production line are far apart, and it requires significant management skill to run both as a part of a single value chain.

Better Localization, Better Acceptance

Yu says that localization is a key to successfully navigating the two-speed world. Segmenting customers and understanding demand at the local level (in both high- and low-growth economies) is required. "When Dell entered China," he says, "no one believed that its direct sales model would work there." It was a new model – direct sell, not through a retail channel. This was new in China, where sales typically

come through computer stores or department stores, not from the Web or a call center. Dell's model didn't fit China's buying habits. "So when Dell entered China, the company had to operate Chinese style," says Yu. Dell revised its model. It began to make some sales through channels, and much less through direct sales. It gained a name and reputation by lowering server prices by a whopping 40%. "Then a lot of Chinese companies began to know about Dell," says Yu. Before that, he says, Sun and HP dominated the server market. But when Dell entered the market with decent quality and lower prices – "Chinese companies are sensitive to price," says Yu – Dell began to gain market share.

In addition to customizing products for specific markets, every company entering an emerging, high-growth economy has to localize the business model to fit the local customers, says Yu. One way to do this is to hire local people who know the countries and the customer segments, who trained locally but understand the developed world as well. That's what Dell did, says Yu. "It knows how to combine the two cultures," he says. "The better the localization, the better the acceptance."

BCG senior partner and managing director Hal Sirkin agrees. "It sounds like a cliché, but companies really do need to master the ability to think globally but act locally. Customizing everything for local markets is key." He offers four other guidelines for companies that want to compete successfully in both high- and low-growth worlds:

Profit vs. growth – In a two-speed world, companies must differentiate themselves in different ways for each market, says Sirkin. They must focus on profits in slow-growth markets, increasing their margins wherever possible through lean operations and by developing new products and services that can command a premium price. But in rapidly expanding economies, they need to focus on growth, on laying the groundwork for future profitability.

Best price vs. best value – In the emerging economies, many people are buying their first cell phone or their first car, so companies need to develop "best price" offerings that are affordable at lower income levels. But buyers in developed markets are looking for the best value, which may be lowest price, but could be the best quality at a premium price. "In either market, companies need a fundamentally better value proposition than their competitors," notes Sirkin.

Differentiated product design – Because of their different needs and income levels, high-growth and slow-growth markets require different types of products. Sirkin contends that companies must design products for the "current billion" consumers in the U.S., Western Europe, and Japan at the same time that they design products for the "next billion" consumers in China, India, and other emerging economies.

New reward systems – The projections of single-digit growth in mature markets and double-digit growth in emerging markets mean we'll need to rethink how we structure growth-based incentive and compensation plans to keep them fair, says Sirkin. For instance, increasing business by 5% in a market that's only growing at 2% is better than a 5% increase in a market that's growing at a rate of 10%. But current systems would tend to reward both equally.

Still, there's no clear-cut approach for doing business at both speeds. Different companies do it differently. "Take a look at Apple Computer vs. Research in Motion (RIM)," says BCG's Manget. RIM manufactures Blackberries in each region. They manufacture in Mexico for the North American market and in Asia for the Asian market. Apple builds everything in one mega factory. Which one is better?" he asks. "If you believe that it is all about cost, Apple has a better model. If you believe it's all about efficiency, maybe RIM has a better approach."

The big tradeoff is cost vs. local customization. "If you make Blackberries in Mexico, but you don't understand Chinese demand or the currency changes," says Manget, "you'll have problems."

A Different Challenge

According to Wharton management professor Mauro F. Guillen, some high-growth countries such as Russia and Brazil are thriving because they have natural resources. China, on the other hand, imports natural resources and has positioned itself as the low-cost manufacturing hub of the world. "But that is an ephemeral

advantage," says Guillen. "When household income catches up with GDP, China may lose its manufacturing edge." If and when that happens, China will still be an attractive consumer market. But since its consumers behave differently than those in the developed world, success will require more than just manufacturing and selling there. "You want to keep an eye on your R&D. You want to keep it close to your manufacturing center."

For mature products that require less innovation, it can be a different story, notes Wharton management professor Olivier Chatain. When innovation is critical, companies from developed countries have an edge because they generally have access to more resources and better technology. But when products are mature and need less innovation, manufacturers from low-cost, emerging economies can steal market share. "Take the aircraft industry," he says. "Embraer, a Brazilian aircraft maker, is gaining global market share because the basic technology is mature and less innovation is required." Meanwhile, major players such as Boeing and Airbus are not as advantaged in the world market as they were 50 years ago when they had more innovation and experience under their belts.

Bottom line on the two-speed world: The basic principles of how to succeed globally have not changed. Successful companies will keep costs low by manufacturing in developing countries when it makes sense and applying lean tools and techniques; they will move R&D to high-growth nations with burgeoning markets for innovative products; and they will become experts in the local laws, customs, and cultures of those countries so that they can compete against – and when appropriate, acquire – local companies.

What has changed, says Chatain, is that a lot of the economic growth today is not in the western world. "That's what's new. It's a different challenge." And it's more complex, he says. "There may be a renewed sense of urgency, but doing the work of succeeding abroad hasn't changed."

One thing is clear, says Manget: You can't just export your operating model to an emerging economy. "To compete successfully, you have to develop a fundamentally new model – one that embraces the cultural and growth differences," he says. "Then you can take some of those key insights you gained and use them to reinvent your Western operating model."

In a two-speed world, each market has lessons for the other.

