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The Confluence Chronicles

From
Meeting
to
Momentum

San Antonio, Texas
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Confluence

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In this new world, the so-called China price makes and breaks companies; information is a source of revenue; innovation a way of life; and downturns are for winning, not survival.

Conference Introduction and Executive Summary

Competing to Win in the Flat World

For three days, technology leaders from Fortune 500 organizations engaged with the leadership of Infosys to explore the implications of our “flattening” world. This term - popularized by Thomas Friedman’s book, *The World is Flat* - describes the profound, democratizing changes taking place as a result of globalization, demographics, technology and regulation. This new world is rife with threats. It is also alive with opportunity. In this world, the so-called China price makes and breaks companies; information is a source of revenue; innovation a way of life; and downturns are for winning, not survival.

If there is a central theme to be taken from the informed conversations at Confluence 2006, it is: winners will recognize that the world is indeed flattening and will make the right moves in a timely manner.

Though it offered much by way of a 5,000-foot view, Confluence 2006 was at its essence about thriving or dying, winning or losing, staying competitive or being marginalized. Some enlightened minds were finely focused on the future, the role of IT, and how they can join with Infosys to move forward successfully. Confluence was pragmatic, practical and exciting.

Key takeaways:

- Flat world imperatives are forcing organizations to move in hitherto unexplored directions, demanding the courage to re-think and re-look at everything enterprises hold dear today
- Global partnering and sourcing are more important than ever, and KPO - knowledge process outsourcing - is taking hold
- Somewhat ironically, the role of the CIO is less about technology than ever - though the demands of technology are increasing dramatically
- That said, technology landscapes - from new generation ERP to the "never say die" legacy systems - have given rise to a lot of complexity. Thankfully, the emergence of new trends such as software as a service and Service-Oriented Architecture (SOA) serve as potentially mitigating factors
- Business process outsourcing continues to generate a lot of interest from functional processes (for example, HR and F&A) and industry-specific processes (mortgage services) to knowledge processes (equity research)
- Infosys, a company that has proven that it can thrive in the flattening world, is establishing best practices in many areas, and clients and partners are depending on them more heavily to deal with a world that is becoming more complex. As AT&T's CIO Andy Geisse pointed out, "Nobody totally understands everything end-to-end. Nobody can know it all." To which we would add: Or do it all, alone
- Factors such as the regulatory environment and cultural diversity will complicate our efforts, but if we establish pragmatic methods and keep our ears to the virtual ground, we will be fine

From bestselling author Geoffrey Moore's opening keynote on how companies can deal with Darwinian forces to the closing remarks by Infosys Chief Operating Officer S. Gopalakrishnan, it was clear that IT will become a tool that allows companies to deal with the flattening world.

Make no mistake - There will be clear winners. Many of them attended Confluence 2006.



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"Clearly we are gaining momentum . . . We believe WIBTA will be recognized as the premier award in the IT and business technology arena."

- S. Gopalakrishnan, Infosys

Wharton Infosys Business Transformation Awards (WIBTA)

Once again, the Wharton Infosys Business Transformation Awards (WIBTA) showed that individuals and companies around the world are combining technology, conviction and creativity to innovate new solutions and solve business, social and environmental problems.

Qualities such as creativity, courage and an unwavering commitment to excellence were in plentiful supply among the winners of the 2006 WIBTA awards. Now entering its fifth year, WIBTA has grown both in prestige and its ability to draw the best and brightest. Each year, WIBTA honors four distinguished individuals and companies that display excellence and innovation in information technology. This year's recipients showed that technology is a vehicle for creating new paradigms.

The distinguished WIBTA jury panel included Dr. Harbir Singh, chair of the Department of Management at Wharton; David Boyles, former Chief Operating Officer of ANZ Banking Group; Esther Dyson, editor-at-large at CNET Networks; and Sir Paul Judge, Director, Schroder Income Fund. They evaluated applications based on:

- Innovative use of technology
- Effective company/business-wide implementation
- Re-defining industry/business models
- Delivering measurable, sustained results

The Latin America Technology Change Agent Award

This year's winner was environmental entrepreneur Enrique Gomez Junco, who founded Celsol, a company that provides solar-powered air conditioning units to hotels in Mexico. Though Celsol enjoyed early success, it faltered because of lack of capital. Unwavering in his commitment to provide "green" power, Gómez re-launched his business in 2000 with a new name, Optima Energía, to provide water, electricity and gas in economically and environmentally friendly ways. Optima Energía has saved its clients 73 million kilowatts of electricity, 10.7 million liters of natural gas, 1.9 million liters of diesel, and more than USD 88.4 million.

The genesis for Gomez Junco's pioneering work? "I knew that oil reserves were going down, and everybody's concern for the environment was increasing," he said. "But it was very hard in the beginning because we started only with solar energy and the payback was more than six years. Everybody had other priorities and we had to rethink how to make the company profitable. By putting several technologies together, we were able to provide quicker paybacks - within three years."

With its subsequent success, Optima Energia has proven that "green" is as good for business as it is for the environment.

The North America Technology Change Agent Award

This year's honoree was Dr. Leroy Hood. An immunologist and technologist, Dr. Hood is President of the Institute for Systems Biology, Seattle, which pioneered a systems-based approach to biology and medicine. By combining advanced technology with molecular biology, he laid a new foundation for the study of human genomics. His current work at the institute analyzes biological systems in their entirety and is a revolutionary new approach to medicine that will improve our ability to predict and prevent diseases.

The Latin America Enterprise Business Transformation Award

The organization honored in this category was FUNDESUMA, which instituted an information management tool that helps local and national authorities efficiently coordinate the reception, storage, classification, control and distribution of humanitarian supplies. By improving transparency and accountability of the supply distribution, FUNDESUMA set a new standard for Latin America's disaster response. Its methods are being examined by various United Nations agencies as a possible global standard for humanitarian relief supply management.

FUNDESUMA was represented by Juan Jose Castro-Chamberlain, its Managing Director. Asked about the key driver for its success, he said, "We engaged our clientele - people working in warehouses and in disaster relief - and asked them what they needed. And so, now we help countries and agencies build their capacity. It's a very simple tool."

A simple tool, but one with profound implications.

North America Enterprise Business Transformation Award

The winner in this category, Southwest Airlines, is one of the most profitable and efficient airlines in the world. One of the reasons for its success is its ability to use information technology as a strategic differentiator. Southwest was the first airline to sell tickets online. It pioneered ticket-less travel. Its customer reservation system uses work-at-home call center agents, vastly reducing capital costs and overhead. Other innovations include Southwest Shortcut, an online tool that helps customers find the lowest fare, and DING! - a desktop application that notifies customers of reduced fares.

“We strive to make your customer experience great, bring flights in on time and provide a safe experience,” said Jan Marshall, Chief Information Officer for Southwest. “So the question is, how do we use technology to do that? There is a tremendous amount of technology innovation that goes on behind the scenes, from mechanics to customer service to the people at the gates. It’s just an incredible effort by all our employees. We’re looking for the competitive edge in the supply chain and in every facet of the business.”

Thanks to its pioneering work, Southwest maintains that edge.

The Future of WIBTA

“Clearly we are gaining momentum as more and more companies apply for the awards,” said S. Gopalakrishnan, Infosys’ Chief Operating Officer, who led the awards ceremony. “We believe WIBTA will be recognized as the premier award in the IT and business technology arena.”



