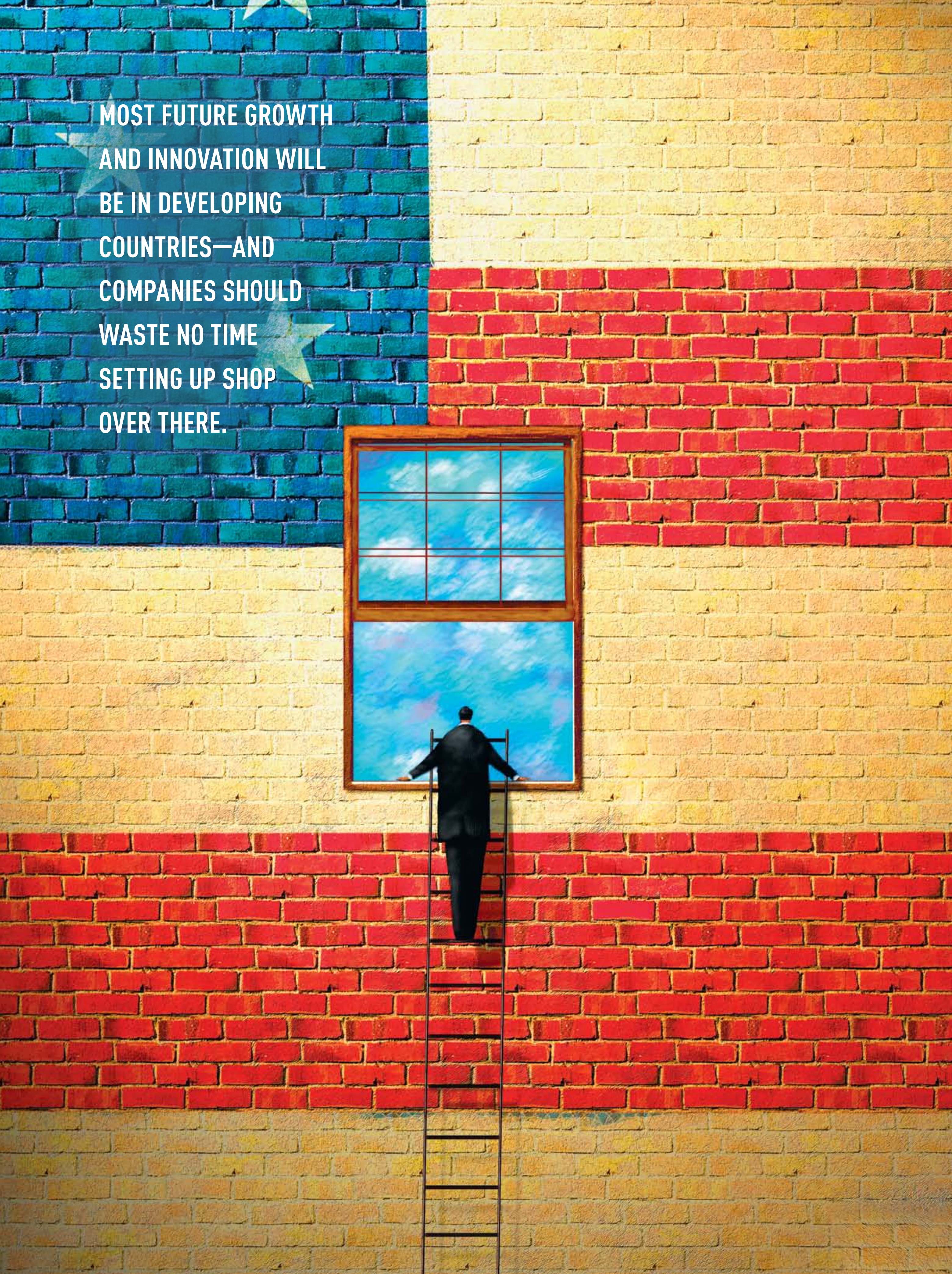

MOST FUTURE GROWTH AND INNOVATION WILL BE IN DEVELOPING COUNTRIES—AND COMPANIES SHOULD WASTE NO TIME SETTING UP SHOP OVER THERE.