Manufacturing in a Two-speed World

With a sticker price of up to $1.6 million, MRI machines were not affordable across much of the developing world in 2007. After all, household incomes are considerably lower than in developed countries, and in India, for example, there is no formal health insurance system to compensate providers for MRI exams. Indian physicians charge about $150 for an MRI procedure, compared to $1,000 and up in the United States.

Yet, the Indian market (and others throughout the developing world) is enormous – and the demand is real. But a scaled-down, low-quality MRI unit was out of the question for GE Healthcare. For one thing, Indian physicians know the state of the art of western technology. "They attend conferences here, they have family here," says Jim Davis, vice president and general manager of GE Healthcare's Magnetic Resonance business, who is based in the United States. "Some of them trained here." Besides, he says, "We are on a mission to provide quality care in all markets. A human being is a human being. We don't want to discriminate. We want to bring the same diagnostic tools to India as the U.S."

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> –Jim Davis, vice president and general manager of GE Healthcare's Magnetic Resonance business

So GE Healthcare began development of the Brivo 355 and its sister product, the Optima 360, MRI machines for technicians using the technology for the first time. Designed, developed, and built in India and China, the machines don't compromise quality but do have an easier-to-read user interface and are easy to operate by technicians who may lack the degree of training they would receive in the developed world. Davis calls them "the right machines for emerging markets." And at $700,000 to $900,000, they are the right price.

GE Healthcare is currently selling its budget-priced MRI machines in India. Since the company began taking orders in January 2010, according to Davis, "sales have surpassed our expectations by at least 50%."

Interestingly, the units – designed and built lean – are awaiting FDA approval for sale in the U.S. "We'll maintain our manufacturing footprint in China and India," says Davis, "and sell it in the U.S. as well" After all, the U.S. has pockets of underserved populations that can benefit from the budget-priced devices that were manufactured in the developing world, where labor and development costs are lower than in the U.S. GE Healthcare's strategy is a departure from the traditional model where no-frills products that were built for the developing world stayed in the developing world.

Lower cost, stripped-down products that can be sold both in high-growth and slow-growth markets are one example of how companies are addressing "the new normal" – a two-speed

world with two types of markets, each with different characteristics. On the one hand are the high-growth economies such as China, India, and Brazil. With growth rates of 8% to 12% and some 2.6 billion people, these markets are hard to ignore, despite their low average household incomes. On the other hand are the slow-growth economies – the U.S. and Western Europe, for example – with growth rates ranging from 1% to 4%, but relatively high average household incomes.

In this article, experts from Wharton and The Boston Consulting Group (BCG) consider some of the key challenges that global manufacturers face as they attempt to synchronize their worldwide operations to meet the needs of these two very different markets.

The Need to Be Lean

To grow, multinationals from the slow-speed, developed economies must target fast-growing, emerging markets. But to compete against local companies, they need to drive out costs, sharply improve quality – or both. In these high-growth markets, the challenge for manufacturers is to maintain flexibility and responsiveness while keeping costs down.

Whether competing in high-growth or slow-growth markets, companies need lean products and systems, contends BCG partner and managing director Hal Sirkin. "In the slow-growth world, you need low costs and the ability to respond quickly to customer needs," he says. "And in the high-speed world, you need to be lean to lower your costs, customize products for emerging segments and create the capacity to grow." Companies that cut out waste through lean products and systems have lower costs and are more responsive, with shorter cycle times and higher quality.

Rethinking Manufacturing

Benjamin Pinney, a principal in BCG's Shanghai office, says that some manufacturers from the slow-growth world are responding to market demand in emerging economies by defining a shared platform for production of high-end and low-end products, often at the same facility. Typically, the high end gets shipped to slow-growth Western markets and the low end to high-growth, emerging markets. But production can start at the same factory – even on the same assembly line – with components common to both models. The specifics change by industry and market, says Pinney. "With automobiles, the common components can be subassemblies or the partly completed chassis. In pharma, it's the intermediate chemicals. With assembled goods like mobile phones, it can be partially kitted parts. With electrical equipment, it can be mechanical components for switchgears."

Almost all the automotive manufacturers are doing this, notes Pinney. In med-tech, many companies are leveraging "split models" for sales aimed at both worlds. Bicycle manufacturers are doing it too, and in the appliance sector, LG is producing frost-free and non-frost-free refrigerators – the former for low-speed countries, the latter for high-speed.

A New Level of Complexity

The growing consumer market across the high-speed world is hard to ignore. For instance, analysts say that some 70% of future business for big pharma over the next few years will be in developing countries, says BCG partner and managing director Adam Farber. But it's not simply a matter of making more or different drugs in their current plants for shipment to these emerging economies. Instead, global pharma companies are searching for new ways to organize their go-to-market model in the new, two-speed world.

One challenge is how to reconstruct their networks to serve the local markets. "Brazil and Russia require that pharma companies have local manufacturing operations to access the market," says Farber. "In several countries, governments say it is critical to the public's health and wellness or to create jobs." So, in addition to knowledge of local customs and culture, drug makers and other manufacturers need to steep themselves in the relevant laws. In some countries, a global producer is not allowed to manufacture unless it brings on a local partner. "The global model," says Farber, "means more languages, more rules, and different duty, tax and patent issues – a new level of complexity that has to be managed."

Considering the degree of localization required, bringing a local partner on board might be a

good idea even if the law didn't require it. The local companies know the market and know their way around. And some are ripe for acquisition. "It's a 'think local, act global' thing," explains Farber. "There are regulatory, packaging, and cultural differences. You need to understand local markets and how distribution works." Of course, this has been true all along for multinationals seeking to capitalize on low labor costs by manufacturing in developing nations. But it's even more important now that these emerging economies are not just manufacturing hubs but real growth markets – and now that there's a greater number of small, local companies to compete against.

