By Mark L. Frigo, CMA, CPA

Reverse Innovation: A New Pathway for Growth

The global marketplace is turning upside down as innovation and growth are stemming from all parts of the world and many unexpected places. What can companies do to succeed in this environment?

Developing an effective innovation and growth strategy is a challenge for most companies. CFOs play a vital role in how organizations create and execute these strategies, how resources are allocated, and how performance is measured. Depending on how they perform their role, they can help or hinder innovation.

To examine these issues, we feature an interview with Vijay Govindarajan (VG), director of the William F. Achtmeyer Center for Global Leadership at the Tuck School of Business at Dartmouth. VG shares his thoughts and insights on how CFOs can drive growth through reverse innovation, the subject of his latest book, *Reverse Innovation: Create Far from Home, Win Everywhere* (written with Chris Trimble and published in 2012 by Harvard Business Review Press). His premise is that economic growth is coming from and is being driven by emerging markets in Asia, Eastern Europe, Africa, and Latin America, so companies will need to develop the right strategies to harness these growth opportunities. Reverse innovation can provide a way for organizations and their leaders to drive innovation that will create growth in developing markets and additional growth in already developed home markets. CFOs can consider how reverse innovation would create new pathways for growth and how the finance organization can contribute to the success of these growth strategies.

MLF: Reverse innovation has gained a great deal of attention in recent years. How would you describe reverse innovation to a CFO? Can you give an example?

VG: Historically, multinationals innovated in rich countries and sold those products in poor countries. Reverse innovation is doing exactly the opposite. It is about innovating in a poor country and selling those products in a rich country. GE sells $10,000 ECG (electrocardiogram) machines in the United States. ECG is the first point of diagnosis for heart disease. Such high-priced machines have very little market outside the top 10% of the economic pyramid in India. To create the market in the remaining 90%, GE innovated [by making] a portable, battery-operated $500 ECG machine for rural India. This machine is now sold in 100 countries. This is classic reverse innovation.

MLF: In your book, you describe the dominant logic of globalization vs. reverse innovation strategies. Can you describe these two approaches?

VG: The comparison of the dominant logic of globalization at many companies and reverse innovation strategies is displayed in Table 1. It shows the dramatic differences in strategic thinking of the two approaches.

MLF: CFOs are in a position to influence growth strategies and how they are executed. How can CFOs help support reverse innovation initiatives?

VG: Reverse innovations are experiments with many unknowns. One cannot use the same rigorous financial analysis that is useful in the core business. CFOs should use the metrics that venture capitalists use to allocate resources: Focus on the originality of the idea, and evaluate the people behind the idea in giving seed capital. CFOs should focus on how the reverse innovation leader is testing hypotheses and learning and not focus on short-term financial returns. Reverse innovation will not

Table 1 **Dominant Logic of Globalization vs. Reverse Innovation Strategies**

Globalization	Reverse Innovation
Optimize products for the developed-world customer	Best solution for the emerging-market customer
Cutting-edge, technologically sophisticated, performance-rich products with many features, new and fancy applications	Frugal, functional, good-enough-quality products
Take the simplest possible approach to designing offerings for emerging markets: remove features to reduce cost	Reinvent the product from the ground up; clean-slate innovation
Premium-price, high-margin orientation	Low-price, high-volume orientation
Technology push; product-out approach	Customer-centric; market-back approach
Look for customers to sell products to	Identify customer pain points, and develop products to solve customer problems
Sell products to current consumers of the product	Create new consumption among noncustomers
Gain market share	Create the market
Leverage current core competencies	Build new core competencies
Exploitation mind-set for emerging economies	Exploration mind-set for emerging economies
Use developed-world products to transform emerging markets	Build new global growth platforms based in emerging markets

(From Vijay Govindarajan and Chris Trimble, *Reverse Innovation: Create Far from Home, Win Everywhere*, Harvard Business Review Press, 2012, p. 36)

pay off in a quarter; it is a bet for the next decade.

