



Innovation roundtable New York City
Responding to market realities
Staying ahead of change

Beating the odds through performance management

The IBM Cognos® Innovation Center for Performance Management hosted the fourth in a series of Innovation Roundtable events that began in Orlando.

At each event, discussions are led by an IBM Cognos customer whose commitment to drive performance management from Finance and whose adoption of Cognos software to enable it has brought about dramatic improvements and increased competitive advantage.

Discussions at previous Roundtable events had covered a wide variety of topics:

- The limitations of budgeting and spreadsheets in the face of greater business complexity
- Alternatives to traditional budgeting such as driver-based planning
- Financial process transformation
- Strategies to enable and manage cultural change
- Increasing visibility, accuracy, and agility
- New approaches to forecasting
- Improving performance by contemplating failure

You can find a proceedings document summarizing these events online.¹

At the October Innovation Roundtable, the emphasis was on the drastic changes required by unforeseen marketplace turnarounds. The telecom industry saw a boom and bust as dramatic as any in the late 1990s and early 2000s. The Vice President of Financial Planning and Analysis for a leading telecom company talked about how he helped lead his company back to financial health when few thought it was possible. Performance management was key to the recovery.

In addition, Greg Hackett discussed the perils of ignoring change. There are new forces at work in the marketplace, and companies that are not prepared to adapt can suffer grave consequences.

The IBM Cognos Innovation Center for Performance Management

The Innovation Center for Performance Management puts new ideas about planning and performance in action. It draws on the expertise of an advisory council with members from systems integrators, Global 1000 companies, and industry leaders, as well as its many participants. It offers the opportunity to:

- Find out about new planning processes and practices, as well as understanding the technologies that can enable them.
- Network with industry leaders like themselves.
- Broaden knowledge and vision for performance management.

On the road to recovery in telecommunications

When the telecom market collapsed, more than one company folded. A leading company was particularly battered, but recently returned to profitability just three years after undergoing dramatic changes. At this session, the Vice President of Financial Planning and Analysis recounted how Business Performance Management (BPM) helped the company navigate through decline and restructuring back to growth and profitability.

The first challenge: “complexity beyond belief”

Rapid growth and near-weekly acquisitions led to a complex culture, complex systems, and significant customizations. Even had their market not collapsed, this company was facing significant performance challenges. The combination of deregulation, unlimited access to capital and the Internet boom in 1996 drove the telecommunications industry to historically unprecedented levels of growth:

- Between 1996 and 2000, the number of service providers grew from fewer than 1,000 carriers to more than 15,000.
- Service provider capital spending grew from \$213 billion to \$310 billion and was expected to reach \$580 billion by 2003.
- At the height of the boom, capital spending had soared to 106 percent of revenue, nearly three times its historical average.²

Like its peers, this company was building for the future. Its priority was to grow and maintain market share and in this it was remarkably successful. Between its 1996 IPO and 2000:

- Revenue grew from \$20 billion to \$38 billion.
- Headcount grew from 131,000 to 157,000.
- Customer base grew from hundreds to thousands.
- The company introduced more than 260 new products and acquired 38 companies.

All this activity made for amazing complexity. “Integrating and growing at the same time was an incredible challenge,” said the vice president. “We were complex beyond belief.”

Disaster hits

Like its growth, the telecom industry meltdown was without precedent. When it became clear that the predicted demand explosion was not going to happen, operators cut prices, hoping to fill their empty pipes (see sidebar, “Disaster Looms”). Capital spending in 2003 missed expectations by more than \$360 billion. Equipment-makers’ sales collapsed and share prices tumbled. One competitor saw its market capitalization fall from \$400 billion in the summer of 2000 to just \$3 billion two years later.³

For its third meeting in New York, participants at the Innovation Roundtable included executives from some of the following organizations:

- CMP Media
- Credit Suisse First Boston
- Time-Life, Inc.
- Commerce Quest
- Inverness Medical
- Viking News Service
- Pfizer

The second challenge: focus on performance management

No one knew how long or how bad it would get, said the vice president. Yet the effects of the downturn were already so dramatic and wide-ranging that simple cost-cutting was no longer an option. The company needed a complete reconfiguration of its systems, processes, and culture. It needed to shift its outlook from aggressive growth to managing cash and risk.

So how do you re-engineer a \$38-billion company in the midst of an unprecedented market collapse? Think about driving your car, said the speaker.