3

“Not taking the risk is more risky than taking the risk.”

Geoffrey Moore Keynote: “Dealing with Darwin”

Geoffrey Moore, best-selling author and managing director at TCG Advisors opened Confluence 2006. His latest book, *Dealing with Darwin: How Great Companies Innovate at Every Phase of Their Evolution*, provides a roadmap to help established businesses thrive in today's flattening world.

Moore's keynote, a revealing look into what could be described as an extraordinary time for business and society, emphasized that established businesses need to learn how to adapt - or they will suffer the slow decline in margins and revenues that has characterized the fate of so many icons. In order to ensure meaningful and continued innovation, Moore believes companies need to focus on four areas:

- Return on innovation
- Innovation strategy
- Funding innovation
- Perpetuating innovation

Return on Innovation - Creating Performance that Competitors Can't or Won't Match

In a flattening world, large markets attract low-cost competitors. This results in a natural deflationary effect: the so-called “China price.” How can a company combat this effect by ensuring return on innovation? In several ways. First, identify processes that will become “core.” These are the processes that enable and create differentiation - the source of unmatched competitive advantage. After identifying core processes, define all the other work as context. Next, commit to “beyond class” outcomes – offers that competitors cannot or will not copy. Elsewhere, promote “good enough” criteria.

Innovation Strategy - Focusing Innovation to Create Escape Velocity

“In a Darwinian world it is very, very dangerous not to have an innovation strategy. You have to understand this is not optional.”

As soon as you go public with a great new product or service, competitors respond; so your product becomes context-commoditized. It becomes harder and harder to get the return you want. To foster an effective innovation strategy, companies must engineer a process model – “and that in my opinion is what Infosys does for a living,” Moore said. His recommendations:

- Centralize, bringing operations under a central authority
- Standardize, to further reduce costs and risks
- Modularize. Deconstruct the system into its component sub-systems and standardize interfaces for future cost reductions
- Instrument. Develop monitoring and control systems
- Outsource to further reduce overhead and other costs, while controlling them with service level agreements

Funding Innovation – Extracting Resources from “Context’ to Use for “Core”

Money and people in the budget can today be repurposed to fund and drive innovation. Where? Just look in the metaphorical corporate couch. The more mature an organization, the more coins you’ll likely find.

Perpetuating Innovation – Recycling, Creating an Innovation Machine

One of the keys to perpetuating innovation is the way you handle your people. It might seem obvious, but equipment and money are quite different from people. What’s not obvious is how to handle those differences. If you’re starting a new process you might say, “I guess we have to lay-off people.” But that may not be necessary. Instead try mixing and matching. Moore recommends creating:

- Invention zones
- Deployment zones
- Optimization zones

Remember too that the most scarce resource is not money, it's leadership. Leaders can be coins in the couch as well. To illustrate the point, Moore asked the audience for a show of hands: How many believe managing Exchange e-mail is core? No hands went up. Then he asked, "How many outsource Exchange?" Again, no hands. "There, you have it," he said. "A complete misuse of human capital – coins in the couch."



4

“All of us in some sense feel like we are entering new frontiers, new territory. It is very exciting, the tremendous opportunities we see before us.”

S. Gopalakrishnan's Monday Morning Opening Remarks

Infosys President and Chief Operating Officer S. Gopalakrishnan, also one of the company's founders, opened Confluence sessions by tying a Texas legend to the bold virtues that make companies great.

S. Gopalakrishnan plays a key role in defining company strategy and in using technology and innovation to maintain the company's leadership - but he is certainly not alone. Of the seven people who founded Infosys 25 years ago, four others are still active, including N.R. Narayana Murthy, who recently moved into a non-executive position; Nandan M. Nilekani, CEO; S.D. Shibulal, Group Head, Worldwide Sales & Customer Delivery; and K. Dinesh, Co-Founder and member of the Board. That's evidence that Infosys is in it for the long run – and evidence of the passion that continues to drive Infosys to the forefront of technology innovation and business value for its clients.

Of Texas Legends - Past, Present and Future

As Gopalakrishnan pointed out, Texas recently became home to the most number of Fortune 500 companies in the United States – 56, with California now a runner-up at 55. Appropriately, Texas is the home of the legendary cowboy Pecos Bill, who, while real only in folklore, still commands a presence in Texas. Bold and entrepreneurial, he idealizes the cowboy virtues of strength, will, perseverance, versatility, and adaptability. The Texan can-do attitude was reflected again and again at the summit.

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“We have to have powerful partners
in the boat with us rowing hard,
helping us move forward.”

Bill Mitchell Keynote: The Transformation of Arrow Electronics: A CEO Perspective

Playing the hand he was dealt, Arrow Electronics' CEO described a company that thrived, struggled and ultimately recovered to grow faster than its industry – thanks to a novel mix of technology and business acumen.

“In a flat world, people, systems and process are critical to our success. Our future rests on finding new ways to add value across the supply chain.”

The history of Arrow Electronics is marked by tragedy and triumph. In his Monday morning keynote, CEO Bill Mitchell outlined Arrow's ability to recover, reinvigorate and refocus, and use technology to move forward. In Arrow's storied history and determined climb into the future, there are lessons for all.

Arrow's origins go back to New York's Radio Row in 1935, when the electronics distribution industry was born. In 1968, three Harvard business school graduates decided to roll up thousands of mom-and-pop electronics parts outlets into one company, choosing Arrow as their consolidation vehicle. No one knows how many companies Arrow bought. It's in the hundreds, but the result was the creation of the modern electronics distribution model.

Then a 1980 arson fire during an annual meeting killed 13 of the company's 14 key leaders. By the time Mitchell was hired in 2003 he was the fourth CEO in eight years. The company was reeling from the dotcom bust, and still, in some ways, from the fire. It very much needed to move forward.

Mitchell's challenge: Evolve Arrow from an acquisitions company to a professionally managed organization and develop sustainable value. His first 100 days were devoted to improving the balance sheet – cutting costs, restoring profitability, generating cash – “Business 101,” as Mitchell put it. Then he focused on organic growth, developing internal vision, strategy and values and a professional management structure.

He had to do it while the entire world was shifting underneath Arrow. Like it or not, Melville, NY, the company's longtime headquarters, was no longer the center of the universe. Globalization was under way. The world was flattening. Asia was the center of attention. Competitors were evolving.

Arrow succeeded anyway.

"I didn't have to re-do. All I had to do was unleash."

Arrow's Four Paths:

- Growing faster than the market
- Operational excellence
- Financial stability
- Shared leadership

Mitchell's vision was to build a company that could successfully negotiate turns in the road, growing organically faster than its competitors. But to do that, it had to grow up. He looked inside the company, rotating people into short-term assignments, giving them clear deliverables, assembling teams to build vision and strategy.

"The best part of it is we had buy-in," he said. "We built a clear vision as a team. You have to remember, alignment is not agreement. You can't get 200 people to agree the sun is going to come up tomorrow, so don't even try."

Focusing on the principle of shared leadership – getting everybody in the game – Arrow became a company that today powers the supply chain, solving complex and time-related issues for customers, connecting manufacturers and customers in ways they cannot achieve by themselves.

Silos became OneArrow. The company refocused globally. Shared leadership replaced the hub-and-spoke process. A company that once needed heroic saves to survive now depends on continuous process improvement. And it has preserved the feel of a family business while emphasizing accountability and performance management.