MLF: In your book, you discuss the fear of cannibalization as a possible barrier to reverse innovation. What advice would you give CFOs to help their companies overcome this fear?

VG: Usually, reverse innovations create new markets in rich countries. There is no cannibalization here. For instance, the $500 ECG machines developed for rural India are used in ambulances in the U.S. This is a completely new demand that GE has not met before with its bulky $10,000 ECG machine. At some stage, as technology improves, the low-priced products will cannibalize premium products. If multinationals do not disrupt themselves, someone else will. Thus there is a cost of cannibalization. But there also is a cost of inaction. The cost of inaction is far greater than the cost of cannibalization.

MLF: You introduced the concept of reverse innovation in "How GE Is Disrupting Itself," an October 2009 *Harvard Business Review* article you wrote with Jeffrey Immelt and Chris Trimble. Since that time, what keys to success and pitfalls have you observed in companies pursuing reverse innovation strategies?

VG: Reverse innovation is a major growth vehicle. Several companies, such as GE, P&G, PepsiCo, and John Deere, are pioneers in reverse innovation and have benefitted. For example, PepsiCo innovated [by creating] a [Frito-Lay] snack food in India for Indian consumers called Aliva, which is lentil-based as opposed to corn-based Frito-Lay chips in the U.S.

The biggest pitfall comes when American companies try to unlock opportunities in emerging markets using dominant logic based on success at home. For example, Deere was not able to penetrate the huge Indian agriculture market when the company tried to strip down its high-end machines for India. Only when Deere innovated [by creating] a 30-horse-power tractor suited for the small farms could the company take a major share of the Indian market.

MLF: In your book, you discuss how reverse innovation has worked in healthcare. For example, Narayana Hrudayalaya (NH) Hospital has transformed healthcare in India by performing open heart surgery for just $2,000, compared to $20,000 or more in the United States, through process innovation resulting in world-class quality and profitability for the hospital. Can you briefly describe how they did it?

VG: NH Hospital has used economies of scale to drive costs down. They do heart surgeries on an assembly line. Counterintuitively, volumes actually increase quality. NH Hospital buys the same equipment you will see in Mayo Clinic or Mass General, but they use the equipment 25 times more. If you use a fixed-cost resource fully, cost per unit comes down. This is what Henry Ford taught us 100 years ago!

MLF: During a recent keynote presentation at a CFO summit, you mentioned a "performance price paradigm" that focuses on creating more value for less cost. Can you give a brief example?

VG: Imagine that we can construct a $300 house for the poor in which we can embed a $10 Nano iPhone. Using a digital platform, we can offer more education to the poor through e-learning, more healthcare to the poor through telemedicine, and more banking to the poor through mobile banking.

MLF: What advice would you give CFOs as their organizations pursue reverse innovation?

VG: CFOs should treat reverse innovations as though they are managing breakthrough innovations—understand and manage the inherent uncertainties. Reverse innovation requires local growth teams in poor countries. Resources and power should be shifted to emerging markets. In short, CFOs should feel comfortable in shifting the center of gravity to poor countries. That is the only way to win in emerging markets. **SF**

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Editor's Note

The reverse innovation strategies Vijay Govindarajan presented provide CFOs with a new pathway for growth. *Strategic Finance* readers will recognize the logic of reverse innovation when viewed through the lens of Return Driven Strategy. GE's development of the $500 ECG machine in India shows how focusing on otherwise unmet customer needs in rural India enabled GE to innovate its offering around those targeted customer needs, partner strategically and engage employees and others through its local growth teams in India, and use reverse innovation as a viable options strategy for growth. It also provided opportunities to fulfill unmet needs in the U.S. market by deploying the $500 ECG machine in ambulances in a market segment not previously served by GE's $10,000 version. Reverse innovation can be an effective approach to help CFOs address the growth challenge facing many companies. It is based on finding the best solutions for emerging-market customers and serving the fastest-growing markets while providing a second round of value creation in developed home markets. CFOs need this type of strategic thinking to develop their strategic leadership skills as they face the challenges of driving innovation and growth in today's global environment.

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