When you drive your car, your mind is focused on many parameters at the same time. You're likely to be asking yourself several questions. Through your car's instrumentation and your own capabilities, said the vice president, you should be able to answer these questions, anticipate problems, or change direction instantly.

The same logic applies to managing performance:

Question	Business equivalent
Do I know where I've been?	Historic results
Do I know where I am now?	Real-time/current Data
Do I know where I'm heading?	Forecast
Do I know my final destination?	Strategy
Do I know how to get to my destination?	Business Plan
Can I anticipate a problem?	Leading indicators
Am I aware of my surroundings?	Competitive information, market & customer data
Do I know how to change direction?	Contingency planning, what-if analysis, cause & effect

Most people wouldn't get into their cars without such information, yet most run their businesses without it. This puts them at a disadvantage.

The telecom company used this approach to create its performance management system. Now it uses a collection of disparate-yet integrated-systems and information:

Detailed Customer by Product Forecast (400 x 100 Matrix).

Using IBM Cognos software, the vice president's team built a 400 x 100 matrix of customers and products and distributed it across the company, enabling everyone to work with the same data on the same platform-in the same way and with the same mindset. "When you know the process, you know how to think about the data." The finance team can compare actuals to forecast instantly and see what has changed, saving thousands of hours' worth of data collection and yielding better results.

“Integrating and growing at the same time was an incredible challenge. we were complex beyond belief.”

A new approach

Integrating Results, Plans, and Outlook: Complete integration means changes in one area are automatically and accurately reflected in the others. Recalibrating plans in response to market or customer trends becomes second nature.

Enterprise Data Warehouse: An IBM Cognos data warehouse ensures accurate data and enables drill-through to transaction-level detail.

Full-stream P&L, Balance Sheet & Cash Flow Forecast: Complete integration means changes in one area are automatically and accurately reflected in the others. Performing “what if” analysis is quick and easy and drives better decisions.

Driver-based Headcount Planning: “We don’t say ‘Tell me how much you spend on compensation.’ We say: ‘How many people do you have? What’s their level and location?’ It’s a completely different conversation.” These conversations drive the compensation and bonus plans.

Business Restructuring Management: This helped the company decide where to take top-line action (reducing staff, cancelling contracts, reducing inventory) on a quarter-by-quarter basis.

Program Management: A Drive for Cash (DFC) program charged every employee to find “funnels of opportunity” to raise cash. The vice president provided the CFO with monthly performance reports that answered key questions: Who, What, When, and How much? This helped drive accountability. In two years, DFC generated 180 percent and 160 percent of target.

Effective Version Control: Using a centralized system for forecasting and restructuring helped keep track of which numbers it presented to banks, rating agencies, executives, and other audiences.

Value in coming together
Participants in the San Francisco Roundtable had an experience similar to those at the inaugural event in Orlando. When asked about the likelihood of their recommending a Roundtable event to a friend or colleague, 100 percent responded “likely” or “very likely.” Participants also said the Roundtable stimulated new thinking and helped clarify their ideas around performance management:

“It validates our approach to re-engineering planning: start small, gain some quick wins, allow positive feedback to permeate throughout the business, then tackle bottom-up planning as users request change in processes and tools.”

Portfolio Management: Continual scenario analysis helped the company decide which investments, products, and markets were worth pursuing and which were not. They could see the impact of staying in a market or leaving it to competitors.

Balanced Scorecard: Use of metrics including on-time delivery and operating cash helps the company keep watch on its operations.

Driving Visibility and Accountability through Reporting: “Everything is a team effort,” said the vice president. Consistent and accurate reports ensure that R&D, marketing, sales, finance, and other teams work together with the same information.

Value in coming together

Participants in the San Francisco Roundtable had an experience similar to those at the inaugural event in Orlando. When asked about the likelihood of their recommending a Roundtable event to a friend or colleague, 100 percent responded “likely” or “very likely.”

Three priorities to align change

A finance-driven, enterprise-wide approach to performance management helped the company deliver on three priorities:

1. Stabilize the financial structure.
2. Streamline cost and expense structure.
3. Redesign systems and processes.

“David Axson gave several ideas to think about related to the purpose and focus of planning.”

“It stimulated thinking about what information most effectively supports the decision-making process.”