“We have to have powerful partners in the boat with us rowing hard, helping us move forward.”

Today Arrow connects some 130,000 customers to 600 suppliers, doing more than 40,000 transactions a day, mostly with small- and medium-size businesses using technology to add value and deal with the flattening world. Net sales will be an estimated \$13.5 billion this year, compared to \$7.3 billion in 2002. Perhaps more significantly, the company has outgrown the market in 13 of the last 14 quarters, with Asian business quadrupling in about the same period.

Was it all smooth? No. Arrow’s decision to outsource, for example, was met with more jeers than cheers. Now, in partnership with Infosys, some 277 people support it on the BPO side. Several hundred more are working on the IT side – “and that will grow quite substantially,” Mitchell said. “I have been called a Benedict Arnold CEO. I say this is something we have to do. This will create the kinds of jobs we need and opportunities we need.”

Mitchell figures the company is about halfway through its transition.

“It’s still a journey,” he said. “But when you start seeing what you can do, when you unleash people, it is really, really powerful.”



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"It's so cheap to experiment that you might as well do it without the business plan because the marketplace will tell you much more about it than you could ever figure out by yourself."

Chris Anderson Keynote: “The Long Tail”

Taking a view of technology and economics that ranged from the 5,000-foot level to the microscopic, the editor of *Wired* magazine described the landscape that is shifting underfoot like never before.

“These days, technology trends are business trends.”

As editor-in-chief of *Wired* magazine, Chris Anderson is at the center of the new economy. His new book, *The Long Tail: Why the Future of Business is Selling Less of More*, explores the rise of the niche as a powerful new force in our economy. His message: New efficiencies in distribution, manufacturing and marketing allow us to deliver many more products in the “tail”, that is, outside the usual demand curve dictated by the expanse of shelf space and other limiting factors. Collectively, these niche products create a new market as big as the one we already know.

“Waste is good.”

In the beginning, computers were so expensive and so difficult to run that access could only be achieved through the high priests of IT. But soon, a few visionaries – Alan Kay at Xerox PARC among them – concluded that we not only could, but should waste transistors. It was heretical, but if transistors could be wasted, they could, for example, be used to draw little pictures on a computer screen, thus helping to make computers easier to run – maybe even fun. This led to the democratization of the computer, unlocking an extraordinary boom in ideas and energy. Waste was *very* good.

Never Delete Another e-mail?

Three years ago, the Web mail market was mature. Then, along came Google, which said, in essence, “Wait a minute. Now storage has become so cheap we can waste that too.” The result: We may never have to delete another message. And so it goes. Thanks to an abundance of bandwidth, a company called YouTube realizes the distribution platform is becoming close to free - and suddenly TV shows no longer need to be

“green-lighted” by executives in offices. Now they are created by anyone at any time and uploaded in seconds. YouTube has a network-sized audience. That’s why it sold for \$1.65 billion.

Kitchen Mixers in 60 Colors – Why the Scarcity Economic Model is Dead

In retail, shelf space is scarce. It has to be. It’s expensive. That means only the best selling stuff can be put on the shelf. This is scarcity economics. But the cost of online shelf space did the same thing that processors and storage and bandwidth did – it dropped close to zero. And so a KitchenAid mixer available only in black and white and one color in stores can be bought online in more than 60 colors. Traditional retailers have to guess what is to be put on shelves. Online retailers throw it all out there and let the market decide.

Online, Netflix gives its customers access to more than 65,000 DVDs, and in the process exposes consumer needs and trends that were never envisioned in the Old World. Thus, does the economics of abundance drive music sales now? Who would have imagined cheap processing power (and batteries, and screens) would have enabled us to put our entire music collection in our pockets? Steve Jobs, that’s who, recognizing the economics of waste.

“You don’t have to guess which products are going to pass the economics test. You can throw it all out there and let the market sort it out.”

Google has revolutionized the advertising business not so much by stealing from conventional advertising markets but by extending useful advertising to mom-and-pop businesses. The Internet has allowed Google to scale down to the incredibly large market of onesies and twosies. eBay has done it for hard goods. HR is affected as well. While the traditional hunt for talent was driven by scarcity – with companies forcing employees to learn and work in centers of interest, Google holds a global programming contest and winners come from Kenya, Madagascar - all over the world. “That is what happens when the flat world meets the long tail of talent,” said Anderson.

Small is The New Big. Complexity is Free. So Scale Down.

"It's so cheap to experiment that you might as well do it without the business plan because the marketplace will tell you much more about it than you could ever figure out by yourself."

The implications, Anderson said, are profound. Scarcity models require a company to forecast ROI before launching a product or initiative. In a world of abundance you just do it, and figure it out later.

In scarcity, many things are forbidden. With abundance, almost everything is permitted by default, "Which is inspiring to employees," says Anderson.

Scarcity is paternalism. Abundance is egalitarianism.

Scarcity is top-down, abundance bottom-up. "We let the interns show us," said Anderson. "They can do whatever they want."

Scarcity is command and control. Abundance is out-of-control. "It's exciting, but requires very different thinking."

Indeed. The flat world is like that - different thinking, different attitudes, different reactions, and different styles. One could even say there is an abundance of choices.



7

“Companies that have flat characteristics will be the leaders in their space. Not only will they outperform, but being flat is absolutely necessary to staying in business. But there has to be a clear vision of where you are heading.”

Nandan Nilekani Keynote: Tomorrow's Infosys

In a keynote that highlighted the journey organizations need to make to become flat world companies, Infosys' CEO outlined four key strategic imperatives. To ignore them is to risk marginalization.

"Becoming a flat world company is a journey. There are major implications for customers and employees. Imagine if you are starting off fresh. Knowing what you know, how would you design your company?"

An electrical engineer by trade, an entrepreneur by inclination, a leader by choice, and one of Time Magazine's 100 most influential people in 2006, Nandan M. Nilekani is one of Infosys Technologies Ltd.'s founders, and is currently its President and Chief Executive Officer. In his keynote, he outlined four fundamental flat world imperatives, and how companies need to leverage these imperatives to "flatten" themselves.

"Everybody must have a strategy to become a flat world company."

Trends that are Flattening the World:

1. **Emerging economies.** The emergence of countries such as China and India as economic powers has changed the world in profound and lasting ways. Flat world companies must not only understand this globalization, but work to turn it to their advantage by finding partners and customers around the world.
2. **Demographics.** There are some two billion new consumers in China and India alone. In addition to doubling the global workforce – there are 70,000 annual college graduates in the U.S. vs. 350,000 in India and 600,000 in China – they have added huge markets. Some 5 million mobile phones are sold each month in India alone. This has created lower price points, forcing companies to offer products that are not just cheaper but also better.

3. **Technology.** While the economies in China and India were once almost exclusively agricultural, their jobs today are mostly services. Many of these services are done electronically, either through wires or through the air. Everything, including connectivity, is becoming faster, cheaper and more mobile.
4. **Regulation.** The world demands more transparency, security and privacy. Complicating this is the fact that there is no single regulator. Every day myriad regulators around the world adopt regulations that affect businesses. The ability to work effectively in this environment requires immense focus, subject matter expertise and, more often than not, savvy partners.

“What does all this mean for flat companies?”