Marshall L. Fisher, a Wharton professor of operations and information management, agrees that what's new is that these emerging economies are becoming attractive markets, not just manufacturing bases. "The emergence of consumer markets is interesting," says Fisher, noting that one of the missions of the Communist Party in China is to develop the country's internal economy. "They think people are saving too much money. Whatever problems the U.S. has, China has the reverse." The Chinese government's desire to grow the internal economy and increase the percentage of income that people spend in China creates opportunities for non-Chinese companies to make inroads there. "That's heightening the interest," says Fisher, who adds that the megabrands in the U.S. such as Nike, Wal-Mart, and Amazon are not the top brands in China. "Maybe it suggests that you don't need to be #1" to be big enough there. China, according to Fisher, tends to be a more fragmented market. In the U.S., only the top firms have global share. But China's potential market is so big, there is room to be #10 – and still make money.

But China also has huge companies with very little global name recognition – yet. Fisher points to Foxconn, a $40 billion company with 300,000 employees and a 10-square-mile campus. The company makes products for Apple and Motorola, largely for export. "They'd be *Fortune* 25 in the U.S. but no one has heard of them." Fisher is interested to see what happens to Foxconn as the internal Chinese economy develops. "They could use the emerging home market to develop new skills," he says, or to begin developing more affordable products for local consumers – and for global export. Clearly, this is a company to keep on the radar screen.

More Than Just Low Labor Costs

Companies face a range of challenges as they formulate a two-speed strategy for manufacturing, says Michael Zinser, BCG partner and global co-leader of the firm's manufacturing group. "Yes, labor costs are lower in developing economies. But companies need to balance the low cost of labor with the added logistical costs and the risks inherent in lengthier supply chains," he notes. Add to that the rising expectations of buyers. "Customers don't just want the lowest cost, they want to get their products quickly too!" The best solution may be for companies in slow-growth, developed markets to manufacture in low-cost, high-growth markets and sell to local consumers as well as to Western buyers. That way, the slower sales growth in the developed markets and the higher logistics costs would be offset by the robust local sales. But it's easier said than done.

"When companies first started manufacturing in Asia there were tax incentives, labor rates that were among the lowest in the world, and excess capacity," says Zinser. But some of those incentives have gone away, labor rates are rising (as they are at Foxconn), and logistics costs are higher. "That said, the cost savings are still there," he notes, "but you need to be clear about what your objectives are." For instance, if a company is based in North America and just wants to cut its production costs, it might be better off going to Mexico or to some parts of the U.S. "But if you want to tap into the fast-growing markets of the developing economies, you might want to set up manufacturing operations there – and local sales channels too," he adds.

Keep in mind, too, that the no-frills products made for emerging markets might also be embraced by consumers in the developed world. Again, this can create more complexity, but more opportunity too. Zinser gives the example of a U.S.-based manufacturer of lawn-care products that competes against domestic companies with high-end products and against companies from India and other emerging economies with low-cost products. "But a segment of U.S. consumers

will always want lower-priced products," he says. In order to provide both premium and low-end products to the domestic market, the company has migrated some production to Mexico. But it has also started manufacturing in Southeast Asia to capitalize on the low labor costs and Asia's growing consumer markets.

Many companies set up overseas operations to take advantage of lower labor costs, but don't take the opportunity to rethink their production processes with an eye toward cutting costs and reducing complexity. Others let quality, health or safety standards slip, says Zinser. A hands-off approach in unknown markets can lead to problems. The best way to avoid these problems is to be on site, not on the other side of the world. "There is no alternative to having feet on the ground," he stresses. "You have to be there and see exactly what's going on. Otherwise, you can end up with massive recalls and a PR nightmare," he says. "You have to do your due diligence, and you can't make assumptions. I've seen companies working with contract manufacturers on the other side of the world and forgetting to ask them what their production schedules looks like." But when you're there on the shop floor, you can look around, kick tires, ask questions and learn a lot more than you would in a meeting.

Wharton management professor Morris A. Cohen was recently in India meeting with Unilever executives. There was some discussion of the difference between selling in India and in the U.S. "There is not much need for marketing in India," he says. "There is so much demand that companies feel if they can just get their product in front of the customers, they'll buy it. It's not worth spending on marketing." Instead, Unilever in India spends on distribution and consumer education. In some cases, he says, Indian people don't know how to use bottles that contain consumer products. "So Unilever sets up stores run by women in the local villages. It's a combination of technology and outreach that meets the local market's needs." And knowing what the local market needs at a granular level requires a local presence.

Cohen points out that India has significant barriers to entry, such as ownership rules that determine how much of a local company can be owned by a foreign corporation. Other challenges are structural. "India's is an informal economy with lots of little shops by the road, so distribution is an enormous problem," notes Cohen. He recalls meeting with the CEO of a large Indian cell phone company that uses Wal-Mart as a distributer, not a retailer, because the Wal-Mart name isn't well-known in India. The distribution challenges are compounded by the country's substandard roads and infrastructure. "China has done a better job of managing infrastructure than India," he says. "Local markets are more easily penetrated because it is easier to transport goods there."

Much depends on where you are selling, says Sirkin. "You can produce in these markets, sell for less, get your costs down, and take advantage of local market knowledge. Or you can do what Apple does: design in the U.S. and outsource production to companies that are cheaper." Of course, Apple can design its products in the U.S. and make them in China because, unlike GE Healthcare's budget MRI machines, Apple products are the same whether you're buying them in New York, London, Mumbai or Shanghai. There is no budget-priced iPad designed for developing economies. GE Healthcare, though, has gone through the process of customer segmentation – drilling down, analyzing the market data, and coming to a deeper understanding of its target customers' buying habits, favorite brands, and – perhaps most important – their aspirations.