■ MATTHEW BUDMAN is editor-in-chief of *TCB Review*.

OUT OF THE ★ WEST

THE DAYS ARE LONG GONE WHEN WESTERN COMPANIES COULD SECURE A FOOTHOLD IN DEVELOPING ECONOMIES BY SHIPPING OVER THEIR EXPIRED AND OBSOLETE CAST-OFFS. "In most cases," writes Vijay Govindarajan, "you can't just take a product designed for the rich world, make minor adaptations, remove a few features to reduce costs, and suddenly have a blockbuster product in China or India."

Since much of the world's economic growth is happening in those markets, companies can't just write them off. But serving customers in China and India and Africa and elsewhere demands more than a bit of brainstorming in offices in the West, Govindarajan says—it requires actually setting up R&D centers in those countries, to get a close-up view of what customers want and need.

And the resulting innovations—high-quality products and services at a fraction of current U.S. prices—represent the future not only in the emerging economies but on Western shores as well. Of course, that process—creating in poor countries and shipping to rich countries—runs counter to the way innovation has traditionally worked. Hence the term *reverse innovation*.

Govindarajan is Earl C. Daum 1924 Professor of International Business at Dartmouth's Tuck School of Business; he placed third on last year's Thinkers50 list of "the world's top 50 business thinkers," partly on the strength of a 2009 *Harvard Business Review* article, co-written with GE CEO Jeff Immelt, that introduced the concept of reverse innovation. Along with his longtime co-author, Tuck professor Chris Trimble, Govindarajan expands on the idea in *Reverse Innovation: Create Far from Home, Win Everywhere* (Harvard Business Review Press).

He spoke on a recent visit to The Conference Board's offices in New York.

★ BY MATTHEW BUDMAN

YOU WRITE THAT "PEOPLE—ESPECIALLY IN THE WEST—EXPECT THE FUTURE TO BE INVENTED IN SILICON VALLEY OR HOUSTON OR MUNICH, BUT NOT IN BANGLADESH."

Part of those cultural assumptions come from our historical success. We have been so successful for the last hundred years that we still have that mindset—we think the universe starts and stops here, and our innovation can serve the entire world. But Silicon Valley doesn't have a monopoly on innovation; innovations can happen in other regions.

IN YOUR NEW BOOK, YOU KEEP COMING BACK TO CHALLENGING WESTERN MULTINATIONALS' ASSUMPTIONS AND "THE DOMINANT LOGIC." WHAT ARE THOSE ASSUMPTIONS?

The first assumption is that the emerging markets will grow exactly the same way that America grew in the past. In America a century ago, the per-capita income was $1,000, just like India today. So companies see India today as America a hundred years ago, and therefore India will need more transportation, more food, more energy, and more health care, just like America needed those things back then. The mistake that people in the West make is assuming that India, in the next hundred years, will grow along the same economic trajectory that America did and that, therefore, no one needs to do any innovation—companies can take the products they already have and just wait for India to catch up. This assumption is flawed.

BUT WON'T INDIA NEED MORE TRANSPORTATION, FOOD, ENERGY, AND HEALTH CARE?

Of course. But they will solve those problems with today's technology, not with hundred-year-old technology. They will leapfrog the earlier innovations.

The second assumption that American companies have is that once per-capita GDP reaches a threshold level—say, $10,000—consumption will take off. People will want things like cars and houses and cell phones. According to that assumption, India, with its $1,000 per-capita income, must grow tenfold before consumers will buy cars and houses and cell phones. This assumes that price thresholds will remain constant. But if you can bring the price of a car down to $2,000—which is what Tata Motors has done with the Nano—then Indians can start buying cars now.