Under each priority, there were several concrete steps:

Stabilize the financial structure

- Enter capital markets to secure additional funding.
- Recapitalize the business to mitigate risk.
- Sell assets and recover others by reducing vendor and customer financing.
- Institute the Drive for Cash program (DFC).

Streamline its cost and expense structures

- Bring in an outside consultant to challenge traditional thinking.
- Establish a Program Management Office (PMO) that focused on five areas:
 - Business Realignment
 - Sales Force Redesign (align customers with future plans and improve channel performance)
 - Review R&D portfolio (identify the most profitable products and analyze risks involved in leaving given markets)
 - Corporate Centers (HR, Finance, R&D, etc.).
 - Supply Chain Overhaul/Outsourcing.

Redesign systems and processes

- Migrate to global systems.
- Overhaul global billing, order, and delivery process.
- Strengthen controls.
- Begin a Balanced Scorecard initiative.

Suggestions for future reading

The following titles are available free of charge from the IBM Cognos Innovation Center for Performance Management: Best Practices in Planning and Management Reporting, by David Axson. Published by John Wiley and Sons, 2003. Beyond Budgeting: How Managers Can Break Free from the Annual Performance Trap, by Jeremy Hope and Robin Fraser. Published by Harvard Business School Press, 2003. For other titles, please visit www.cognos.com/innovationcenter

Each aspect was helped by different elements of the plan:

Stabilizing financial structure	Primary BPM systems
Capital markets to ensure funding Recapitalize to mitigate risk	Plan, Cash Flow Forecast
Assets sales and tax work to generate cash	Full-Stream Forecast
Global asset recovery Drive for Cash	Program Management
Streamlining cost and expense	Primary BPM systems
Third-party consultant	Business Restructuring Management
Program Management Office	Program Management
Areas of focus: – Business Realignment – Sales Force Redesign – Portfolio Review and R&D Focus – Corporate Centers – Supply Chain Overhaul	Sales Forecast Full-Stream Forecast Portfolio Management
Re-designing systems and processes	Primary BPM systems
Migration to global systems Overhaul of customer order, delivery, and billing processes Strengthen controls Balanced Scorecard	All BPM Tools

“We wouldn’t be where we are now if we hadn’t implemented the performance management system when we did.”

Two ingredients to change the culture

As in previous Roundtable events, much of the discussion focused on ways to enable cultural change. The speaker pointed to two key decisions that helped make this happen for his company.

Bring in outside views.

A long corporate history and low staff turnover made many people unwilling to look outside their own four walls. The prevailing attitude was that they knew the business better than anyone else. “We had to challenge traditional thinking. We knew we had to shift. But with a corporate history dating back to the 1800s, it’s easy to rest on your laurels.” Bringing in the outside consultant helped open people’s eyes to what was really happening.

Set the right “tone at the top.”

“Top-down leadership is the only way you can make change happen and get people behind it,” said the vice president. The CFO clearly stated the business imperative: “We need cash to survive.” The vice president’s team maintained momentum by creating regular progress and performance reports. “Before you knew it, everyone was aligned around this goal. It made my job very easy.”

Results

The ability to increase visibility and accuracy around its forecast and financial performance, combined with better decision-making and accountability, contributed greatly to the company’s dramatic turnaround. Although its revenue numbers are well short of those before the downturn, the company has posted dramatic gains in every other key financial indicator. A large part of the turnaround was the company’s ability to shed non-essential commitments and initiatives and focus on its key business drivers. “We now have very few drains on the business,” said the vice president. Vendor financing – supporting start-ups and related projects – has gone from a “ridiculous number to a negligible number.” “This is a non-issue for us. It’s not for our competitors.”

And timing was everything: “We wouldn’t be where we are now in terms of the strength of our balance sheet and our operating results if we hadn’t implemented the performance management system when we did,” the vice president said.

Disaster looms in faulty forecasting

The burst of the telecom bubble was in large part due to faulty – and overly aggressive – forecasting taking place across the entire industry. When speculation gave way to reality, most telecoms were unable to adjust. Telecommunications is an infrastructure-intensive business, and because infrastructure takes a long time to build, telecoms firms have to make bets on the level and nature of future demand. As it turned out, the bets made during the technology bubble of the late 1990s were spectacularly wide of the mark.