Bottom Line on a Two-speed World

According to Pinney, "Companies that are thriving in this two-speed world are really good at managing both mass production and just-in-time production. They're able to make fast adjustments up and down the value chain in response to changing market dynamics. And they make smart use of subcontracting to manage capital commitments against different production steps."

Manufacturers that want to optimize their operations in the two-speed world can learn from those that faced tough economic restraints in the past. "Necessity is the mother of invention," says Sirkin. "The Japanese had to compete. They had to keep costs down and eliminate all the waste they could." The companies that got

lean produced low-cost, high-quality products that changed the rules of competition. Case in point: the U.S. auto industry. When the big three automakers were producing big cars, Toyota came in with a low-end product and tailored it for the U.S. market, and then moved up the value chain to higher-end models.

"Any country or company that is resource-constrained will figure out how to do more with less, as China and India have proven," says Sirkin. "In competitive markets, if your company doesn't come up with a better value proposition, someone else will."

Winning in Two Worlds: Supply Chain Flexibility

Even before the recent global downturn, a two-speed world was emerging. Its hallmarks: a slow rate of growth and high per capita income in developed regions such as Europe and North America, and far faster growth in emerging economies with low per capita income, such as China, India and Brazil. Now, after the most significant recession since the 1930s, these divergent growth patterns have become even sharper, with implications for every aspect of a global company's operations.

A key challenge will be to create flexible and adaptable supply chains that can serve both types of markets while optimizing sales and margins. In high-growth emerging economies, this means delivering rapidly increasing volumes of low-cost and sometimes low-margin products profitably – even in the face of poor infrastructure and convoluted distribution channels. In the low-growth developed economies of Western Europe, the United States and Japan, companies must defend or steal market share by providing better, faster innovation and exceptional service without sacrificing profit margins.

In this article, experts from Wharton and The Boston Consulting Group (BCG) discuss how companies can make their global supply chains more flexible and responsive in order to meet the needs of this two-speed world.

Two Worlds, Stark Differences

A close look at high- and low-growth countries reveals sharp differences that can have a major impact on supply chain management, notes Pierre Mercier, BCG partner and leader of the firm's supply chain group. For instance, the more mature, low-growth economies have well-developed infrastructures, while emerging high-growth countries – with the exception of China – tend to lack the highways, bridges and airports needed to transport goods efficiently.

Developed economies also have more mature distribution systems and highly developed retail industries. In the U.S, for example, major retailers such as Costco and Wal-Mart are configured for high volumes of goods. Huge loading bays and elevated platforms allow forklifts to load pallets of merchandise onto 18-wheel tractor-trailers that take the goods directly to stores – often with thousands of square feet of retail space – where the lion's share of sales occur. In India, by contrast, goods can be delivered to very small retailers through a chain of wholesalers that keep decreasing in size. "There's a whole cascade of distribution, where trucks keep getting smaller and smaller. In some cases, the ultimate delivery vehicle might be a bicycle," Mercier says.

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Because "mom and pop" stores still tend to be a huge part of high-growth-rate economies, distribution involves delivering small quantities of products to a staggering number of locations. Large consumer products companies can have

millions of delivery points in India compared with just a few thousand in their more developed markets.

Meanwhile, the more fragmented distribution systems and the undeveloped nature of high-growth economies affects forecasting ability, says Senthil Veeraraghavan, a professor of operations and information management at Wharton. Companies operating in those countries lack up-to-the-minute sales metrics generated by the computerized supply-chain-management systems of more developed economies. "In Western countries, you get a lot of aggregated data from retail centers with which you make informed decisions. In developing countries there is less reliable data available," says Veeraraghavan. "You have to do a lot of guesswork and legwork. I can tell you how many Droid phones were sold in Philadelphia with certainty. I can't say that of certain regions in India."

This difference in planning capabilities dramatically changes service expectations among companies and their customers. The typical proprietor of a mom-and-pop store in an emerging economy is quite flexible about schedules and delivery, Mercier says. But retailers in mature economies demand speedy delivery of specific quantities at specified times – and companies that want to hold on to market share must provide good service.

It helps that highly skilled third-party logistics providers are readily available at a reasonable cost. But developing markets generally lack service providers with sufficient expertise. Increasing service levels in these countries calls for either using Western providers or working closely with suppliers to get them up to speed, says Mercier.

Moreover, a company selling in a mature economy can expect to send and receive invoices electronically, order components in advance, share demand forecasts with its suppliers or customers and pay retailers to stock certain goods and carry inventory. In emerging economies, however, businesses stick to the basics and companies are likely to pay C.O.D., buying right off a delivery truck instead of pre-ordering.

These stark differences leave little opportunity for synergy between supply chains of low- and high-growth economies, Mercier says. Synergies are hard to find even just within emerging markets, given the significant variations among economies, says Morris A. Cohen, a professor of management at Wharton who focuses on supply-chain issues. There's no one-size-fits-all strategy. "Each country has its own unique flavor, with differences in infrastructure, distribution and retail systems. This diversity calls for different supply chains."

Price, Customization and Service in Mature Economies

So how can companies adapt their supply chains to a two-speed world? In mature, low-growth economies, strategic pricing is integral to profitability. "If you want to make more money without selling more, then you have to maintain or increase price levels," Mercier says. "Better service and more innovative products allow you to charge a premium." To that end, companies must be able to move quickly, working with the best suppliers, developing the right products and getting them to market faster than the competition.