The third assumption is that the only competitors they need to worry about are other multinationals. The biggest disruptor to your business will probably be some local company you've not even heard of. Historically, what multinationals have done is make products in rich countries and sell them in poor countries. Reverse innovation is doing the opposite—it's about innovating in poor countries and bringing those innovations to rich countries.

HAVEN'T COMPANIES ALWAYS JUST GONE WHERE THE MONEY IS?

For Western multinationals, the dominant logic is based on making premium, performance-rich products for sophisticated customers. As an example, GE Healthcare sells expensive machines to hospitals in the United States: $1 million X-ray machines, $2 million CT-scan machines, $3 million MRI machines, $350,000 ultrasound machines. The dominant logic there is that in every hospital, there is an imaging center, and when the doctor sends the patient to the imaging center, all these big, expensive machines will be sitting there, waiting. That's how the typical U.S. hospital infrastructure looks.

Now, in Africa, 2 percent of the hospitals look similar to those in the United States. But 98 percent of the population is not served by that imaging center. Sticking to the dominant logic will not help you in unlocking the potential in the continent of Africa.

YOU CALL IT "A SERIOUS ERROR TO VIEW MARKETS IN POOR COUNTRIES AS DUMPING GROUNDS FOR SUNSET TECHNOLOGIES." DO EXECUTIVES REALLY THINK THIS WAY?

They really do say: "We've already done the innovation in the United States; all we need to do is set up a distribution center."

FOR PRODUCTS THEY MADE FIVE YEARS AGO? I GUESS THE UNOPENED CRATES ARE STILL IN THE WAREHOUSE.

Exactly. But India doesn't want five-year-old products, much less twenty-year-old products. One of the mistakes Western companies make is thinking that selling in developing countries is all about low cost. It's not—it's about value. Poor people don't want cheap products—they want world-class-quality products at an affordable price. This is about shifting the price/performance paradigm.

BUT ISN'T THAT WHAT AMERICANS WANT AS WELL: HIGH QUALITY AT A LOW PRICE?

Even though the price/performance ratio is important to *every* customer, it's much higher here. Because the affordability of the customers in rich countries is so high, companies can demand very high prices and offer a lot of features. It is true that even in the United States, there is a class of customers who are poor, but it is small, so companies have ignored them. Just like 10 percent of the people in India are rich, 10 percent of the people here are poor, and companies cater to the bulk of the population: those who can afford top products.

Western multinationals look at a market like India or China and say, "Only 10 percent is ready for my product; the remaining 90 percent are still too poor. We have to wait until they're rich enough." And what's important to recognize is that if you wait, the 90 percent will be served by someone else.

AS CONSUMERS, WHAT DO THE 90 PERCENT WANT? WHAT WILL THEY SETTLE FOR?

They won't settle. In India, people want cell phones that have video games and other features, and they want those cell phones at a *ridiculously* low price. They demand world-class quality at a dramatically different price point. That demand, and thinking about how to satisfy it, is where reverse innovation comes from.

A good example is Narayana Hrudayalaya hospital in India, which does heart-bypass surgery for $2,000. And the quality is world-class: The mortality rate at NH thirty days after surgery is 1.4 percent, against 1.9 percent in U.S. hospitals. Now, how are they able to offer world-class quality for $2,000, when that quality costs $100,000 in the United States?

BESIDES LOWER LABOR COSTS?