Since 1997, Internet traffic has roughly doubled every year. Much of the industry, however, was convinced that traffic was doubling every 100 days. This widely quoted statistic, which originated at WorldCom, became an essential ingredient of business plans and conference presentations during the bubble. It assumed unimpeachable status when it appeared in a report published by America’s Department of Commerce in April 1998. Dozens of firms rushed to build new fibre optic networks in America, Europe and Asia. But apart from a brief period in 1995-96, the figure was simply wrong.

The expected deluge of data never came. From 1998 to 2002, the amount of fibre in the ground increased fivefold. Meanwhile, advances in the technology of feeding signals into fibres at one end and extracting them at the other increased the transmission capacity of each strand of fibre 100-fold, so total transmission capacity increased 500-fold. But over the same period demand for transmission capacity merely quadrupled, a rise that could easily be accommodated by existing networks. Meanwhile, though, a dozen new national fibre backbones had been constructed in America, with a similar proliferation in western Europe. Andrew Odlyzko, a telecom analyst at the University of Minnesota, estimates that companies spent around \$150 billion building unnecessary telecom networks in America and another \$50 billion in other parts of the world.

Source: “Beyond the Bubble,” The Economist, October 9, 2003.

Soft benefits

The Performance Management approach also brought about intangible benefits that indicate successful culture change and are the hallmark of high-performing companies: collaboration, accuracy, and accountability.

Collaboration: A new way of talking about the business. Driver-based planning puts discussions about finance in a context that people outside finance can understand,” said the vice president. People can talk about their plans, budgets, and outcomes as aspects of their day-to-day activities. This lets them have more constructive conversations about what they’re doing for the business. For example, instead of saying, “I’m going to spend \$12 million dollars,” marketing can say, “We’re going to run six campaigns focused on three key audiences. Let’s build the plan around that.”

Accuracy: Better decisions in less time. Working from a single platform and using consistent data has increased the accuracy of expenses, balance sheets, and cash flow to the point where the cash flow can be predicted to within \$100 million. “Our forecast process just hums,” he said. “I wouldn’t be able to be here if it didn’t.” From start to finish, the company created its plan for a single fiscal year in less than three months.

Accountability: No more games. Increasing visibility into the assumptions and models in their forecasting eliminated the game-playing and inaccuracies that had plagued the company in the past. Meetings that had previously been unproductive because of a disagreement over numbers are now more productive. “People are much more accountable now because there’s more visibility into the numbers they submit. This was a major cultural shift.”

Lessons learned

The telecom company emerged from the downturn having learned some valuable lessons:

- 1. Don't underestimate the simple things.** Data integration and version control make up 90 percent of your solution. For example, even with dedicated spreadsheets stored in a shared area, the vice president's team struggled to find the information they needed and compare it to previous versions. They eliminated the problem by building a three-dimensional model comprised of plan version, P&L cash flow, and time periods. "Now we can view every version of any plan that was presented to anyone at any time. We can make annotations knowing it's the right version."
- 2. Approach change in manageable steps.** "You don't need a big bang." Going slowly and in steps helps people understand the benefits of the new system and opens their eyes to the possibilities. This helps drive ownership.
- 3. Don't over-engineer the solution.** Keep it simple and be prepared to accept tradeoffs. Distinguish between the essentials and the nice-to-haves to get up and running quickly. Think in operational terms, not financial terms, then work out how to build a financial model or process to support it.

Next steps

Even though the telecom company has shifted its focus from restructuring back to growth, the vice president said there is still much work to be done. He identified three priorities:

- 1. Simplify the business.** "We're still complex and that touches every aspect of the business," he said.

“There’s no reason to control things if they don’t really matter.”

Greg Hackett

2. Enhance and expedite financial information flow focusing on:

- Expense management via effective reporting.
- Greater automation. Some areas of the business still rely on spreadsheets. “As long as you give people spreadsheets, they’ll customize them,” said the vice president. Eliminating “creeping customization and islands of information” is key.
- Data cleanup and maintenance – the company still has too many cost centers and accounts.
- Reducing level of detail. “I have a detailed travel budget by period and organization,” said the vice president. “But we never manage travel against budget. A driver-based approach is far more effective and meaningful.”

3. Ongoing change management. Some senior managers don’t “get it” because they don’t live and breathe it, said the vice president. Others assume the new information is simply the result of people working harder. “We need to evangelize: ‘This stuff makes a difference. Without it, you get left behind.’”