Because of these needs, sourcing from low-cost countries isn't always the best solution. Many companies are rethinking their sourcing networks and looking at "near shore" production. Making or buying goods closer to end markets may cost more, but shorter supply chains result in greater speed, responsiveness, and flexibility – and less risk. Weighing the trade-offs can be complex, however, and companies need to analyze the economics, Mercier says. China or India may be a good source for easily transported goods or those with high labor content. But when factors such as weight, bulk, or shelf life are considered, the conclusion might be to source closer to home. He points to Mattel, which makes its miniature Hot Wheels cars in China and its larger, bulkier Fisher Price ride-on cars – which are more difficult and costly to ship – in Mexico.

Another factor to consider is the degree of customization that a product requires. A commodity-like product can be made in high volume at a large-scale plant in a low-cost country. "But high-end customized products

should be made in a local facility that can react quickly to changes in demand," Veeraraghavan says. A San Francisco-based manufacturer of messenger bags has a dual manufacturing and sourcing strategy. It produces most of its products in a low-cost country, but it uses a local facility for high-end U.S. customers willing to pay a premium for customized products.

In mature economies, efficiencies can also come from combining forces with other companies, Mercier says. Several years ago, two consumer products companies, working through a European logistics group that helps members identify others with similar distribution routes, discovered that 93% of their combined products were being delivered to the same 127 drop-off points. In a pilot effort, they set up shared delivery schedules and created a shared warehouse to supply inventory to their plants and, in turn, to provide finished products for retailers' distribution centers. The combined volume justified an investment in warehouse automation to reduce handling costs. The result: Inventory fell by 65%, out-of-stocks decreased by 30% and costs were dramatically reduced.

Another part of the equation in mature economies is the need to provide higher levels of service to retailers and end-customers as cost-effectively as possible. "In developed countries, where growth is slow and consumers have many choices, you need to make sure retailers sell your product," Mercier says. "If you're not there, your competitors will be." One solution is to improve systems and processes that can boost service levels. For example, computerized demand-forecasting systems can better determine appropriate inventory levels, lowering costs and creating greater efficiency. Another approach is to communicate more closely with customers and suppliers. This allows you to monitor demand signals more effectively and make the right trade-offs regarding where to re-supply and when, says Mercier. He points to Procter & Gamble, which has a sizable number of employees stationed near Wal-Mart's Bentonville, Arkansas, headquarters. By collaborating with Wal-Mart's team on planning and promotions, for instance, P&G is able to respond more effectively, readily increasing or decreasing the supply of particular products as needed.

Emerging, High-growth Economies: Wringing Costs from the System

In low-wage, developing countries, the average consumer cannot afford expensive products, so cost and value are very important. A company's supply chain must reflect that reality. "In emerging economies, you need a very low-cost, streamlined supply chain," says Mercier. "If you deliver a truckload of cookies that you sell at 10 cents a pack, it better cost you less than it does to deliver a truckload of cookies that sell for $3 a pack."

That makes it essential to wring as many costs out of the system as possible. "You need the lowest possible delivery cost because the consumer can't pay a premium for a product," Mercier says. One solution is to strip away processes and procedures that work in Western markets but are unnecessary in high-growth areas. "There's no need for invoicing systems if retailers pay cash on delivery, for instance." Even pallets – a staple in developed economies for a century – may be an unnecessary investment in developing economies where labor costs are low.

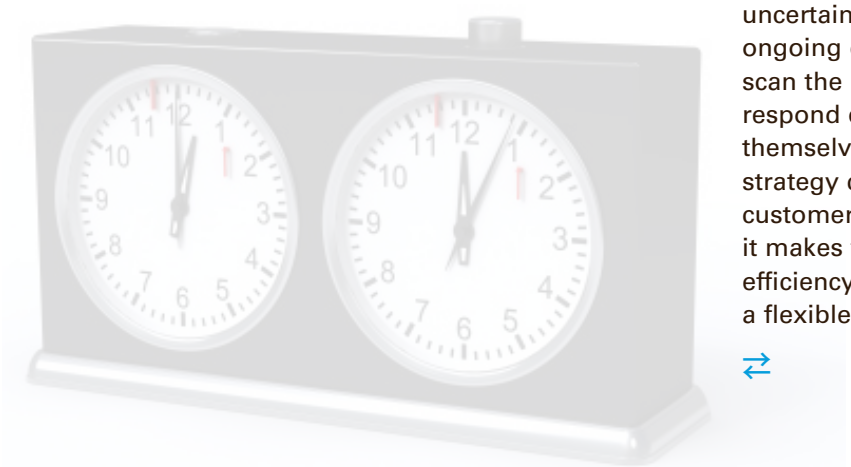
Multinationals also face a growing threat from ambitious local companies, creating even more urgent pressure to tailor systems to local markets, Mercier says. Many of the factories that companies set up in low-cost countries were replicas of their high-cost domestic plants. By not capitalizing on local conditions and capabilities, they never achieved all of the potential savings. "You can use your old manufacturing and sourcing processes for a while, as long as your competition is like you. But if you're still operating with a largely Western model in a low-cost country, you won't win against local competitors," he says.

When wages are relatively low, for instance, companies can create labor-intensive processes to reduce the cost of equipment, technology and automation. Further savings can come from rethinking product design, choosing fewer and simpler features that better suit the market instead of over-engineering. "You can't change an industrial footprint and supply chain overnight," says Mercier. "Western companies are still struggling with legacy systems, while local competitors are unencumbered."

