

European vendors for their assistance, but they were not interested in taking on the regulatory and other challenges posed by the Russian market.

Instead of giving up, McDonald's decided to tackle the local supply chain voids on its own, working to change the market context in service of its business to an even greater extent than the other examples in this chapter. With the help of its joint venture partner—the Moscow city administration—the company identified Russian farmers and bakers as additional partners. It imported cattle from Holland and russet potatoes from the United States, brought in agricultural specialists from Canada and Europe to improve the farmers' management practices, and advanced the capital streams to farmers so that they could invest in better seeds and equipment.

Next, the company built a 100,000-square-foot McComplex in Moscow to produce beef, ketchup, mustard, Big Mac sauce, and bakery, potato, and dairy products. It set up a trucking fleet to move supplies to restaurants and financed its suppliers so that they would have enough working capital to buy modern equipment. The company also brought in some fifty expatriate managers to teach Russian employees about its service standards, quality measurements, and operating procedures, and it sent a team of twenty-three Russian managers to Canada for a four-month training program.

In response to institutional voids, McDonald's created a vertically integrated operation in Russia, but the company clung to one principle: it would sell only hamburgers, fries, and soda to Russians in a clean environment—fast. The strategy paid off. Fifteen years after serving its first Big Mac in Moscow's Pushkin Square, McDonald's had invested more than \$250 million in the country and controlled 80 percent of the Russian fast food market.

Accept or Attempt to Change Market Context? Monsanto in Brazil

Like Microsoft, U.S.-based Monsanto faced contextual challenges in Brazil so serious that they threatened to undermine the company's business.⁵² In response, Monsanto worked actively to change the market context. Monsanto was a pioneer in developing biotechnology for the

agricultural sector, creating products such as seeds that could increase crop yields, exhibit particular desired characteristics (in fewer generations than in traditional agronomy), and resist plant pathogens.

In the United States, the company relied on a sophisticated soft infrastructure to develop and protect its technology. Monsanto's research and development operations relied on a robust education and technical training infrastructure to identify, sort, and train employees and identify capital markets that could support the long time horizon of new product development. After selling its sophisticated seed varieties, Monsanto relied on intellectual property rights protections, either through patenting genetically modified plants, obtaining plant variety protection certificates from the U.S. Department of Agriculture (or, in some cases, both), and then licensing use to farmers. In the United States, as in other developed markets, Monsanto could turn to the well-developed court system—adjudicators, in the taxonomy of market intermediaries—to resolve disputes and enforce protections, such as filing suits against growers who replanted seeds without paying new license fees.

Monsanto's developed market-made technology had a compelling value proposition in developing countries, where farmers were competing in global markets without local substitutes for technology such as Monsanto's seeds—in part the result of institutional voids in technical training and high-tech expertise. Demand for this technology in emerging markets presented Monsanto with tremendous business opportunities, but many of these markets lacked the sophisticated soft infrastructure to protect its technology.

As the world's largest soybean exporter, Brazil was a promising market for Monsanto's Roundup Ready soybean seeds, which were genetically engineered to resist—and thus intended to be used in conjunction with—the company's Roundup herbicide. The product was a blockbuster success in the United States—planted in 50 percent of the country's total soybean area in three years—and Monsanto sought to introduce it in Brazil only one year after its U.S. debut.

The company received a patent for Roundup Ready soybeans in Brazil as well as approval for commercial sale from the country's