

Cracking Frontier Markets



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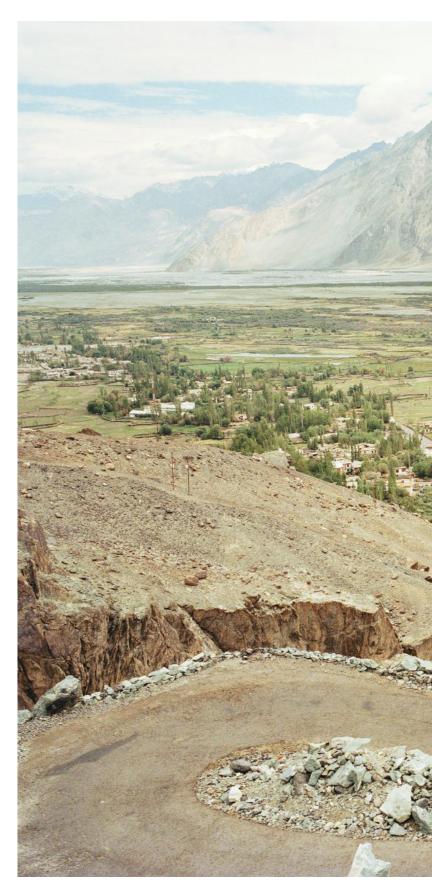


HEN A MOVIE IS released straight to video, it's usually a bad sign: Early

reviews were negative, the quality is dubious, or backers aren't confident it will find an audience. Going straight to video, historically, was a way to save face and move on. But in 1992, when the electronics salesman Kenneth Nnebue shot the straight-to-video Nigerian movie *Living in Bondage*, it was anything but a disaster.

Nnebue had received a shipment of blank VHS cassettes to sell in his store but quickly realized that most Nigerians had no use for them. He then had the idea of putting homemade content on the tapes. He wrote a script, found a producer and a director, and hired actors and actresses. The resulting two-part thriller about a down-and-out businessman who uses witchcraft to revive his fortunes was released on those tapes; Nigeria had no operational cinemas at the time. Made on a \$12,000 budget, the film went on to sell hundreds of thousands of copies across Africa, in the process catapulting "Nollywood"—the then-nascent Nigerian movie industry—to eminence.

Barely a blip on anyone's radar 25 years ago, Nollywood today produces about 1,500 movies a year, employs more than a million Nigerians, and is thought to be worth \$3.3 billion. In terms of volume, it rivals both Hollywood and Bollywood. This homegrown industry has attracted the





Idea in Brief

THE CONTEXT

Experts often assume that frontier economies are so underdeveloped that they can't support consumer-facing businesses—yet hundreds of companies have proved the conventional wisdom wrong with unexpected fast, sustainable growth.

THE WAY FORWARD

Entrepreneurs who succeed in these markets focus on market-creating innovations: products and services that speak to unmet local needs, create local jobs, and scale up quickly.

THE SOCIAL GAINS

Frontier markets are often plagued by corruption and held back by poor roads, lack of electricity, and so on. The essentials of development can be "pulled in" by market-creating innovators—and over time, governments and financial institutions tend to offer their support.



ABOUT THE ART

These images were shot by Frédéric Lagrange during a two-week trip through Ladakh, a mountainous region in the northeast corner of India.

attention of banks and other financial institutions, some of which now have "film desks" designed to invest in its productions. By some estimates, Nigeria is home to more than 50 film schools. The government has established funds for training filmmakers and financing new movies and is beginning to take piracy and copyright protection more seriously. In 2018 both New York and Toronto hosted Nollywood film festivals, while Netflix bought its first Nollywood film. *Lionheart*.

How could a modest investment by an electronics salesman simply looking to sell VHS cassettes trigger the rise of a multibillion-dollar industry in one of the poorest countries in the world—where fewer than 35% of households had access to electricity and only about 20% had a television set? Was Nollywood just a lucky anomaly?

Hardly. Nollywood is among scores of entities that have realized enormous growth by creating entirely new markets where they might least be expected. With emerging-market giants such as Brazil, Russia, India, and China experiencing slowdowns, investors, entrepreneurs, and multinationals are looking elsewhere. They've been eyeing so-called frontier economies such as Nigeria, Pakistan, and Botswana with great interest—and enormous trepidation. How can one find serious growth opportunities in economies characterized by extreme poverty and a lack of infrastructure and institutions, and with little or no data about market size and customers' willingness to pay?

