



Investing in the IT That Makes a Competitive Difference

Key ideas from the [Harvard Business Review](#) article By Andrew McAfee, Erik Brynjolfsson

The Idea in Brief

It's not just you. It really *is* getting harder to outpace the other guys. Since the mid-1990s, competition in the U.S. economy has accelerated to unprecedented levels. The engine behind this hypercompetition: IT. Thanks to powerful tools like ERP and CRM, backed by cheap networks, companies are swiftly replicating business-process innovations throughout their organizations. The firm with the best processes (order fulfillment, field installation, job closing) wins, but not for long. Rivals are striking back with their own IT-based process innovations.

To gain--and keep--a competitive edge in this environment, McAfee and Brynjolfsson recommend a three-step strategy:

Deploy a consistent technology platform, rather than stitching together a jumble of legacy systems.

Innovate better ways of working.

Propagate those process innovations widely throughout your company.

By taking these steps, elevator-systems maker Otis realized not only dramatically shorter sales-cycle times but higher revenues and operating profit.

The Idea in Practice

The authors recommend these steps for staying ahead of rivals through IT-enabled process innovation:

Deploy. Adopt a uniform technology platform to be used throughout your company.

Before deploying a consistent platform, Cisco's various units had nine different tools for checking an order's status. Each pulled information from different repositories and defined key terms differently, leading to circulation of conflicting order-status reports around the company. The company reconfigured its IT systems for consistent execution of key business processes including market to sell, lead to order, quote to cash, issue to resolution, forecast to build, idea to product, and hire to retire. The payoff? Strong performance over the past few years.

Innovate. Design better ways of doing work in your company. The best candidates for innovation are processes that:

- Apply across a large swatch of your company (such as all your stores, factories, or delivery teams)
- Produce results as soon as your new IT system goes live
- Require precise instructions (such as order taking or delivery)
- Can be executed the same way everywhere and every time in your organization
- Can be tracked in real time so you can immediately spot and address any backsliding to older versions of the process

U.K. grocery chain Tesco has long used customer-rewards cards to collect detailed data on individual purchases, to categorize customers, and to tailor offers. But it went one step further: tracking redemption rates for direct-marketing initiatives and tweaking its processes to get better responses from customers. Its process innovation drove its redemption rate to 20%--far above the industry's average of 2%.

Propagate. Use IT to replicate process innovations throughout your company.

At CVS pharmacies, customer satisfaction was declining. The reason: Prescription orders were delayed during the insurance check, which was performed after customers had left the store. So customers weren't immediately available to answer common questions such as "Have you changed jobs?" The company decided to move the insurance check forward in the prescription-fulfillment process, before the drug-safety review, so customers would still be around to answer questions.

The process change was embedded in the information systems that supported operations at all 4,000 CVS pharmacies in the United States. Performance improved across all the pharmacies, and customer satisfaction scores rose from 86% to 91%--a dramatic difference in the aggressive pharmacy market.

- [Purchase the full-length Harvard Business Review article here.](#)
- [Visit Harvard Business Online.](#)
- [See more on Leadership and Managing People at Harvard Business Online.](#)

Copyright 2008 Harvard Business School Publishing Corporation. All rights reserved.

Further Reading

Articles

Radically Simple IT

Harvard Business Review

March 2008

by David Upton and Bradley R. Staats

The authors focus on the "Deploy" principle for driving IT-enabled process innovations. Their advice? Build a low-cost, efficient IT system that runs your existing business and supports new growth fueled by process innovations. Develop your system over time, using these principles: 1) **Forge your business and IT strategies together**--so your IT platform supports your strategic objectives. 2) **Strive for simplicity**--so you can reuse elements of your system and save money. 3) **Invite users' input**--so they'll quickly embrace the new system. Using these principles, Japan's Shinsei Bank created an enterprise system that supported its strategy of providing new retail services. Its customer base jumped from 50,000 in 2001 to 2+ million in 2007.

The Next Revolution in Productivity

Harvard Business Review

June 2008

by Ric Merrifield, Jack Calhoun, and Dennis Stevens

This article sheds further light on the "Propagate" principle. The authors recommend using service-oriented architecture (SOA)--a way of designing business-process technology built on Web-based services. SOA makes it vastly easier to share processes with other units. To take advantage of SOA, identify processes that give you a strategic edge. Then automate these processes through Web-based services anyone (different business units, customers, suppliers) can access. Airlines did this by enabling passengers to check in for flights on their home computers, at airport kiosks, or through customer-service representatives.

Collection

Wringing Real Value from IT, 2nd Edition

HBR Article Collection

October 2008

by Nicholas G. Carr, Michael E. Porter, and Diana Farrell

This collection provides additional insights for maximizing the value of your IT investments. In "IT Doesn't Matter," Nicholas Carr recommends ways to save money on your investments. For example, explore cheaper alternatives, such as open-source systems and barebones PCs. In "Strategy and the Internet," Michael Porter advises using IT to integrate your virtual and physical business processes. For instance, employ your Web site to attract customers *and* draw them to flesh-and-blood salespeople, who provide personalized advice and after-sales service. In "The *Real* New Economy," Diana Farrell suggests figuring out what drives productivity most in your company (labor efficiency? asset utilization? cost reduction?), and sequencing your IT investments so they build on each other.

About the Authors

Andrew McAfee is an associate professor at Harvard Business School in Boston. He is the author of "Mastering the Three Worlds of Information Technology" (HBR November 2006) and has a blog at andrewmcafee.org/blog.

Erik Brynjolfsson is the Schussel Family Professor at the MIT Sloan School of Management and the director of MIT's Center for Digital Business in Cambridge, Massachusetts. More of the author's research is available at digital.mit.edu/erik.

Copyright © 2007 CNET Networks, Inc. All Rights Reserved.