Flat companies have several attributes:

- They are extremely info-centric
- At every chance they practice zero touch, with transactions occurring without human touch. This includes sharing information and collaboration between customers, suppliers, knowledge experts and management; the result: they work smarter and faster and collaborate more efficiently
- They have no boundaries; connectivity means they are no longer limited by time or distance
- They demand more. “Tolerance for lack of information is going down,” said Nilekani
- They focus on executing personalized service

Four key strategic imperatives to become a flat world company:

1. **Being the China price.** Globalization means prices degrade. Nobody is immune. Rather than dreading this, become the lower cost producer. Build the most cost-effective, high-performance business possible. What Infosys has done in IT services is an example. Infosys is faster, better and less expensive, and it's showing its clients how to do the same.

2. **Fostering customer loyalty through faster innovation.** Good customer service is no longer enough. By staying agile and partnering with best-of-breed companies that have market-altering insight, companies can innovate more quickly. That is what makes customers stick.
3. **Making money from information.** It's time to change the mindset that information costs. It's actually a place to make profit. The first step is to be able to get and deliver information as it occurs, which means low-value tasks should be automated. The idea is personalization, efficiency and the ability to use real-time information to better know your customer and market needs.
4. **Winning in the turns.** Economies are cyclical. That can't be changed. What can be changed is how companies manage booms and busts. Proactive management, coupled with the proper technology, is key. This is what really distinguishes great companies. Outsource with the right partners. Keep your ear to the virtual ground. That's how you win in the turns.

The Winning Ways

Asked to name companies employing effective flat world strategies, Nilekani named Toyota, which is employing near-identical solutions around the world; Arrow, which is transforming its people and processes, and Infosys itself. At Infosys, everybody uses the same tools and the same process, from Bangalore to Brisbane, and its ability to share information and be proactive has certainly helped it win in the turns. In 1999 it booked \$13 million in revenues, and in 2004 that figure was \$1 billion. Because it is a leader among companies learning to thrive in a flat world, Infosys is building considerable intellectual property around the concept - creating roadmaps and best practices for customers and helping them in their transformation.

For Toyota, Arrow, Infosys and many other companies, the journey is far from over. But the steps taken so far promise a bright future – and for other companies willing to learn the flat world lessons, the future can be just as promising.

8

Using presently available technology and several “actors,” this year’s Experience Theater showed exactly how technology is going to enhance customer service – while saving companies money.

Experiential Theater: Future Thinking Solutions

The Experiential Theater introduced three forward-thinking solutions through the eyes of a business traveler. Using a bit of live drama, stage props and live interaction between the main character on stage, real-time working solutions and subject matter experts, the audience was able to vicariously experience the benefits of these new business solutions from a user's perspective.

Imagine that you're traveling abroad, and you've just checked into your hotel. You're frustrated because the airline lost your luggage. You're tired and hungry, and you call the concierge for help. You're not expecting much because it's late, but to your surprise, you find yourself communicating through your in-room TV to a real person who immediately begins to take care of your every need. How? Because this person – the Virtual Concierge – has knowledge of the local area. He even displays restaurant menus, arranges transportation and sends toiletries to your room to replace the ones lost with your luggage.

This is one way technology is already starting to help us, and in the future it will only get better. Consider the Virtual Concierge that uses a network to deliver synchronized voice, video and graphics through the in-room TV, thus elevating the level of service to the guest. Now take this solution and apply it to a mall banking kiosk or a help center at an airport. You see how customer service can be improved across multiple industries.

In addition to the Virtual Concierge (or virtual assistant) the audience saw a new paradigm in digital asset management that can be implemented in less than half the time of existing systems and at a fraction of the cost. The finale also included a glimpse into the future of shopping, using RFID technologies in new ways that not only provide better experience but reduce costs for the retailer and enable higher levels of customer service.

And it's not just make-believe: All of the solutions are running for real and are available for implementation.

9

“Even small gains add up. If you start doing small doses, small increments, they add up. And the number we eventually get is fairly meaningful.”

- Ritesh Idnani, Infosys

Breakout Sessions: Using BPO to be Competitive

- Customer Case Studies

If it maintains its current growth, business process outsourcing (BPO) is poised to become the main outsourcing contract next year. What is the true value of BPO? What are its best practices? This breakout panel answered these questions and others.

The panelists included Amit Shetty, Senior Vice President of SunTrust Bank; and Jinna Bains, Vice President at BT, who works closely with the CFO of BT. Both shared their journey with Infosys BPO in horizontal functions, domain work (industry-specific processes) and the still-emerging area of knowledge services (services providing judgment and decision support). The session was moderated by Ritesh Idnani, who is responsible for go-to-market strategy for Infosys BPO.

SunTrust – A Journey Starting, Lessons Learned

“It’s not just an IT opportunity, it’s a business opportunity.”

With about US \$180 billion in assets and 35,000 employees, SunTrust is a top-10 US bank. SVP Amit Shetty said that the bank’s journey with BPO started about two years ago, when a corporate efficiency and quality executive heard competitors talk about offshoring.

“We took a trip to India and got excited about what we saw,” he said. “But we kind of had to come back and battle the local culture – our bank for the most part thought locally, not globally.”

Soon, however, internal economists were warning about margin pressures in the industry. Costs had to be lowered, somewhere, somehow. And by then the bank had a new CIO who was more open to the process. Soon the bank’s outsourcing efforts started on the IT side. Then it tackled the business side.

“The reality is we were very ill-prepared,” said Shetty. “The amount of things we had to tackle was amazing. Still, we did a pilot, and once we got it going, it was an incredible success. We walked into it with the mindset of labor arbitrage but we walked out of it with something a lot better.”

SunTrust's Breakthrough Insights

- There are more opportunities than just labor arbitrage
- Once opportunities are discovered, they can lead to uncovering more and more opportunities
- Piloting is crucial
- Continue making the labor arbitrage case
- Make the cultural differences work for you. "Part of our playbook is to do training on both sides," said Shetty

BT – The Valuable Lessons of a BPO Veteran

BT Group, the privatized UK state telecommunications operator with 100,000 employees, is the country's dominant fixed line telecommunications provider – and a lot more. It operates in more than 170 countries, and almost a third of its \$40 billion in revenues comes from its Global Services division.

BT's BPO journey has been 18 years in the making. Like many other companies, it started in the IT and software and development space. Success with those efforts led it to BPO. From 100 full-time equivalents (FTEs) in 2001 working in customer service alone, its BPO efforts have grown to 7,000 FTEs. With the addition of IT work, that number increased to about 13,000, 95 percent of whom are in India. Now it's doing BPO work in knowledge process areas - paralegal work, for example. It has about 100 FTEs doing paralegal work and 180 doing analysis and market intelligence. The company intends to engage 26,000 employees in business process outsourcing in the next three years.

"For us, all the labor arbitrage goals have been met but the additional benefits have outweighed why we considered getting into BPO in the first place," said Bains. "This is where the next savings are going to come from. Labor arbitrage only goes so far."

BT Breakthrough Insights

- BT had to focus its BPO efforts on growth areas because it is not legally permitted to displace UK residents
- Break all steps along the way into smaller chunks
- Anticipate bumps in the road and plan for them

- Ensure consistency throughout the organization to assure consistency and quality in customer service

The key is planning. “With the right approach you can get to the right scale,” said Bains.