Another way foreign companies can cut costs is to use local suppliers, who pay less for raw materials, labor and other inputs –and can therefore charge less for their parts and components than Western suppliers. But industries with highly complex products or stringent safety requirements face a greater challenge since most suppliers in emerging economies fall short of the quality standards and process excellence of suppliers in the developed world. "In these cases, the risks of using sub-standard inputs far outweigh any potential cost savings," notes Stefan Mauerer, a BCG principal based in Munich. "Given the need to squeeze out costs, the solution may be to develop the capabilities of key suppliers in these emerging economies." A focused development program can lead to major improvements in processes, productivity, quality and costs. "Local suppliers can be a source of innovations as well as cost-saving ideas, so building closer relationships can be well worth the effort," adds Mauerer. Gain-sharing programs can provide an incentive. "When any savings are shared in an equitable way, everyone has an incentive to contribute and collaborate," Mercier says.

Playing to Local Strengths

Foreign companies should also explore approaches to distribution that play to local market strengths. To reach small villages in India, for example, Hindustan Unilever Limited taps women's self-help groups. The company provides training in sales and bookkeeping to help these women become direct-to-consumer distributors for Unilever's soaps and shampoos. About 45,000 agents serve 3 million consumers in 100,000 villages spread out over 15 states.



According to Wharton's Cohen, the effort involves "one of the most sophisticated supply-chain systems in the world. The company is able to do statistical analysis through sophisticated modeling and access to complex, timely data about goods being sold in remote villages. And so while state-of-the-art data-aggregation systems may not be the norm, innovative thinking can sometimes combine best practices from both mature and developing and economies, further underscoring the need to tailor efforts to local markets.

Increasingly, multinationals may need to think about supply chains in emerging, high-growth economies both as routes into local markets and a source of parts and finished goods to be distributed globally. Again, though, local conditions should dictate the approach. In China, Wal-Mart has two supply chains – one for sourcing and distribution within China, the other for sourcing just about everywhere else, according to Marshall L. Fisher, a management professor at Wharton whose research focuses on China. Wal-Mart China sells products from thousands of small, local farmers to 187 stores in-country, while Wal-Mart Global Sourcing supplies tens of billions of dollars worth of private label goods to Wal-Mart each year, Fisher says. "It's not a slam dunk to pull this off. It's easier to move products 20 miles to a port and then ship them to the U.S. than to supply hundreds of Wal-Mart stores in China that want to buy locally," he says.

Because of the stark differences between slow-growth and fast-growth economies, supply chain synergies will be hard to come by. Moreover, the increasing interdependence of countries in the global marketplace and the lingering uncertainties of the recent downturn present ongoing challenges. The key is for companies to scan the horizon, keep their options open, and respond quickly to opportunities as they present themselves. "A multinational with a truly global strategy can make, buy or sell wherever the customers, talent or resources are, and wherever it makes the most sense from a cost, quality or efficiency standpoint," says Mercier. "That's why a flexible, adaptable supply chain is so critical."

Innovation – the New Two-way Play

A Chinese firm is currently designing a rough equivalent of the iPad, Apple's smash-hit tablet computer. The Chinese version is expected to retail for about $80, or a fifth of the iPad's $499 base price at launch. A European carmaker is also midway through a new design – for vehicles targeting several emerging markets. The company is borrowing design features and manufacturing ideas from its joint venture partner in India. And Fiat Brazil's Fiat Mio, an urban-targeted compact car, is being designed in Brazil for global markets.

Product development efforts at these three companies underline an accelerating trend of sourcing innovation from within mostly large, rapidly developing economies for end users in home markets, but also for export, including to the developed world. Once viewed as low-cost copycats, companies from China, India and Brazil are moving up the value chain, creating innovative products with global appeal. Ignore them at your own peril – especially as a new "two-speed" world emerges. This duality is characterized by high incomes but slow GDP growth in the developed countries of Western Europe, the U.S. and Japan; and explosive GDP growth but low household incomes in rapidly developing economies – most notably China, India and Brazil. This parallel dynamic is likely to continue for years. In this article, experts from Wharton and The Boston Consulting Group (BCG) look at the importance of innovation as a source of competitive advantage in this two-speed world.

Innovate to differentiate

To compete in both the high- and low-speed worlds, companies need a fundamentally better value proposition than their competitors so that customers are willing to switch. Taking market share is the name of the game, either from established incumbents in the developed world, or to gain a foothold in rapidly growing economies. Customers need a reason to do business with your company – either a lower price or a better mousetrap.

> "We need better products, faster, at a lower cost."
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> –Joe Manget, senior partner at BCG

New products and services are important differentiators in both markets, but especially in slower growing developed economies. "In the low-growth (typically Western) markets, the primary way for companies to grow is to gain share," says Joe Manget, senior partner at BCG and global leader of the firm's operations practice. "They can't rely on market or population growth to drive their revenue growth." And share gain requires fundamentally better products and services, especially given the pace and intensity of emerging market competitors entering the developed markets, says Manget. As a result, companies will need to focus more on innovation and product development. "We need better products, faster, at a lower cost."

It's not just a matter of creating lower cost, scaled-down products for developing nations and premium ones for mature markets, says Christian Terwiesch, Wharton professor of operations and information management. For one thing, Western markets have a growing population of people who cannot afford high-value, high-cost products. Job losses and the weak employment market, a result of the economic downturn, have exacerbated that trend. Job losses, high personal debt, a weak housing market and high health care costs have changed the complexion of markets in developed countries.