Greg Hackett: adapting to a tough new world

In addition to showcasing successful customer deployments, the IBM Cognos Innovation Center is dedicated to spreading the word of leading thinkers in performance management. On this night, the guest speaker was Greg Hackett, co-founder of The Hackett Group, former business partner of David Axson, and an advisor to the Innovation Center.

Echoing research that David Axson had presented in San Francisco, Hackett painted an unsettling picture of corporate performance in response to changing markets. “There’s an 85 percent chance that your company will be out of business before you’re ready to retire.” Consider the numbers, Hackett said:

Forbes 100 List, 1917-1987

- 61 companies no longer exist.
- Only 18 remained as large companies.

S&P 500, 1957-1987

- Only 15 percent were long-term survivors
- Only 16 percent outperformed the S&P Average.

Companies that were once the envy of corporate America are also vulnerable. “There’s no assurance of continuity,” he said. “Size and past success mean nothing.”

Consider the list below:

Fortune’s most admired companies in america	
At the time of the Roundtable	1983 - 2000
Wal-Mart	Rubbermaid
Berkshire Hathaway	Digital Equipment
Southwest Airlines	Lucent
General Electric	Levi Strauss
Dell	Eastman Kodak
Microsoft®	Time Inc.
Johnson & Johnson	Shell Oil
Starbucks	Walt Disney
FedEx	Motorola
IBM	AT&T

The truth is that most companies die, said Hackett. And they’re dying sooner than ever before: Between 1938 and 2000, the average company life span shrunk from 78 years to 20.

In addition, most companies have only a small window of opportunity to get things right. Hackett cited his own research that showed how, after five years of outperforming their peers, a company's profitability inevitably stagnates for another 10 years before declining sharply. Once this happens, he said, most companies can only hang on with their fingernails as their market share slips away.⁴

So why do companies stagnate? They miss the danger signs, said Hackett. Here's why:

No one plans for failure. Successful organizations tend to stiffen up and presume continuity over time, said Hackett. No one is responsible for understanding the environment and market turmoil. "Most people have a real terrible job of driving change because what people want to do is play around the edge doing continual improvement. The resistance to change is huge."

Too much "good management." An over-reliance on analysis and management "fads" is killing intuition. He cited Motorola's reliance on Six Sigma: "You could drop a flip phone from the fourth floor and still make a call," he said. "But they missed the bigger move from analog to digital and let others move past them."

Companies listen to their largest customers. These are often the ones in decline, said Hackett. Companies should instead listen their newer, smaller customers. "They're the ones that are focused on innovation and growth."

Many of these tendencies stem from the professional management approach pioneered by GM's Alfred P. Sloan. This approach stressed a multi-year strategic plan, detailed annual budgets, static reports, and single-point estimates. And numbers. Lots and lots of numbers. "This is where you're going to go wrong: too much data, not enough insight," said Hackett. "You're just going to put up stuff that's easy to put up."

This approach was suitable for its time - when industry was moving from small family-run businesses to large industrial organizations. It no longer works today, said Hackett, because of its inflexibility and focus on short-term problem-solving.

What is finance doing?

Ten years ago, said Hackett, everyone was looking to cut costs. And finance was a likely candidate. Companies viewed Finance as expensive, controlling overhead that processed transactions, but providing little value. Finance would have to transform itself into a strategic partner to the business—a place where people could be recognized for making good decisions. In some areas Finance was successful. ERP systems simplified processes and controls. Adopting benchmarks helped drive best-in-class performance. And it dramatically reduced costs: from 2.2 percent of revenue to 0.75 percent.

Finance doesn't get much cheaper to run than that.

However, it has yet to deliver on the promise of becoming a true business partner, said Hackett. Planning and budgeting are still ineffective in driving performance. Risk management has weakened. Decision support isn't much better. And finance, despite being leaner and cheaper, is still thought of as overhead because it still spends the bulk of its time processing transactions. "You should not process transactions. You should not do management reporting. That's not your job."

The solution? Outsourcing, said Hackett. All your processes, and quickly — within a full calendar year. Outsourcing now costs seven percent less than in previous years and "most outsourcing companies have better control processes and service than you do." This is just the start, Hackett said. The real challenges lie in recasting the role of Finance. "If you keep working on those programs to reduce costs, you distract your organization from what really has to happen — making your culture better and making better decisions." "Everything you do with planning, management reporting, and decision-making has to change."