Sure, Indian surgeons get paid less than American surgeons. But the real difference is innovation. NH buys the latest

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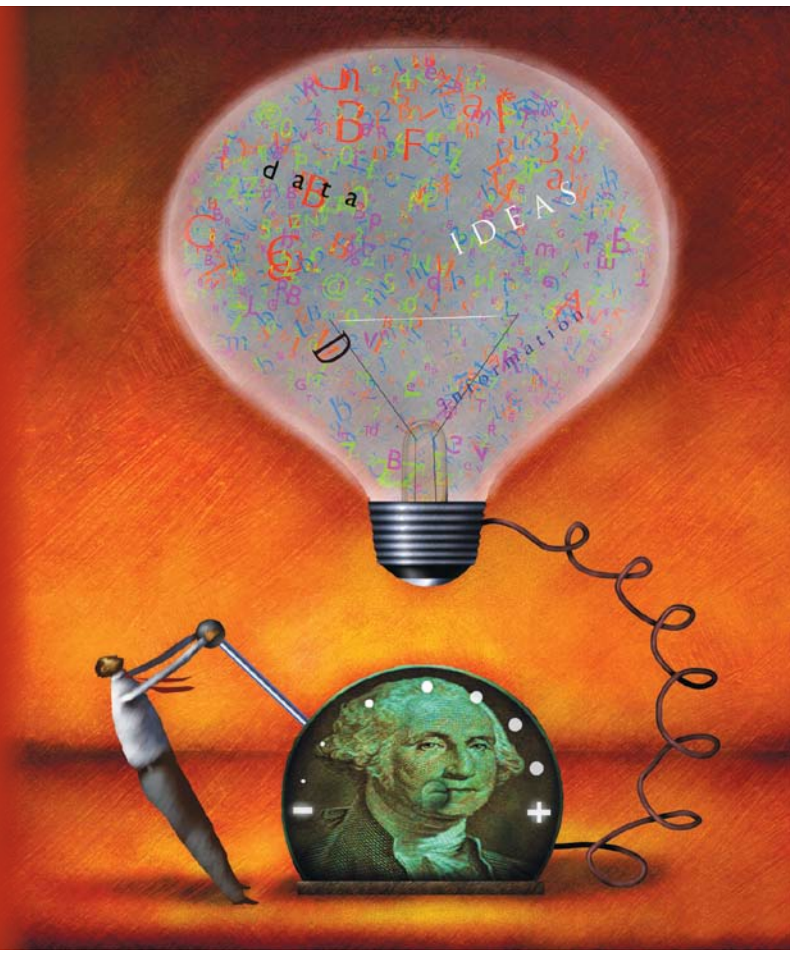

equipment—the same equipment you would find in Mayo Clinic or Cleveland Clinic or Mass General—and even pays more, because it has to be transported to India. They can afford it because they use that equipment *five hundred times* more than U.S. hospitals do, which really drops the price per patient.

In Hanover, near Dartmouth, we have a world-class healthcare facility. There's an imaging center with an X-ray machine, CT scanner, MRI machine—all just sitting there. They are utilized 10 to 15 percent of the time. In America, somehow we believe that it is our birthright that when we need that MRI machine, it should be available. Yes, health care should be accessible to everybody, but why do we tolerate 85 percent underutilization in a critical resource like an MRI machine? We wouldn't tolerate General Motors running a plant at just 15 percent of capacity. NH has driven its utilization of its imaging machines to 100 percent, bringing the cost per use down.

In the United States, we believe that health care is such a complicated and sophisticated industry that we cannot use manufacturing principles. But that's what NH does, with specialization, economies of scale, and standardization. They've borrowed principles from McDonald's, which makes billions of hamburgers with very few people.

And people think that with volume, the quality of health care will suffer, but no: Because the surgeons at NH do more surgery, they're actually better at it. That's why the quality is better overall.

AND YOU FORESEE THIS WAY OF THINKING COMING TO THE UNITED STATES?

Models like NH's will transform health care in the United States, for sure. Costs here are out of control, and even after spending so much, sixty million Americans are uninsured and quality is not best in class. Incidentally, NH is opening a new two-thousand-bed cardiac hospital in the Cayman Islands, a sixty-minute flight from Miami. It will be the largest cardiac facility in the world—and it will charge 40 percent of U.S. prices.