Jim Andrew, a senior partner in BCG's Chicago office and head of the firm's global innovation practice, agrees with this assessment. "Given the slow growth and the stagnating real incomes in much of Europe, the U.S. and Japan, affordability continues to move up the list of most important buying criteria. That is one reason why many of the innovations that occur in high-growth countries will also be applied rapidly back into developed markets."

The Call of Growth in Emerging Economies

For many western companies, the size of these emerging markets is a major attraction, but the growth potential is an even bigger driver, says BCG's Andrew. "Companies love growth. Wall Street and other equity markets greatly reward it. But most Western companies still have about 75% of their sales in the developed markets, which most observers believe will have a growth rate only in the low single digits," he notes. "At that rate, your stock is essentially a fancy bond disguised as a stock. Real growth needs to come from somewhere else if you want to increase your market value."

The big question for many Western companies in developed markets is where to find that growth, Andrew says. "There are really three places you can find it. You can take market share in your established markets, which generally requires strong innovation capabilities. The second option is to buy your growth through acquisitions, but that comes with all the deal risks and integration problems that cause most M&A efforts to fail." The third option is to build positions in the high-growth emerging markets of China, India and Brazil, among others, including some in the Middle East. But that is easier said than done." To successfully compete in rapidly developing economies, where Western companies typically have much lower market shares and much less well-established positions, they must bring something new to the party. Frequently, that involves innovation, Andrew points out. "They often can't rely on their strong brand names, they usually don't have go-to-market and distribution strengths, and they rarely have the lowest costs."

Sachin Nandgaonkar, partner and director at BCG India, believes it makes sense for Western companies to partner with Indian collaborators to develop products well suited for the two-speed economy. "In many cases, it is about leveraging the existing Indian product platform to improve offerings for the Indian market and to open new markets in other emerging economies. The partnerships can also help Western companies access some niche market segments in developed countries," he explains. "The idea is to leverage the Indian platform, test it for suitability in other markets, make the required modifications and build a cost-competitive global supply chain." Emerging markets can offer double-digit growth opportunities.

Low Costs Are Still a Draw

Cost advantages, of course, are often the immediate drivers for multinational companies sourcing innovation from high-growth countries. The manufacturing cost for the $80 Chinese version of the iPad now in development is about $40, says Idris Mootee, CEO of Idea Couture Inc., a design consulting firm. His company is working with a Chinese manufacturer of telecom equipment on the product. How are they able to knock off so much cost? "It is a combination of factors. There are some savings on quality control and even more savings on customer service – there is no 1-800 number to call," he says. "Also, there are no marketing, branding or R&D budgets. It is extremely lean manufacturing." The Chinese manufacturer expects to earn gross profit margins of up to 40%.

Low costs are also helping Narayana Hrudayalaya, a hospital chain based in Bangalore,

attract a steady stream of international patients, says Ravi Aron, a senior fellow at Wharton's Mack Center for Technological Innovation. In this case Westerners are drawn to the hospital's high quality and low prices – which more than offset the travel costs.

Narayana Hrudayalaya has perfected a way to deliver cardiac surgery at dramatically lower costs than in Western countries. India's health care industry "does not need a magic pill or the fastest scanner or a new procedure," the nine-year-old hospital chain's founder, Dr. Devi Shetty, told India Knowledge@Wharton. Instead, it requires improvements and innovations that lower costs and make medical services more widely available. He calls his model "the Walmart approach."

Cardiac surgery in the U.S. costs about $50,000, compared to $5,000 to $7,000 in India. Shetty attributes his hospital chain's lower costs to a combination of process improvements, lower construction costs, and bulk buying of equipment and supplies from vendors. He now wants to build a series of 5,000-bed "health cities" across India. "We want to have 30,000 beds in the next five years," says Shetty. "As our volume increases, we will get further economies of scale. In the next five years we want to be able to do a heart operation for $800 from point of admission to point of discharge. We believe it is possible."

Aron points to other examples:

- Aravind Eye Care System, a chain of hospitals based in Madurai, India, has fine-tuned its processes to deliver low-cost eye surgeries and related treatments at a fraction of what they would cost in developed countries. Last year alone, Aravind says it performed more than 300,000 eye surgeries and examined more than 2.5 million patients.
- GE Healthcare cuts the price of its medical imaging system by 10 % by making it in Bangalore vs. in the U.S. By manufacturing the system locally for local markets, it speeds deliveries, reduces waiting periods and further boosts sales. "The innovations from here could lead to an entirely new line of products, which in turn could create whole new market opportunities for us," notes John Dineen, GE Healthcare's president and CEO.

Scaling Down to Scale Up

Western companies sourcing innovation from high-growth countries might start small, but could have big gains further down the road, says Aron. "Initially, companies profit by creating lower-cost products for developing markets. Some of these will remain just that – lower cost products that find a mass market in the large, populous markets of the developing world." But an equally important aspect of innovation is increasing the value of these products by improving their performance without increasing the cost – a process Arun calls "scaling down to scale up."

Notes Arun, "The first step of the scale-upwards movement is actually scaling down; that is, creating a radically different, much lower-cost product that is a simpler version of the sophisticated product sold in developed economies. The next step is to take this scaled-down product and start increasing quality without adding significant cost. The resulting "scaled-up" product begins to resemble the original, more sophisticated offering sold in developed markets, but at a far lower cost." In later stages, it is easier to start adding features – while holding down costs – to this scaled down version rather than trying to lower the costs of manufacturing of the sophisticated product. "By starting at the opposite end, pruning the cost of manufacturing the original product in the first-world market, you might get a 4%-8% improvement at best," Aron says. "By taking a completely different product and scaling it up, it is far more likely that the performance to cost ratio will see an order of magnitude change."