Missing from the conversation is a foundation of theory to help explain why some efforts succeed while others don't. The reason, in our view, is the power of innovation, and specifically what we call *market-creating innovation*. It not only generates new growth for companies but catalyzes industries that buoy frontier economies and foster inclusive, sustainable development.

THE POWER OF MARKET-CREATING INNOVATION

Contrary to the conventional wisdom that a society must "fix" itself—its infrastructure, courts, legislatures, financial markets, and so on—before innovation and growth can take root, we believe that innovation is the process by which

a society develops. Innovation funds our infrastructure, cultivates our institutions, and mitigates corruption. When a country's prosperity stalls out despite a lot of activity within its borders, that country might not have a *development* problem. It might have an *innovation* problem.

Market-creating innovations, in particular, provide a strong economic foundation. They share several characteristics. First, they offer many people *access* to a product or service that was previously unaffordable or otherwise unattainable—if it existed at all. That can have a profound impact on economic development for the region in question as well as on wealth generation for the innovator and entrepreneur.

Second, market-creating innovations leverage business models and value chains that focus on *profitability before growth*. They often do this by borrowing existing technology and inserting it into a different business model. When Kenneth Nnebue inadvertently launched Nollywood, he not only gave millions of Africans access to locally made video content but also inserted existing technology (VHS tapes and recorders) into a business model (straight to video) that many would have scoffed at. Nnebue understood that although straight to video might have been merely a face-saving tactic in Hollywood, it was the right strategy for Nigeria. If he had tried to copy Hollywood and build theaters, his efforts might well have floundered.

Third, market-creating innovations are generated by and for a local market—or at the very least, they are designed with a local market in mind. This means that innovators must do the arduous work of understanding the ins and outs of that market and making a product simple and affordable enough for it. They might make use of low wages in the region, but market-creating innovations are not fundamentally about taking advantage of low wages to make a profit. In fact, over time—as an innovation spreads throughout a market—wages increase. This is in contrast to the race-to-the-bottom phenomenon, wherein low wages are deliberately exploited, often for export.

The increase in wages brings us to the fourth characteristic: Market-creating innovations generate *local jobs*, which fuel the local economy. These jobs arise specifically to serve the local market; they cannot easily be outsourced to other countries. They might include, for example, positions in design, advertising, marketing, sales, and distribution. They



often pay better than global jobs, such as low-wage manufacturing work and work sourcing raw materials, which are more readily moved from one region to another. Nigerians may not have manufactured VHS tapes or recorders, but recall that today Nollywood employs more than one million people in the country. And their jobs, unlike many created in Nigeria in decades past, are not at risk of leaving.

Finally, market-creating innovations can be *scaled up*. In fact, because they make a product simple and affordable, bringing it within many people's reach, scaling up is a fundamental part of the process. As Nollywood spread across the continent and to Africans in the diaspora, it created more jobs, supported infrastructure development, and helped

Nigeria develop its fledgling institutions. Thus the potential impact of market-creating innovations is enormous for companies and countries alike.

Let's turn now to two more market-creating innovations, exploring how the various characteristics have played out in each.

BUYING INSURANCE—AS EASY AS SIGNING UP FOR A RINGTONE

While working in London's insurance industry in the 1990s and early 2000s, Richard Leftley was puzzled by two tables

in the annual statistical analysis published by the global reinsurer Swiss Re. The first showed the number and location of people who had died as a result of natural disasters. The second showed insurance payouts. "There was a total mismatch between the two lists," Leftley recalls. "The human toll was enormous in places like Bangladesh, Pakistan, and India. But those countries were never even on the total payouts rankings." It made no sense, he thought, that the people in the world who most needed insurance were the ones least likely to have it.

Leftley soon saw an opportunity to change that. He spent a vacation volunteering in a poor village in Zambia, where he was placed in the home of a widow and her child. He was struck by just how painful her daily circumstances were. In what Leftley calls the "Chutes and Ladders" of life, the woman's husband had contracted HIV while the family was living in the capital, Lusaka. This started a downward spiral: He became too ill to work, and the family spent all its savings on medicine—both legitimate drugs and "hocus pocus" concoctions that offered nothing more than false hope—and eventually on his funeral. Broken, the widow and her child returned to her childhood village to start over.