If we in the United States don't follow the same pattern, these fellows will force us to do it. This doesn't mean that every American medical center has to open a hospital in India. But Americans need to study these principles and bring them to the United States.

YOU SUGGEST THAT WESTERN COMPANIES NOT ONLY LOOK AT WHAT'S TAKING PLACE IN EMERGING ECONOMIES BUT ACTUALLY SET UP SHOP THERE.

Yes, American companies should be going to these places and creating these opportunities and then bringing them to the United States. If you don't do it, some local company will do it—and disrupt you. Innovation requires really understanding the customer problem, and that implies being close to the customer.

You have to create a dedicated team. If you're going to innovate for India, you need to create a dedicated team *in India*, with R&D, manufacturing, marketing, and supply-chain capabilities—that way they can understand the customer problem. Most Western multinationals try to do the innovations sitting in Milwaukee, with Americans.

DO THEY TRY BRINGING OVER INDIANS WHO KNOW THE TERRITORY OVER THERE?

Indians in Milwaukee are still too far away from the customer. The key is putting boots on the ground.

I was in India a week ago, and I saw a start-up company creating something *very* interesting: a surgical bed for hospitals. Now, they're not saying the cost will be lower than the main supplier—an American company—but they say it will save 40 percent of space. Saving 40 percent of space means being able to serve 40 percent more patients, and those patients will use the hospital's X-ray machine and everything else.

How are they able to save this much space? Because, by working closely with Indian hospitals, they came to understand the customer problem. Typically, after surgery, when the patient is lying in the bed, there's an IV next to the bed, on the ground, occupying space. So they built the IV equipment into the surgical bed. The patient records are kept in a chest of drawers that's occupying space, so they built a shelf underneath the bed for the records. Doctors and nurses need to clean their hands, and the dispenser takes up space in the room, not to mention the time it takes to walk there between

IF YOU'RE GOING TO INNOVATE FOR INDIA, YOU NEED TO CREATE A DEDICATED TEAM *IN INDIA*, WITH R&D, MANUFACTURING, MARKETING, AND SUPPLY-CHAIN CAPABILITIES—THAT WAY THEY CAN UNDERSTAND THE CUSTOMER PROBLEM.

each patient. So the company built a dispenser into the bed. There's storage space underneath for the patient's clothes and belongings.

My point is: By understanding the customer problem—in this case, that space is the most important value for Indian hospitals—this company has designed a product that solves that problem. It's the kind of fine-grained understanding you cannot have if you simply bring the Indians to Milwaukee.

AND, OF COURSE, THERE'S NO GUARANTEE THAT THE INDIANS WOULD BE WILLING TO COME TO MILWAUKEE.

Maybe New York City.

YOU RECOMMEND THAT MULTINATIONALS "STATION CRITICAL DECISION-MAKERS IN POOR COUNTRIES," WHICH MADE ME WONDER WHETHER ONE BIG OBSTACLE IS THE RELUCTANCE OF THOSE CRITICAL DECISION-MAKERS TO LIVE, EVEN TEMPORARILY, IN POOR COUNTRIES. IT'S NOT LIKE GETTING TWO YEARS IN LONDON.

The moment they go there, they get excited by what they see. These countries may be poor, but they offer depth and interest and varied experiences. When these executives go there, they're pleasantly surprised. You think the quality of life is not going to be the same as going to London, but when you go to India, you are given a big bungalow, instead of a little flat. You have ten servants and a cook and a chauffeur-driven car. The comfort level tends to be quite high.

But the more important thing is what you see and experience in India. It is life-changing.

STILL, IT MUST BE A TOUGH SELL FOR PEOPLE WITH FAMILIES AND ESTABLISHED LIVES IN THE STATES.

Maybe Western multinationals should be recruiting executives for global mindset to begin with. A lot of Americans have traveled quite a bit and have open minds. I have two daughters, both born in this country, and we travel every holiday. My 17-year-old has made ninety trips abroad and been to sixty-five countries. If you recruit someone like my daughter, she is not going to be afraid of experiencing something new.

