

## Motorola Improves Profit Margins and Reduces Costs by \$3 Billion over Three Years

### Customer View

**“Digital Six Sigma is not just a marketing campaign at Motorola. It is a retooling and refurbishing of traditional Six Sigma [quality-improvement practices] that we are now applying to product development, marketing, sales, customer service, warehousing, and all other transactional processes.”**

**“Cisco IBSG helped us accelerate the implementation of Web-based tools for customer care, enabling us to do a better job in field service and technical support which ultimately impacts our profitability as well.”**

—Mike Fenger, Chief Quality Officer and Corporate Vice President of Customer Advocacy, Motorola

What does it take to turn a company with six very autonomous and competitive sectors, each accustomed to driving its own business and initiatives, into one collaborative team sharing the same goal? With the objective of driving overall profitability, Motorola brought together leaders from each of the company’s business units to share best practices, improve profitability, and achieve US\$3 billion in cost reduction within three years through its Digital Six Sigma initiative.

### BACKGROUND

Since Motorola’s founding in 1928, it has lived up to its image as an innovative, technology-driven company. One of the first in the industry to integrate technology roadmaps, Six Sigma quality, and 10X cycle-time reductions into its manufacturing process, Motorola is viewed as a model for product quality. However by 2000, as technology spending decreased worldwide, the company began to suffer, generating US\$27 billion in revenue on the top line but almost no profit on the bottom line. Responding to the challenge, Motorola management first made some difficult decisions that included closing factories, laying off employees, and selling several business units.

The company next turned its focus toward developing a strategic new e-business direction, applying its history of successful process-driven improvements to drive productivity and synergy across its six business units to increase profitability and return to a positive cash flow. This initiative, called Digital Six Sigma, incorporates new Web-based training tools, modeling and simulation tools, digitized process compliance, and quality-measurement tools.



Prepared by Cisco Systems, Inc.  
Internet Business Solutions Group

To lead this critical initiative, Chris Galvin, Motorola's CEO in 2002, brought in Mike Fenger, who had led the application of Six Sigma and e-business strategies at General Electric's Lighting Division. Fenger's initiative was centered on an aggressive goal of US\$3 billion cost reduction within three years.

"Six Sigma is a method of driving out defects," explains Fenger, Motorola's chief quality officer and corporate vice president of Customer Advocacy. "We felt in 2003, our greatest defect was lack of profitability."

### Challenge

Operating within a decentralized environment, Motorola has always given each of its sector leadership teams a great deal of independence in how they run their businesses. However, the success of Digital Six Sigma was dependent upon companywide buy-in and collaboration, and this long history of autonomy became the first challenge the organization needed to overcome.

"I spend most of my time on culture change," Fenger says. "Any time you start a new initiative, you find that people react differently. Some resist vocally, some wait for it to go away, and some just do the bare minimum. And then you have what we call passionate lunatics—those people who are the early adopters. They are the ones who really get it and can help us drive the initiative."

As part of the Motorola turnaround, Fenger put together global Synergy Teams made up of business process experts representing each of the functional areas within the company that were identified as targets for improvement, including customer service and support, logistics, sourcing, supply chain, and new product introduction.

Motorola then invited the Cisco Systems® [Internet Business Solutions Group \(IBSG\)](#) consultants to work with the teams on the [customer care](#) process. "They helped us conduct an assessment to discover where each sector was in terms of self-service capabilities," explains Karen Hamilton, senior director, Personal Communication Sector, Service and Support at Motorola. "We took a look at what we already had on the roadmap vs. what we weren't even thinking about yet and identified strengths, weaknesses, and opportunities."

Cisco® IBSG also worked with Bob Chan, vice president of IT for Personal Communications, Motorola Asia, on support issues in China, where the company's focus was on increasing customer satisfaction and loyalty.

"China is becoming more of a replacement market in metropolitan areas, where you have to go after repeat customers," Chan says. "Repurchase intent is the biggest determinant of how well Motorola will do in the overall Chinese cell phone market. Therefore, it is critical that we focus on customer satisfaction at both the service operator and consumer level."

### SOLUTION

The IBSG assessment identified three critical areas of focus within customer care—business-to-business (B2B) support, B2B field service, and business-to-consumer (B2C) support.

"Cisco did a great job on the assessment," Fenger says. "[The Cisco team] showed us how we should evaluate the performance of our call centers, the critical benchmarks, where we should focus, and what our opportunities are. It was helpful in that they were able to frame our problem, understand it from an external perspective, give us relative benchmarking data, and help us narrow in on specific problems."

After the assessment, the Motorola team attended a session at the [Cisco Executive Briefing Center \(EBC\)](#) in San Jose to learn more about industry best practices. "As a company, our sectors were all at very different

stages of implementation and it was good for the organization to see what maturity could look like,” Hamilton says. “It facilitated thought processes to see what Cisco had done and how customer self-service—one of its main drivers—had evolved.”

The Cisco IBSG consultants also demonstrated how Motorola could take advantage of networking and Web tools in the areas of service and support to implement automated contract management, software downloads, updated product specifications, and requirement gathering for remote monitoring and support. “Cisco put us on the right path, solidifying clarity around our roadmaps, bringing a structured view as to how to go about this, and accelerating the implementation of the initiative,” Hamilton says.

With focused energy, a CEO who visibly championed the cause, and a cross-functional team to move the implementation through each of the sectors, Motorola was ready to roll.

## RESULTS

As of November 2004, Motorola is ahead of schedule in reaching its original goal of US\$3 billion in cost savings within three years from its Digital Six Sigma effort. About halfway through the initiative, the company has already saved US\$1.8 billion, much of that coming from improved engineering productivity, reduced cost of poor quality (CoPQ) and increased procurement effectiveness. The team is on track to hit the third billion over the next 12 months.

As a result of the Service and Support Synergy Team initiative, Motorola is rolling out implementation in the various sectors that specifically address the company’s original goals. “We saw how Cisco pushed the envelope,” Fenger says. “That focused us, inspired us, and gave the team more energy as well as a sense of urgency. I believe that drove change for us faster than it would have otherwise happened.”

Opportunities being pursued include:

- **B2B support**—Automation of key process areas to reduce costs, including case management, remote diagnosis and resolution, and software downloads
- **B2B field service**—Use of Web-based tools to support revenue growth as well as cost reduction in the service and support business area through product redesign that can enable remote monitoring and service
- **B2C support**—Increased revenue opportunity through improved customer support, which also serves to increase customer loyalty and customer lifetime value

**“CISCO IBSG HELPED PUT US ON THE RIGHT PATH, SOLIDIFYING CLARITY AROUND OUR ROADMAPS, BRINGING A STRUCTURED VIEW AS TO HOW TO GO ABOUT THIS, AND ACCELERATING THE IMPLEMENTATION OF THE INITIATIVE.”**

**Karen Hamilton, Senior Director, PCS Service and Support, Motorola**

## NEXT STEPS

Going forward, Motorola and Fenger will increase focus on quality and customer satisfaction, targeting a five percent improvement in customer loyalty each year. Cisco continues to work with Motorola to share best practices on [customer satisfaction](#) and [productivity](#). “We recently participated in another EBC with Cisco where we focused on customer care and remote diagnostics,” Hamilton says. “Cisco is demonstrating how it handles consumer calls. We like the way Cisco manages customer satisfaction, how the company takes the data and drives it back into the organization, and how it manages the relationship with its out-sourcers. A lot of what we are doing is based on the Cisco business model.”

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## MORE INFORMATION

For further information on Internet business solutions, visit <http://www.cisco.com/go/ibsg>

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