Back in London, Leftley was determined to put his professional expertise to use helping people in poor economies. When he came up with an idea for a new business, his colleagues greeted it with skepticism. "They laughed at me," he says. "I was talking about going to Zambia and selling insurance to people who had HIV. People thought I had lost my marbles."

They're not laughing now. Founded in 2002, MicroEnsure has registered more than 56 million people in emerging economies for insurance (adding 18 million in 2017 alone), paying out \$30 million in claims and radically innovating the insurance business model. It has introduced new forms of protection for customers, including microhealth, political-violence, crop, and mobile insurance.

Working with established insurers, MicroEnsure designs and operates programs in some of the world's most impoverished communities, many of which are in frontier economies. Creating a market was a matter of trial and error. In its early days, the company tried simply offering low-cost versions of the insurance products available in advanced economies. Leftley says, "I had to print brochures that said things like

'Skydiving and water polo are excluded'"—expensive sports that his target customers would never have contemplated. "It was mad." And it failed woefully: Despite mounting an expensive advertising campaign, MicroEnsure recruited just 10,000 customers.

So Leftley tried again, changing both the product and the way he reached potential customers—offering them free insurance through their mobile phones. People could sign up without paying any premiums; they simply had to buy a certain number of extra minutes. They could keep earning this insurance by renewing the purchase each month. When a customer buys the required minutes, the telecom company pays his or her premium to both MicroEnsure and the partner insurer. Over time customers are offered additional insurance products, such as "double cover" (for a spouse) and "family cover," which cost extra—from three cents to \$1 per month, with payment collected through their phones. Revenue from the supplemental plans is split among MicroEnsure, the partner insurer, and the phone company.

Still, the offer of *free* insurance initially failed. Leftley realized that although sign-up required answering just three supposedly simple questions—name, age, and next of kin—even that was too much. "Those three questions caused 80% of people to not complete the process," he says. In many frontier markets, questions about age and next of kin are far from simple; people often don't know or care about their age, and designating next of kin in a complex family structure is difficult. So MicroEnsure had to radically innovate its business model again.

What if the company didn't ask customers anything? It would know only a person's mobile phone number. With that one piece of information, it would agree to provide insurance and make payments directly to that phone number; no paperwork, answers, or proof of anything would be required. "This was very freaky for insurance companies," Leftley says. To cover a customer without knowing even his or her age, in an industry built on data, forecasting, and actuarial tables, was a truly radical thought. But with that innovation, he explains, "buying insurance became as simple as signing up for a ringtone." And the free insurance became a powerful marketing tool: Once a customer had been educated about the concept of insurance, it was easier to upsell and cross-market other insurance products.

This is what sets market-creating innovators apart: the ability to identify opportunities where there seem to be *no customers* and to create a business model that upends the way things have always been done.

"We had cracked the code," Leftley says. Indeed, Micro-Ensure signed up a million customers the first day it offered a new life-insurance product in India—one that had no age limit or exclusions and required nothing more than a mobile number. And today when insurance companies want access to new customers, they sometimes retain MicroEnsure for consulting and product development services, aware that it has gained significant insight into customer behavior and spending patterns.

MicroEnsure was awarded an FT/IFC Transformational Business Award four times in recent years. It is already profitable in 80% of the markets it has entered. And it has created some 500 jobs, with more added as it moves into new markets. More than 85% of its customers have never bought insurance before.

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TO CAPTURE, YOU MUST FIRST CREATE

China is the world's second-largest economy. Its per capita income hovers above \$8,000—enough to put it in the World Bank's upper-middle-income category. Over the past 30 years China has lifted close to a billion people out of extreme poverty, in arguably the most impressive economic rise of any nation in history. In 1992, however, China's per capita income was just \$366—\$49 less than Ghana's. It was in this "1992 China," where destitution was the order of the day, that the entrepreneur Liang Zhaoxian created a market for microwave ovens and went on to build one of the largest appliance companies in the world.

Today that company, Galanz, accounts for almost half the microwaves sold globally. But Liang didn't build that empire by focusing on how to exploit China's low wages to create exports. He concentrated first on creating a market for microwaves in China—an opportunity his competitors couldn't see. In 1992 only 200,000 microwaves were sold in China, most of them in cities. The average price was about 3,000 yuan, or \$500—well beyond most citizens' reach.