“Even small gains add up,” said Idnani, of Infosys. “If you start doing small doses, small increments, they add up. And the number we eventually get is fairly meaningful.

BPO the Next Wave

More and more work requiring judgment and decision support is being done remotely. This includes research, analytics, engineering and design, and animation. “Absolutely the next wave,” said Bains, who added that BT is considering outsourcing the production of financial P&Ls on a monthly basis.

Added Shetty of SunTrust: “I like to think of BPO and KPO as same issue. Knowledge analytics to me is a huge opportunity.”

Truth or Fiction?

While India remains the most popular destination for remote processing, China is emerging as a formidable competitor.

Bains: “For us China can be useful for front- and back-office voice and language support, and the time zone is an added benefit . . .but we won’t do BPO there on the same scale. We don’t believe the infrastructure and labor arbitrage is there, and we’re also worried about IP and data protection.”

Shetty: “With China, the question is, ‘What can we get there that we can’t get from other places where we have made investments?’ I think China is relatively complementary to India but offers nothing really different.”

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“Complex systems require automation to operate effectively. If you had to remember to breathe, life would be much harder.”
- Andreas M. Antonopoulos

Breakout: Paradigm Change for IT Operations — The Flat World Urgency

Affordable and fast global networks have made the world flat, and have enabled corporations to utilize centralized application services while consolidating IT resources in global data centers. How is IT changing in light of these trends, and how must it evolve further?

These key questions were addressed in this breakout session. Andreas M. Antonopoulos, Senior Vice President of Nemertes Research, summarized the trends, deriving insights from his firm's research and from views of panelists Sunil Narang, Vice President of Finance, Level 3 Communications; Paul Edmisten Senior Vice President, SunTrust Bank; and Priti Rao, Vice President of IMS, Infosys. The discussion focused on convergence of functions within IT, the role of automation, the impact of remote operations and concepts around business services, and practical issues surrounding compliance and security.

“Leading companies are reinventing the ways they do IT – responding to increased competitiveness.”

Session Breakthrough Insights:

- Automation is a necessity
- IT costs have declined but the people cost is increasing. “It’s most important that we look at automation,” said Rao. “I would think in the next two or three years a big change is required.” Technology is enabling flexible business practices – you must take advantage because your competitors will
- As our employees reinvent work, we must reinvent IT to deliver the services they need
- Complexity is growing exponentially, interdependent systems require multidisciplinary teams

- Focus on IT services and non-IT resources
- Automation of low-level tasks frees up time to focus on the service
- Manage by service level agreements, not total cost of ownership
- Regulatory compliance and good security are both audit-driven
- Your employees are everywhere, so your security measures must be everywhere
- Companies have treasure troves of underutilized data – and flat world thinking means companies need to make money from data, not pay for it
- Make sure your global resources are using the same methodology

“One of the advantages of bringing in outside help is you can bring in methodology.”

Technology Trends Highlighted at the Session:

- Increased miniaturization, including multi-core CPUs and nano-scale chips
- High-density computing and storage (blade servers, 0.5 TB disks). Blade servers are used in nine percent of the enterprises and that percentage is growing; SANs are used in 90 percent of them
- Faster networks: 10 GE over UTP, MPLS. Metro Ethernet is used by 46 percent of American enterprises; the number for MPLS is 42 percent
- Increased convergence of voice and video data. VOIP is used by 75 percent of the enterprises

“Location no longer matters,” said Antonopoulos. “Where the data center is doesn’t even matter. Where the employees are is everywhere.”

SunTrust Breakthrough Insights

“From a business perspective it has become tremendously challenging, delivering what they need and balancing keeping the lights on with the application.”

As Edmisten noted, many questions remain. Yes, it has become important to start changing the IT architecture. Leveraging offshoring is one thing, but how do you maximize use of global resources? And with face-to-face collaboration being replaced by technical collaboration tools, how do you maximize their effectiveness? If you don't, you wind up with inboxes full of unread – and unstructured – messages.

“We need to be more proactive in our monitoring and then begin to blend that with the server operations and our network,” added Edmisten.

Level 3 Breakthrough Insights

“Everything has to be done yesterday. Everything has to be done accurately. So speed is driving things now.”

- Automation is key to Level 3 – with the main focus on the reporting side
- Operational convergence: “Like any other IT organization, when we were growing, we had a lot of silos — even in IT,” said Narang. “People were not talking to each other. We have reached a stage where we have consolidated things. I think we are at the infancy stage but we are heading in the right direction.”



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"We are looking at this as a huge opportunity."
- Steve Oberlander, Director, Analog Devices

Breakout: Enterprise Applications: Building Your Next Generation Roadmap

In order to remain competitive, companies must remain flexible and agile – and adopting a service-oriented approach is a step in that direction. With Oracle, SAP and other packages incorporating business processes as services in the next evolution of enterprise application suites, this breakout session addressed roadmaps for the next steps.

“The tension between promises and reality is well known.”

Chandra Kakal, Head of Enterprise Solutions, Infosys, presented some hypotheses and was joined by Josh Greenbaum, Principal, Enterprise Applications Consulting. Together they led an illuminating discussion with panelists Vincent Melvin, CIO, Arrow Electronics and Steve Oberlander, Director, Analog Devices, on their plans and experiences in the next-generation journey into the heart of SAP and Oracle.

The Upside of Getting it Right

“When this stuff gets done right we will all have to get real jobs because it will be as simple as turning on your car’s engine.” – Josh Greenbaum

Greenbaum said, a client that recently automated much of its e-commerce site via web services enjoyed the following benefits:

- Customer wins increased more than 20 percent
- Per-customer revenues were up over 10 percent
- Overall order volumes increased 30 percent
- Customer retention was up 100 percent
- Errors were reduced by 35 percent
- Personnel costs were reduced – the company needed 20 to 40 percent fewer full time equivalents

Analog Devices – A Major Upgrade Looms

“The technology is one thing, but more important to us is engaging the business. As far as they are concerned we finished ERP 10 years ago and they are not real excited about revisiting that.”

- Steve Oberlander, Director, Analog Devices

A globally distributed company with 10,000 employees, Analog Devices enjoys IT that is mostly centralized and implemented across the enterprise - giving almost everybody in the company access to the same platform – “and it works quite well,” said Steve Oberlander. One of the first companies to go live with sales and distribution on the SAP platform, Analog did a lot of customization, and it carries a lot of that customization forward today. It has done extensive integration with an Oracle data warehouse, which is working well, “but the complexity of moving data around is making it tougher,” said Oberlander.

Analog is moving towards a major upgrade and plans to implement SAP's new architecture. “We're looking at a plan for next year,” said Oberlander. “The key business driver is how we can look at the business differently from a vertical market perspective. From the IT perspective it's around scalability and flexibility.”

How Will SOA Help?

“Some of the things that appeal to us are the pre-built services and the application functionality,” said Oberlander. “We need to abstract more data out of the core ERP area so we can leverage it more for BI.”