Sourcing design and innovation from low-cost, high-growth countries is about more than cutting engineering and manufacturing costs. It extends to reconfiguring products to increase flexibility. Besides the cost savings, Mootee says his Chinese client is looking to improve the "Apple user experience ... by 50% by freeing users from the world of iTunes," Apple's online music store. Says Mootee: "There are lots of people who like Apple but don't like the idea that they have to buy music only from Apple. They would like an open-source equivalent." The product will be on the market before mid-2011, he adds.

Also on tap for 2011 is Fiat Brazil's novel design for an urban concept car. Fiat Brazil is developing the Fiat Mio (or "My Car") using input from a public "suggestion box" posted on the company's website. Fiat launched this innovative, "crowd-sourcing" approach in early 2009, with a goal of unveiling the new car's design in the fall of 2010 at the International Automobile Show in San Paulo.

Few companies, even among big Western multinationals, have a clear strategy for how to tap opportunities in emerging-country markets, and suffer from a myopic, "U.S.-centric" mindset, contends Mootee. But some companies, like Siemens of Germany, have well-calibrated plans. Inspiration struck Siemens' global CEO Peter Loscher after he visited India and drove around New Delhi in the $2,500 "people's car" developed by India's Tata Motors for the local market. Not long after the visit, Siemens announced a plan to invest US $3.7 billion in India, China, Russia and Brazil to develop more than 80 "base level" products for "financially constrained markets," according to a report in the *Financial Times*. Those products will include wind-power generators, voltage switchgear, traffic management systems and steam turbines, and will cost 70% less to develop, the report says. The entire innovation effort could increase Siemens' Indian sales alone 10-fold, it adds.

Making Innovation Work at Both Speeds

Innovations in design and manufacturing can flow comfortably in both directions, as India's Tata Motors showed with its recent acquisition of Jaguar Land Rover of the U.K. Europe's tough emission standards will force Jaguar Land Rover to look at smaller engines – such as those already made by Tata Motors, notes P.M. Telang, the company's managing director, in an interview with *The Economic Times*. At the same time, Tata Motors will use Jaguar Land Rover's expertise in design to reduce engine noise and vibration, and to make cars that are more sophisticated than its current offerings, which include the Nano, the Indigo sedan and the Indica hatchback. In fact, the two companies plan to look at jointly developing engines.

Having a local presence also helps companies find needed skills and talent, says BCG's Andrew. "Talent is a real driver in many of these cases." The big advantage is "being able to attract and hire talent that knows the market better and has the necessary technical skills. Some of the more developed markets have a shortage of certain types of technological talent," he notes. This is less of a problem in some of the emerging, high-growth economies, which have a tremendous number of highly qualified technical graduates. According to some projections, India will graduate 600,000 engineers, mathematicians, technicians, and scientists by 2010, while China will produce 800,000 graduates with engineering and other technical degrees in the same time period. By contrast, the U.S. graduated about 75,000 engineers in 2008.

As companies from developed markets increasingly turn to emerging economies for innovation and talent, they must weigh the pros and cons of various business models. When does it make sense to set up a wholly owned R&D operation overseas, for instance, rather than partnering with an established local player? Is it smarter to start with a technical or marketing collaboration or a licensing arrangement, and take equity stake later, if things work out?

"It's all about managing tradeoffs," Andrew says. Ownership and control issues come to the fore, especially when intellectual property rights are involved. "The question is, what tradeoff do you want to manage? If you want to do everything yourself, that's perfectly fine and there are many reasons why a company might want to do that. But you are also likely to have some challenges around speed, resources and managerial bandwidth if you go it alone," he contends. "Are those challenges worth dealing with for what is likely to be more control over the outcome and a lower risk of losing valuable intellectual property?" The answer varies by company and situation.

Aron offers these guidelines:

- When intellectual property is at risk, companies tend to own the innovation-producing business unit, as is often the case in China.
- Companies are unlikely to share ownership with third-party innovation partners whose chief strength is in navigating local regulations.

- A local partner that understands how to get an innovation to market and get quick feedback will likely be used as a distribution channel. The innovating company will retain ownership.
- Innovation may be a joint activity when the local partner offers significant product insight and/or is skilled at creating new products. For example, Cisco's partnership with India's HCL Technologies is more of a "peer-to-peer" relationship.

Companies like Procter & Gamble tend to acquire smaller companies with innovative products. "P&G is as open to innovations that come from its own labs as it is to innovations from the labs of the companies it acquires" Aron says.

Copy-paste vs. Reapplied Learning

The regional cross-fertilization of innovative ideas is as exciting as it is challenging. But BCG's Andrews cautions that any back-and-forth exchange stands less chance of success if it is merely transactional. "Western companies that source innovation from developing countries should be aiming for more than just a cheaper product for their home markets," he says. Just as it's often difficult to take a product designed for developed markets and copy-paste it successfully into an emerging market, it's equally difficult to copy-paste in the other direction. The real gains, according to Andrews, "come through deeper insight into the techniques and capabilities of innovators in developing countries that can be applied more generally in developed markets – and are therefore more sustainable."

And those insights should come from as many sources as possible. "If you believe the next high tech idea will come from Silicon Valley, chances are you're right, but it is a dangerous strategy to pursue," says Terwiesch. It might just come from the engineering student that dropped out of some university in India or China." A good innovator will identify multiple sources of ideas from different parts of the world and then isolate the best ideas through a process of elimination and filtering. Companies that understand and are quick to internalize these new realities will gain a leg up on those who wait for herd instincts to kick in down the road.

Special Report

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