Chinese people typically saw the microwave as a luxury they didn't need—and manufacturers saw them as too poor even to consider such a purchase.

Liang saw something different: people living in apartments with no stoves and, at best, with hot plates that overheated their cramped quarters. He also saw that the last thing anyone living in a small, stuffy apartment wants to do is cook.

So the business model he developed was predicated on creating a market in China. Even though Galanz took advantage of the country's low labor costs, as did many other manufacturers, it would be incorrect to suggest that it was just a low-cost maker of microwaves. From the start it had the typical Chinese customer in mind.

To successfully target that customer, executives had to think in novel ways. In the mid-1990s the capacity utilization rate for most microwave manufacturers in China was about 40%—but Galanz ran its plants 24/7. While other manufacturers advertised on TV, Galanz opted for newspapers, where it introduced "knowledge marketing"—providing information on how to use its products and including details about new models. This strategy drastically reduced its advertising and marketing costs; companies with similar sales spent almost 10 times as much.

An article in *China Daily*, a popular English-language newspaper, credited Galanz with educating many first-time consumers about the appliance. "In 1995, the company popularized the knowledge of the use of microwave ovens nationwide," the piece said. "It started running special features such as 'A Guide to Microwave Oven Usage,' 'A Talk on Microwave Ovens by an Expert' and 'Recipes for Microwave Oven Dishes' in more than 150 newspapers. It spent nearly 1 million yuan [\$120,481] in publishing books like 'How to Choose a Good Microwave Oven.'" These efforts created powerful brand awareness and helped Galanz sell its initial microwaves for about 1,500 yuan—half as much as most others on the market.

Galanz also developed capabilities that contract manufacturers focused primarily on low-wage exports did not require in China. When the company needed design engineers, salespeople, and marketing experts, it recruited them. When it needed distribution channels, it established them. When it needed offices, factories, and showrooms, it built them.



To serve the Chinese market, Galanz had to create many local jobs. Just two years after the company began production, it had a national sales network of almost 5,000 stores and had begun its global expansion. Today the company has distribution centers in nearly 200 countries and operates the world's largest microwave R&D center. If its strategy had been to exploit low wages for an export market, it probably would not have made those investments.

With Galanz we can also see the development impact of market-creating innovations. For instance, in 1993 the company had just 20 employees; by 2003 it had more than 10,000, and today it employs more than 50,000. And the indirect employment effects are undoubtedly much larger. Yu Xiaochang, the firm's executive vice president, argues that Galanz indirectly employs a million people in areas

including components and spare parts, repair, and maintenance. In 1993 the company produced about 400 units a day on a single line; by 2003 it was running 24 lines and producing about 50,000 units a day. A decade later it was producing some 100,000 units a day.

Galanz generated more than \$4.5 billion in revenue in 2013 (the last year for which data is available). Liang Zhaoxian is on *Forbes* magazine's list of the world's richest people, with a net worth of \$1 billion. His wealth and Galanz's success were built on market-creating innovations in China, for China.

Galanz illustrates clearly what it takes to succeed in an economy that many have written off. First, as discussed, Liang saw the potential for a thriving microwave market in China even though experts deemed the population

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too poor. Second, the effort wasn't just about making an inexpensive microwave oven; the company developed a business model that involved new forms of advertising, educating Chinese customers, and building retail and distribution capabilities. Third, Galanz did not invent technology or invest in R&D at the outset; it borrowed from other manufacturers. Over time it began to invent technologies, but it did not start out that way.

Fourth, Galanz was patient in terms of growth but impatient for profits; that's why it ran its manufacturing plants at 100% capacity, grew its resources as it created a market in China, and didn't build a global brand until it had comfortably and profitably dominated the local market.

A final point, which cannot be overemphasized: Instead of waiting for the government to invest in the education needed to ensure a steady stream of brilliant engineers, Galanz developed local talent itself, "spar[ing] no expense in training and hiring," as one article put it.

WHAT ABOUT CORRUPTION, INSTITUTIONS, AND INFRASTRUCTURE?

However flawless an organization's strategy for creating markets in frontier economies, very real barriers exist. Corruption, the lack of functioning institutions—what Harvard Business School's Tarun Khanna and Krishna Palepu call *institutional voids*—and dilapidated or nonexistent infrastructure constitute formidable challenges. How should companies think about and address them?