“We are looking at this as a huge opportunity ... we know there is functionality there,” he said. The platform for SOA architecture will probably be SAP and Microsoft. Some Analog goals:

- Make more information flow in real-time — re-architect the whole data management process
- Better alignment of IT with the business. Take a more processes-oriented approach to the business
- Improve scalability — look at the whole supply chain process and integration
- Continue work with Infosys to conceptualize how the company will go from A to B

Arrow Electronics – A Worldwide Oracle Rollout

After spending a number of years with IBM as a systems engineer working on its first SAP deployment — “We spent three years running around the world with our hair on fire” — Vincent Melvin landed at Arrow as its CIO. A company that was extremely acquisitive, Arrow found itself with a lot of different architectures and systems. Vincent's job is to roll out Oracle

worldwide. So far one thing is causing him to lose sleep at night: The upcoming technology is so potentially disruptive that he can see getting a year or two into the project and then having to tell the board that something better has come along. But he's comfortable with his choice of Oracle.

"SAP tends to be a little harder to figure out," Melvin said. "You have to invest more in the way of specialized skills but it does have more capabilities once you understand it."

Arrow Breakthrough Insights

- Bring the business side into IT decision-making
- Try, somehow, to encourage IT personnel "to come up the value chain and engage with the business." But Melvin added that this is not always possible or desirable. "Not everybody has that in their DNA," he said. "Some folks like what they are doing. Finding those people who are naturals at working with the business side is going to be a challenge." Not everyone can be trained "up" into the role
- Find a way to balance the need to bring in outside expertise, like Infosys, with the need to acquire and retain in-house knowledge of the newest technology. "We are heavily relying on Infosys ... my fear is at some point the best and brightest people around me will be wearing the wrong badge," Melvin said

Fast-takes on Vendor Promises: Poised on the Cusp of Operational Excellence

- Faster time-to-market
- Improved customer responsiveness
- Better supply chain effectiveness
- Improved corporate governance and risk management
- Better matches between business needs and technological capabilities

Fast-takes on Operational Realities: Most Companies Still Have Trouble Realizing the Dream

IT departments are still fighting the same problems:

- Cost • Integration • Complexity • Security • Usability • Line of business still not getting the benefits • Too little link between business process and IT.

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"It has become a differentiator
for us in our space."

- Sherwood Chapman, EVP and
CTO, QCSI

Breakout: SOA, the Enterprise Challenge

When talking to business executives, there's still a bit of a backlash around service-oriented architecture (SOA). And no wonder. Executives have heard many similar promises before. What's the truth?

"From my experience there is a very compelling business case that emerges from the early deployments - though it is often quite different from what the early evangelists were talking about and promising."

In a session led by John Hagel, an independent management consultant and author of *The Only Sustainable Edge: Why Business Strategy Depends on Productive Friction and Dynamic Specialization*, panelists shared expert, real-world perspectives on SOA. They also debunked some of the myths surrounding it and focused on the business case and most promising approaches for deployment.

Panel participants included Mark Halliday, Director, DHL; Sherwood Chapman, Executive Vice President and Chief Technology Officer, QCSI; and Sohrab Kakalia, Vice President, Infosys.

SOA Architecture – What's Different This Time Around?

Hagel noted that one of the basic issues is simply agreeing on a definition. SOA is a new way of organizing and connecting technology resources with focus on services, not viewing technology as a fixed resource for a specific context. "We're moving from a narrower granular view of IT services to a much coarser-grain view of business services," he said. "We're defining it at a level where you can engage with the business side in a much more tangible way . . . that is a major step forward."

The Challenges Are Significant, as Are the Benefits

- There is still misunderstanding and mistrust between IT and business line executives
- IT departments are overwhelmed by detail
- Line executives are under-delivering on impact

But Early Adoptions Have Shown:

- Margin pressures are a good near-term reason to move aggressively into SOA, since it can help reduce operating costs
- Post-merger integration is a good entrée as well. “SOA represents an interesting opportunity in these cases,” said Hagel
- Companies who face compressing product lifecycles might also benefit. With SOA, it’s possible to get products to the marketplace much more quickly, with better system support
- Another useful area is business situations where there is a need for closer coordination with partners

Early Adopters Report That:

- The near-term business case is rapid ROI through cost savings in operations
- The second stage is where the enterprise moves from savings to agility. The notion of flexibility becomes of significant value. Though this is much harder to quantify as a benefit, companies can now source services from a broader range of choices
- In the third stage, organizations move from agility to innovation, harking back to the flat world need to cement customer loyalty through continued innovation

QCSI Breakthrough Insights

“It has become a differentiator for us in our space.”

A leading healthcare payer solution provider and an early SOA adopter, QCSI needs to offer advanced technology and services that automate the complex process of claims adjudication and settlement. In 2004 it brought in Infosys to help roll out an SOA project on a “very aggressive” deadline, and it was delivered in nine months.

Chapman said that while the client base does recognize the value of SOA, “It’s hard to justify ROI when you go to SOA. I think it’s really about the agility and innovation you get.”

DHL Breakthrough Insights

“We are expecting near-term benefits and medium-term benefits from agility . . .”

With his team working on a business case for modernizing DHL's infrastructure, Halliday is moving into SOA. One near-term benefit: untangling a disparate web of applications and services – a result of multiple acquisitions. “We have a variety of solutions and a lot of redundancy - a wide variety of formats,” said Halliday. He noted that while a lot of reusable services have already been built, the tangle of standards has made those services less useable. But his team is working on the issue, with help from Infosys.

DHL lessons learned:

- Start with a good pilot project
- Set up governance early
- Move from product management of applications to product management of services
- Decide early on who pays for services

SOA and the Flat World

“If you tie it back to the flat world then there is a strong case that SOA is an imperative,” concluded Hagel. “If you don't move into a SOA environment it's going to be much harder to achieve those kinds of operational imperatives. SOAs provide a very interesting opportunity to take some of the inefficiency out of the business.”



13

“No single firm or department is going to be able to master everything. Nobody totally understands everything end-to-end.”

Keynote: The Business Transformation of AT&T

In his address, AT&T's CIO described the company's sometimes bumpy journey from recognizing the flattening of the world to participating in that flattening – and, finally, to taking advantage of it by leveraging globalization.

“It was amazing. I came back from [India] going, ‘This is not a labor arbitrage issue, this is an intellectual capital issue. These people know what they are doing.’

A leader in global communications, AT&T has learned a lot about the flattening global economy – sometimes the hard way. The company, along with everybody else in telecom, has been working to enable itself to compete in a flat world while at the same time participating in that flattening by enabling seamless global communication. Nowhere are its challenges greater than in IT, and nowhere are its successes more apparent than in the work of Andy Geisse, the company's chief information officer.

Geisse, responsible for information technology and billing operations for AT&T Services Inc. and its subsidiaries, has accumulated much insight into a global model that relentlessly pursues business transformation. He shared some of those valuable insights – and the news that in eight years the company has used technology to drive more than \$1 billion in annual costs out of IT, while enjoying increased productivity. “Globalization,” Geisse said, “has been a part of that.”

In its quest to become the only communications and entertainment company its customers will ever want, the company has acquired or laid more than half a million fiber route miles. It has 30 data centers in four continents. Its network carries 5.4 petabytes of daily traffic. It is also 60 percent owner of Cingular, which covers six continents and is in 180 countries. Taken together, AT&T offers reliable, quality access to 97 percent of the global economy.

Part of the Challenge, and Part of the Solution

“No single firm or department is going to be able to master everything. Nobody totally understands everything end-to-end.”

Because of AT&T, corporations, small groups and individuals have access to nearly every market in the world, 24/7. Intellectual capital can be delivered from and to anywhere. So can pens. One of Geisse's favorite stories involves a mom-and-pop company that is making it big, shipping a new kind of pen all over the world. But globalization has brought new challenges - new competitors on many fronts.