YOU WANT "THE NEXT GENERATION OF LEADERS AND INNOVATORS" TO BE "JUST AS CURIOUS ABOUT NEEDS AND OPPORTUNITIES IN THE DEVELOPING WORLD AS THEY ARE ABOUT THOSE IN THEIR OWN BACKYARD." PLENTY OF BUSINESSPEOPLE MAY BE CURIOUS, BUT AS A SOCIETY WE SEEM TO BE TURNING INWARD RATHER THAN OUTWARD. WILL THAT HAVE AN IMPACT ON OUR ABILITY TO MAKE THIS TRANSITION?

Without question. Think about all the presidential candidates on the Republican side, and even people on the Democratic side. Everyone talks about three important priorities for the United States: jobs, jobs, and jobs. But they attack the jobs question by saying, "Let us focus on America and American consumers." This is a very insular view, because American companies can create jobs and growth if they focus on poor countries. That's where the growth is, and that growth can be captured only through innovation. So we need to become curious about problems in poor countries.

Americans also seem to have a complex about this—our mindset is stuck in the outsourcing era, with India subtracting jobs, not adding them.

THE OFT-USED PHRASE IS "SHIPPING JOBS OVERSEAS."

Right. I'm not talking about outsourcing jobs to China—I'm talking about innovating for Chinese consumers. We need to understand how that can generate more growth for American companies and more prosperity for America. If we don't talk about this, if we become insular, the result will be economic stagnation and decline. The biggest laboratory for innovation for rich countries is poor countries.

WHEN YOU SPEAK WITH EXECUTIVES, WHERE ARE THEY MOST RESISTANT? AT WHAT POINT DO PEOPLE SAY, "MY COMPANY IS JUST NOT GOING TO GO THERE"?

The resistance is not at the intellectual level. They all get this; they all understand it. They all nod their heads. The problem is in action. The real issue is whether you're willing to make uncomfortable organizational choices by, say, creating a unit in China and giving it a great deal of freedom and autonomy, and shifting the center of gravity of your R&D to Africa. These are tough decisions, and there are competing priorities—if you start doing R&D in Africa, you don't have that money to spend in the United States. People think of it as a zero-sum game. But it's not. You can be in both Africa and the United States.

HOW CAN COMPANIES AFFORD BOTH?

The cost of innovation is much lower; it doesn't take a lot of resources to recruit people in Africa. You don't spend millions and millions of dollars creating innovation—even if most of it fails! The cost of failure is really low.

SO ARE PROFIT MARGINS. IS THERE A POINT IN CERTAIN SECTORS AT WHICH WESTERN COMPANIES ARE JUST NOT COMPETITIVE? IS THERE A POINT AT WHICH IT'S NOT WORTH IT?

That is a fear. But return to the hospital-bed example: That's not about low price or margin—it's about offering something of value. It's not a bottom-of-the-pyramid innovation—it's shifting the price/performance paradigm so your margins can be quite healthy. There are a number of business models you can create in these countries where the margins are fairly high, almost comparable to the United States.

Of course, there will be other innovations where the margins will be under pressure, because the price is too low. So there you need to focus on volume. The bottom line is total profits, and margin is only one part of the equation. And because these are high-growth markets, competition is not going to reduce your margin, because we're not talking about a market-share game here—we're talking about a very vibrant and growing market. There is plenty of room for many, many players to come in.

AMONG THOSE PLAYERS ARE "THE RISING GENERATION OF MULTINATIONALS HEADQUARTERED IN THE DEVELOPING WORLD." DON'T THESE "EMERGING GIANTS" HAVE A BIG HEAD START WHEN IT COMES TO

INNOVATING FOR THOSE MARKETS AND THEN SELLING IN THE WEST?