In line with Khanna and Palepu's work, our research suggests that the conventional view of how to overcome such obstacles—by first ensuring the presence of adequate infrastructure and institutions and rooting out corruption to create a fertile ground for innovation—may have the thinking backward. That approach, which we call *pushing*, prioritizes top-down, government- or NGO-led efforts as a necessary precondition. "We can't build factories until we have good roads on which to transport our products," goes the argument. "We can't attract international partners until we have reliable courts." And so on.

In practice, the opposite is true. Market-creating innovations don't wait for such obstacles to be removed by resources that are pushed in. They essentially *pull* in the necessary resources—creating workarounds or funding the infrastructure and institutions needed to deliver their products—even if those efforts are not initially supported by the local government.

Consider education. The fourth United Nations Sustainable Development Goal calls for quality education in all corners of the world, and development organizations have spent billions of dollars to that end. But although many schools have been built in low-income countries, the results have been uneven at best. Literacy and numeracy assessments show that students in low-income countries perform worse, on average, than 95% of students in high-income countries. And when schools don't deliver, mass unemployment and widespread distrust in the value of education ensue. What if we thought about education infrastructure—and infrastructure in general—differently?

The Indian IT firm Tata Consultancy Services adopted a unique approach. Rather than waiting for the government to improve education, it took matters into its own hands, because education is essential to its long-term success. With almost 400,000 employees, TCS is one of India's largest private-sector employers. To meet its clients' needs, it pulled "digital education" into its business model. The company has trained 200,000 employees in thousands of distinct competencies and shows no signs of slowing down. It targets its training, whether for new hires or existing workers, according to market demand and project specifications. That makes the education immediately relevant. Employees understand why they are learning, and TCS understands why it is investing.

Market-creating innovations can be a powerful catalyst for improvements to infrastructure and education: Over time, governments and financial institutions take note of innovators' efforts and begin supporting the new markets. Recall the effects of Nollywood's increasing success: The Nigerian government enacted stronger copyright protections, banks and other financial institutions began catering to the industry, and educational institutions responded. Development organizations also got involved, with the World Bank and other groups directing funds to Nollywood.

All these were "pull" activities; such things rarely happen the other way around.

In fact, infrastructure that is pulled into a market as needed—in dribs and drabs, often consisting of "good enough" solutions at the bottom of the market—might actually be the best, fastest, and most cost-effective strategy in the long run. For example, consider how much cell service has improved in Africa over the past 20 years—progress that resulted almost entirely from market-creating innovations.

Many infrastructure innovations that we now take for granted were the work of innovators who wanted to make and sell their products more efficiently. Take transportation. Scotland still has an active Singer railway station—built by the sewing machine company in 1907 to more efficiently transport products from factory to market. The first major U.S. railroad, the Baltimore and Ohio, was built by a consortium of investors and entrepreneurs for the primary purpose of improving access to markets. Many others followed as private companies issued bonds so that they could build their own railroads. The American engineer, businessman, and politician T. Coleman du Pont was responsible for the DuPont Highway, a 100-mile stretch in Delaware, which he later donated to the state. During the automobile mania in the United States in the early 20th century, Goodyear president Frank Seiberling pledged \$300,000 for the building of roads. He did not consult his board, later explaining that this was "a movement upon which [Goodyear] will expect to realize dividends"; people who wanted to sell tires were very happy to build roads. As these types of infrastructure grew, often becoming national security concerns, governments stepped in.

It may seem we are suggesting that governments in frontier economies transfer responsibility for infrastructure development to the private sector. We're not. We are highlighting the importance of *sequencing* and the catalytic role of innovation in infrastructure's development and improvement.

BRINGING MARKET-CREATING INNOVATIONS TO LIFE

How should companies think about creating new markets in frontier economies? We have identified five guiding principles.

Every nation has within it the potential for extraordinary growth. Innovators must first understand that despite what traditional market analysis might tell them, significant opportunities exist in frontier markets. These do not (and should not) resemble opportunities in developed markets, which differ in their fundamental makeup. Richard Leftley saw that although Africa was home to 16% of the world's population, it accounted for less than 2% of the global insurance market—and those lopsided figures signaled that a vast market could be opened precisely because of the continent's nonconsumption of insurance.