AT&T employed a number of strategies. For example, it is:

- Going directly after the Indian market. “We want to be there and be a player in telecom,” Geisse said
- Admitting that the world is too complicated to tackle now without savvy partners like Infosys. “They have IP in development and testing in IT and they have better capacities. For example, Infosys is testing online systems for att.com. Those tools are so sophisticated that we brought them back to the U.S. to use. We are tapping into the intellectual capital in India and it has been a real win-win.
- Viewing outsourcing as a way of increasing value. “In IT we have 3,000 people in India and 5,000 in call centers in India. It is not about cost. It's part of IT being global. As our business becomes 24/7, IT has to be 24/7 also. To support customers we have to have a follow the sun strategy and India is perfect for that.
- Creating value by breaking projects into logical components
- Never forgetting about customer care. “Everybody can match technology,” said Geisse. “Where you win is in customer care. Globalization enables better customer care.”

Things That Go Bump in the Road

Security and IP were both major concerns for outsourcing, but never problems. “When I told my IT security people, we were going to do work in India they said, ‘No way. You are crazy’,” said Geisse. “Which may be true but that has nothing to do with why I wanted to do work in India.” The answer: Strict security guidelines for all vendors, and external auditors for doing ongoing and surprise checks. “We don't allow what

we consider very proprietary information to go to other countries but even that is going to have to change over time in my opinion," Geisse said. "The reality is you have just as much risk if not more with your employees and contractors here. What is really important is your processes and checks and balances."

Other issues include cultural differences. But as Geisse noted, there are cultural differences between New York and San Antonio. "Every company has a different kind of culture and you have to figure out how to make that work for you, not against you," he said.

Differences in platforms and regulatory issues can be a challenge. Financial systems, currency rates and tax laws vary in every country. Some countries even require companies to run according to the financial system in that country. "It can be a very difficult situation," Geisse said. "Good local partners help us through those situations."

India still needs infrastructure – roads, water, electricity, and telecom - and Geisse believes that will happen. "They realize growth will stop if the infrastructure doesn't get better."

Convincing some of the people in the U.S. of the company's mission has been difficult. "Probably the hardest thing was the internal cultural shift – employees saying, "My job is going to India - what are you doing to me?" The answer: "Putting them on the new stuff, projects that are our future."

And because of Geisse and AT&T's ability to adapt in a harsh environment, that future is looking a lot brighter.



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“As CIOs are more integrated into the strategic DNA of an organization they need a mechanism to be able to understand the technical options and how they match with the business.”

- Ron Kifer, GVP and CIO, Applied Materials

Panel Discussion: The Evolving Role of the CIO

Nobody ever said the life of a CIO was going to be easy. But a look at the job through the eyes of seasoned, savvy IT executives from CheckFree, Johnson Controls, Applied Materials, and Lenovo shows the challenges and the importance of the role are increasing like never before.

“The days of the pure technologist are over.”

It's not news that CIOs now play a crucial role in the modern organization. But a panel discussion led by Romil Bahl, managing director of Infosys Consulting, explored how the role of the CIO is one of the fastest changing and most exciting jobs in the business environment. In many ways the job is less about technology than ever before, but at the same time the challenges and choices presented by technology are growing exponentially.

“CIOs need to oversee an increasingly complex environment with higher demands for security and greater transparency than ever before. They need to manage vendors and be business executives. They must communicate both in business terms and technical language. They need to be able to sell technical solutions, recognize business opportunities and be agents for super change.”

The role of the CIO has gone through three major eras:

- Automation, when IT was largely synonymous with mainframes. IT was a delivery organization, and researching new technology mainly consisted of waiting for IBM to announce the Next Big Thing. The success factors were on-time delivery and reliable operations, not business knowledge.
- Integration, when IT was characterized by integrated networks of workstation PCs, mini-computers, and mainframes connected through local and wide area networks. IT costs were rising rapidly, as was outsourcing, and CIOs began working on recruiting and developing professional staffs.

- Ubiquitous computing, marked by a rapidly growing emphasis on the use of Web and Internet protocols to drive internal and external applications of IT and technology. CIOs now need to scan emerging technologies while creating more alignment between IT and business goals – and while juggling what has quickly become an increasingly complex IT supply chain. Ubiquitous computing is a key driver of the flattening world.

What is Driving This Evolution?

Versatility – that's the word that comes to mind. Today's CIO must be versatile.

Six dimensions are at play now. CIOs must:

- Understand the business like never before
- Run IT like it is a line of business - think P&L and extensive use of metrics
- Be a thought and technology leader
- Continue to deliver on all the usual IT promises.
- Participate meaningfully in strategic planning, for business and IT
- Be a change agent/Process Information Officer

CheckFree – A CIO's Perspective on Business

"It's not the 30 years of technical experience. For me it was the time I spent managing a business unit, focused on our largest customer - that is when I experienced most of my career growth." —Van Williams, SVP and CIO, CheckFree, discussing the many roles CIOs must now play.

Williams said, CIOs must:

- Be transformation agents
- Be well rounded. Only an estimated 3 of out 15 CIOs today have been pure technologists throughout their career

- Understand the business like never before and partner with business counterparts to develop forward-looking strategies. “We need to partner around building business cases around great technology, and you can only do that if you understand the business,” said Williams
- Translate business needs into technology solutions
- Be a true leader. “Business is life,” said Williams. “If you want people to listen and follow and believe, then you have to do what you say you are going to do. It doesn’t matter if it’s the CEO or your 5-year-old son”
- Commit to achieve. “More than ever before, technology is ubiquitous,” said Williams. “It is what we do with that technology that is what drives competitive advantage.” As such, the CIO is a transformation agent

Johnson Controls – The Mantra is Measure, Measure, Measure

“Our company is very measurement oriented. It is part of our culture and we run IT in a similar fashion.” — Sue Kampe, VP of IT and CIO of Johnson Controls

No question, the flattening world makes the life of a CIO more complicated. Though Johnson Controls is a very standardized company, there is so much more to keep up with now. But through it all, IT is working proactively to use technology to solve business problems.

Kampe’s strategies include:

- Maintaining a running scorecard of IT’s performance, and keeping it in front of the business people
- Understanding the strategy of the business
- Assessing current IT capabilities and using it to formulate an IT strategy
- Learning from people on the business side
- Understanding that IT investments must have a better return than the next-best business investment. “We have to get much better at explaining that business case,” said Kampe
- Managing with operating metrics that use terms the business side understands

- Benchmarking internally and externally
- Using ratios, not raw numbers, to measure performance
- Partnering often and standardizing your architecture

“We have saved so much doing that and everything moves a lot faster with common architecture,” said Kampe. “We drive the bus and own the architecture, and everything else we have partners for - and Infosys is a big partner.”

Applied Materials – Process Improvement and Business Change Agent

“As CIOs are more integrated into the strategic DNA of an organization they need a mechanism to be able to understand the technical options and how they match with the business.”

- Ron Kifer, GVP and CIO, Applied Materials

As Kifer noted, assuming the roles of business change agent and process improvement officer is not entirely new for CIOs. That doesn't mean it's easily accomplished. He recommends a strong process orientation. It helps to have experience in managing highly cross-functional enterprise relations. Such experience is extremely helpful in, for example, business process optimization. “This is a realm that has eluded CIOs,” said Kifer. “Businesses tended to do this within the functional domains. Cross process categories is where the action is. CIOs are experienced in leading those cross-functional functions.