The biggest challenge for the emerging giants is that they don't have global brands or global distribution. They don't have any assets in the United States; they can't sell without partners. American multinationals don't have that problem—they already have global brands and distribution. Their problem is a mindset problem: They don't want to bring low-priced products into the U.S. marketplace. They're afraid of cannibalization.

SHOULDN'T THEY BE?

Not at first. Companies should aim to bring in a low-price product and position it for a segment of the population that is not currently being served in the United States. Those people aren't being served here anyway. Think of the sixty million Americans who don't have health insurance: If I offer them $2,000 heart bypass surgery, that doesn't do anything to my $100,000 surgery business, because those higher-end customers are insured.

UM . . . WON'T INSURANCE COMPANIES NOTICE THAT THERE'S A $2,000 PROCEDURE AVAILABLE AND REFUSE TO KEEP REIMBURSING $100,000 PER SURGERY?

You're right—ultimately, yes, people will ask why there's such a large gap! And that brings up another point: There is a cost of inaction. NH *is* going to come in and offer $2,000 surgeries, so if you're a hospital here, you'd better do it first. Even though cannibalization is a real issue.

IS THERE ANY DANGER OF FOCUSING ON THE $2,000 SURGERY INSTEAD OF THE $100,000 SURGERY? IN *REVERSE INNOVATION*, YOU NOTE THAT NOKIA ACTUALLY "PUT TOO MUCH EMPHASIS ON INNOVATION FOR THE EMERGING ECONOMIES."

I'm not saying to forget about innovation in rich countries. You can't take your eye off the ball. Nokia focused on China and India and didn't notice that the smartphone market was taking off in the United States, and Apple was there, waiting. It's not either/or. You have to do both. You have to keep your premium-priced, performance-rich, highly sophisticated customer and, at the same time, do innovation for poor countries. It's a big challenge for companies.

APPLE WON'T BE SELLING $5 PHONES ANYTIME SOON, THOUGH.

It is possible to stay at the premium end for some players. Porsche is not going to offer a $2,000 car. But there is a tremendous opportunity for companies that want to participate.

CAN A COMPANY REALLY GO TO MARKET WITH BOTH $200 PHONES AND $5 PHONES?

Absolutely. One way to handle it is with a different brand name, with a different price/performance relationship. Or you can sell through different distribution channels. As a customer, I get confused if I see the same brand selling for $100 and for $10. If you use different channels, you attract different customers.

UNTIL THEY FIND OUT THAT IT'S THE SAME BRAND.

Right! You do have to have some underlying difference in value. The price can't be the only differentiating factor. Otherwise, yes, customers will catch on.

ALL THIS REQUIRES A GREAT DEAL OF RETHINKING—AS YOU WRITE, "YOU MUST LET GO OF WHAT YOU'VE LEARNED, WHAT YOU'VE SEEN, AND WHAT HAS BROUGHT YOU YOUR GREATEST SUCCESSES." HOW DO EXECUTIVES REACT WHEN YOU TELL THEM THAT EVERYTHING THEY KNOW IS GETTING IN THE WAY OF SUCCESS?

No one says to me, "No, you're wrong." At an intellectual level, they agree that they need to abandon some of their assumptions. In practice, they find it difficult, and I don't see very much change taking place. Intellectually agreeing doesn't make it happen. The way to actually forget these assumptions is to shift more power to these countries. That requires taking that next step; that's where the failure is.

SO PLENTY OF COMPANIES KNOW WHAT THEY NEED TO DO AND JUST HAVEN'T DONE IT YET?

There are companies like GE and Procter & Gamble and Pepsico and John Deere that are committed to this. They are pioneers in reverse innovation. But a lot of companies are struggling because they're not able to get over their dominant logic. Remember what happened in the '70s and '80s with Detroit? The Big Three were disrupted when they pooh-poohed players from Japan and Korea. And players from India and China will be fiercer because they'll come in at an even lower price point and higher value. This is a wake-up call. ■