Most existing products have the potential to create new growth markets if we make them more affordable. Narayana Health is a chain of multispecialty hospitals in India, with seven world-class heart centers, 19 primary care facilities, and more than 6,000 beds. Devi Prasad Shetty, who once served as Mother Teresa's personal physician, founded NH in 2000, when India was one of the very poorest countries in the world. He focused on improving the *process* by which care is delivered and as a result democratized access to highly complicated and expensive procedures.

In the United States, open heart surgery can run as much as \$150,000—more than most Indians make in a lifetime. Given the cost, almost no one in India who needed heart surgery actually got it. Shetty saw an opportunity to create a new market for cardiac care. Today NH performs open heart surgeries for \$1,000 to \$2,000, with mortality and infection rates comparable with those in the United States. By increasing the utilization of its most expensive resources—personnel (especially surgeons) and medical equipment—it drastically reduced the cost of operations. It uses tiered pricing, whereby wealthier patients can pay more to get certain services, such as a private room. But the quality of care is standard across all patients.

NH has expanded over the years and now provides quality care in more than 30 additional specialties, including oncology, neurology, orthopedics, and gastroenterology. The organization is worth some \$1 billion, serves nearly 2 million Indians a year, directly employs more than 14,000 people, and has trained thousands of workers who are now employed at other facilities in India and abroad. And while major

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 and start to reimagine what is, you can begin to create something really powerful.
 And that has the potential to change the world."—Richard Leftley, CEO, MicroEnsure

hospitals in the United States struggle to make a profit, NH made more than \$20 million in fiscal 2017–2018.

A market-creating innovation is more than just a product or a service. It is a system that often generates new infrastructure, regulations, and jobs for people who make, distribute, market, sell, and service the offering. One of the clearest illustrations of this point is Mo Ibrahim's Celtel (now part of Bharti Airtel), which democratized telecommunications in Africa and paved the way for an entirely new digital economy that now supports some 4 million jobs. Celtel did not simply create an inexpensive mobile phone; it built a whole system that includes cell towers, installed and maintained by engineers; scratch cards containing prepaid calling minutes, sold in informal shops; advertising, created by artists and graphic designers; contracts, drawn up by lawyers; new projects, financed by bankers; and customer support staff. By 2020 the industry is expected to support more than 4.5 million jobs, provide \$20.5 billion in taxes, and add more than \$214 billion to African economies.

Obstacles can be mitigated through innovation; innovation doesn't have to wait for their elimination. The essentials of development and prosperity can be pulled in by market-creating innovations, as we have seen. When such innovations take root, infrastructure improves, institutions strengthen, and corruption is tempered. And once a new market becomes profitable to the various stakeholders in the economy, including investors, entrepreneurs, customers, and the government, they are often incentivized to help maintain those resources. The process occurs over time; it is not a single event.

When innovations target nonconsumption, scaling them up becomes inexpensive. Once an opportunity is identified and a business model is conceived to make a product or service available to a large population of nonconsumers, achieving scale is relatively cheap. The first step is recognizing an area of nonconsumption. If you try to exploit existing opportunities in frontier markets—many of which are already crowded—and hope to get scale up that way, you may find yourself chasing a mirage.

Think about how easily Safaricom, the company behind the innovative mobile-money product M-PESA, grew its operations after creating a market for consumers who were unbanked. In less than a decade more than 20 million Kenyans adopted M-PESA. Contrast that with how much it might have cost Safaricom, and how much longer it would have taken, to exploit the conventional banking system—buildings, branches, accounts, staff, regulations, and so on—to achieve the same scale.

THE KEY TO cracking frontier economies lies not in exploiting existing markets, although that may lead to some success. It lies in creating new markets that serve the billions of nonconsumers unable to find a product or service to help them solve an important problem.

The *process* by which those markets are created, even in the least likely of circumstances, is what investors and entrepreneurs need to understand. Our research suggests that this is the critical missing link. Once we focus more effort on that, immense opportunity will ensue, and inclusive, sustainable development will follow. It is precisely through innovations that generate or connect to new markets that societies can create jobs, pay taxes, and build their infrastructure and institutions. The quality that sets market-creating innovators apart—the ability to identify possibilities where there seem to be *no customers*—is the reason their work represents such enormous opportunity.

"It's difficult to run a ruler over things you can't see," MicroEnsure's Richard Leftley says. "But when you strip away the layers of conventional thinking about what's *not* possible and start to reimagine what *is*, you can begin to create something really powerful. And that, in turn, has the potential to change the world."

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