Finance should focus on shifting sands

According to Hackett, finance is the only organization that touches everything else and is therefore uniquely positioned to drive change. To avoid stagnation and lost market share, finance needs to build a decision-making and risk management culture that can identify and respond to challenges whenever they happen, not simply at quarter- or year-end. And finance needs to extend peaks, slow declines, and find new opportunities.

Hackett offered some concrete steps companies could do:

- 1. Set up an early warning system.** Dedicate resources to looking outside to market turmoil, competitive moves, and customer trends to let people know what's happening and prepare them to change direction quickly. Having everyone working from the same platform with the same numbers and models is crucial to increase agility, he said. "You can't plan for the future if you spend all your time stacking and racking numbers."
- 2. Focus on what you can change.** There are only about 100 levers in any organization that people can pull on to make a real change, said Hackett. Yet most companies focus on reporting operational details that aren't connected to business drivers. "There's no reason to control some of those things if they don't really matter. But if you report 100 things, if you plan 100 things, if you focus on 100 things or less, then you have the culture pointed in the right direction."
- 3. Gut your planning process.** Conversations should be about goals and tactics, not simple numbers. And, said Hackett, don't wait until the end of the quarter. Do it whenever you have to. There's no need for detailed strategic plans or to wait until quarter-end. "If you have enough information about your productivity and your last quarter's results, then it's enough to go with." If you always know where you are, changing is easy to do."

“There’s no assurance of continuity. Size and past success mean nothing.”

Greg Hackett

4. Bring intuition back into the planning process. Make sure people understand the big picture and focus on the ways they can fail. At Bank of America, said Hackett, people meet every week to look at the numbers and ask, “What does it mean? What’s going to change?” They focus less on execution because they let technology tell them when there’s a problem. This frees up time to manage improvement projects and make sure that they deliver the net change they need. “There are many eyes on the outside.”

5. Energize your culture. Get people away from focusing on operational details and re-focus them on innovation. “Most of the stuff runs itself,” said Hackett. “Or you can set up a system that tells you there’s a problem. You can make sure the improvement projects actually pay off.”



© Copyright IBM Corporation 2009

IBM Canada
3755 Riverside Drive
Ottawa, ON, Canada K1G 4K9

Produced in Canada
May 2009
All Rights Reserved.

About IBM Cognos BI and Performance Management

IBM Cognos business intelligence (BI) and performance management solutions deliver world-leading enterprise planning, consolidation and BI software, support and services to help companies plan, understand and manage financial and operational performance. IBM Cognos solutions bring together technology, analytical applications, best practices, and a broad network of partners to give customers an open, adaptive and complete performance solution. Over 23,000 customers in more than 135 countries around the world choose IBM Cognos solutions.

For further information or to reach a representative: www.ibm.com/cognos

Request a call

To request a call or to ask a question, go to www.ibm.com/cognos/contactus. An IBM Cognos representative will respond to your enquiry within two business days.

IBM, the IBM logo and ibm.com are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.

Any reference in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

Endnotes

- ¹ A proceedings document from this and other Roundtable sessions is available free of charge from the IBM Cognos Innovation Center: www.cognos.com/innovationcenter. Other Roundtable events were held in Dallas, New York, and Chicago.
- ² Rebecca Blumenstein, "For Telecom Workers, Burst of Bubble Takes Heavy Toll," The Wall Street Journal Online, August 19, 2002.
- ³ "Beyond the bubble," The Economist, October 9, 2003.
- ⁴ Hackett gave General Motors as a prime example. On November 3, GM posted weaker-than-expected third-quarter earnings, cut its forecast for the full year and announced that it will lay off 12,000 workers in Europe, nearly one-fifth of its workforce there. Its auto business posted a loss of \$130 million, reversing \$34 million in black ink in the year-earlier quarter. The company's finance unit posted net income of \$656 million, but overall revenue rose just 3.1 percent from the year-earlier period, at the low end of the auto maker's forecasts. Slow growth around the globe caused GM to cut its full-year guidance to between \$6 and \$6.50 per share, down from \$7 per share. The company has an inventory overhang of 2004 models, and its 2005 offerings have received mixed reviews. Forbes.

IBM Cognos
Innovation Center
for Performance Management