The employment of new business process analysis on the front-end of solving business problems: “This is a step often missed in the methodology,” said Kifer. “We miss chances to understand the opportunities and maybe change the technical solution that needs to be delivered. That is the CIO's challenge as well as the opportunity.”

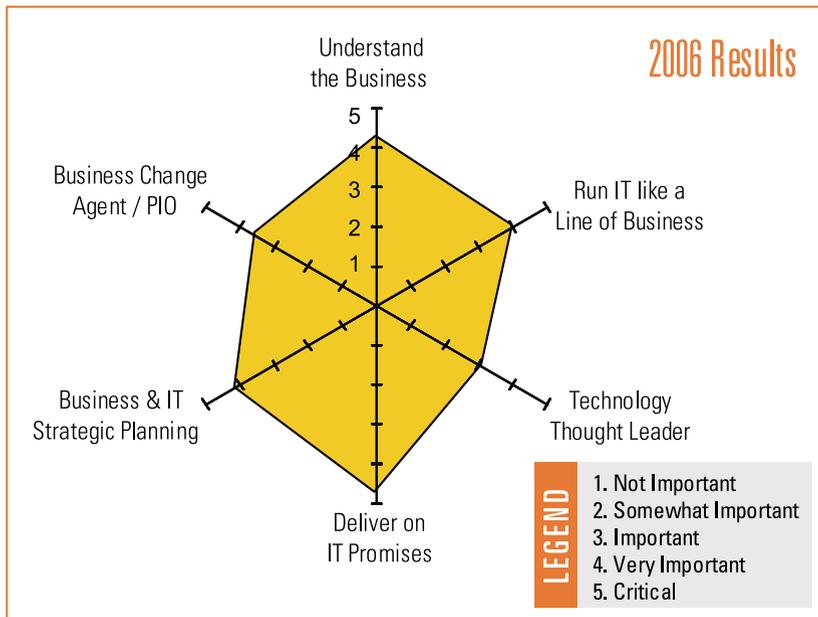
Staying focused on the CIO's role of technical thought leader isn't easy considering the time constraints and the options that must be considered. “Options to introduce change are so varied and there are so many processes and tools and methodologies ...to improve

the competitive position of the organization, it's not something a CIO can do in his spare time." One strategy: Form groups in IT organizations to ensure technical thought leadership, so the company can introduce innovation that will make a competitive difference.

Audience Insight

When asked, "To what extent do the capabilities of a CIO need to evolve to help cope with the four flat world shifts," audience members agreed it is important to run IT like a line of business. However, they have to deliver on IT promises and also conduct business and IT strategic planning, while still being a change agent for the business and maintain technology thought leadership.

Clearly, CIOs who recognize and grow into their evolving roles will help their companies thrive in the flat world.



Audience Response: Capabilities a CIO needs to evolve to cope with the four shifts of the flattening world

Lenovo: A Flat World Case Study

"We *are* the China price."

- George Reichert, VP IT Strategy for Lenovo, on the company's ability to deal with one of the flat world challenges: Being the China price, as opposed to dreading it.

Formed from the union of two leading PC companies - Lenovo, the market leader in China, and IBM's personal computing division, maker of ThinkPad notebooks – the new Lenovo is one of the world's top three PC vendors. The synergies for the union of the two companies go a long way toward understanding what organizations must do to deal with a flat world:

- Lenovo was the #1 IT company in China and IBM was the #3 PC company worldwide
- Lenovo was a leader in desktops and consumer PCs. IBM was a leader in notebooks and business PCs
- Lenovo was focused on the consumer market. IBM was focused on the enterprise
- Lenovo offered a flexible, efficient operating platform. IBM offered global leadership in service and support
- The companies shared a commitment to innovation and the development of their people

The interesting part is that Lenovo also offered global business processes, central/integrated IT systems, central planning and control, centralized inventory management, real-time data visibility, and the ability to flexibly adapt to change. That meant some change was needed in the IT piece of the company.

- The company must make its China efficiencies global, becoming not just the China price, but the China system. The challenge in that endeavor: maintaining the right skills

- While the old mantra was loyalty through good service, Lenovo will push that boundary by providing world-class innovative products at world-class price points
- Spending money on information becomes providing service to its customers at the push of a button
- Winning in the straightaways becomes reacting and adjusting as prices change, supply changes, demand changes and products change

“We’re combining innovation from East and West,” said Reichert. “We consider ourselves to be a new world company.”

And, not coincidentally, a flat world company as well.



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"We are pretty well down the [standardization] road. We've been using Infosys for six years in Europe. The next leap is to drive costs down even further and to start benchmarking around the world. It's true: If you don't measure it, you can't manage it."
- Stephen Clarke, DHL on standardization and benchmarking.

Competing in a Flat World: *The Economist* Survey Results

How is the business world at large dealing with flat world challenges? This panel discussion revealed the results of a survey of nearly 500 executives. The survey, spanning all industries and geographies, was conducted by *The Economist* and Infosys. It aimed to explore and validate key globalization trends, and examine how global leaders are taking advantage of these trends to create competitive advantages.

On hand to discuss the results and give their perspective were Cathy Curless, CIO of Payless Shoesource; Stephen Clarke, Director of DHL; and Brent Rasmussen, CIO of Select Portfolio Servicing, a division of Credit Suisse.

The survey revealed many interesting changes in the actions and attitudes of business. For example, many companies believe standardizing processes globally is important; many are focusing on innovation collaboration tools; a majority are integrating financial and operational information; user-configurable analytics is playing a bigger role, as is the speed of response to business cycles; and many companies are focusing on preparing for changes in business cycles.

Key survey results:

- 50 percent of those surveyed consider standardizing processes or optimizing costs globally as a top three priority. "We are pretty well down the [standardization] road. We've been using Infosys for six years in Europe. The next leap is to drive costs down even further and to start benchmarking around the world. It's true: If you don't measure it, you can't manage it." - Stephen Clarke, DHL on standardization and benchmarking

- 57 percent are putting innovation collaboration tools in place. “Many customers have direct contact with our systems. Without IT and standardization and connectivity none of this could happen. In many cases, we reach into the customers’ systems and take the information and use it.” - Stephen Clarke, DHL
- 65 percent plan to integrate financial and operational information in order to be able to respond more quickly. “We *are* the China price and we have been for years. We democratized footwear and accessories around the world. So how do our systems support that? We must have extensive product design capability and we have to provide that capability from our design office in New York to our development offices in China to our headquarters in Kansas and to our supply chain.” – Cathy Curless, Payless
- About one-half are planning to introduce user-configurable analytics tools. “Business intelligence is a big investment internally. For us BI is core to our whole company.” - Stephen Clarke, DHL
- 72 percent believe speed of response to business cycles is of medium or high importance. “Part of democratizing footwear involves providing styles at the same time you see them in the department stores . . . we are bringing product to market quickly, not a year later like some of the marts do, but in the same season. That is key for us.” - Cathy Curless, Payless
- More than 50 percent are focusing on preparing in advance for business cycles. “We constantly look at standardization, optimization, automation, and outsourcing. Imagine how paper-intensive the mortgage industry is. Imagine large imaging projects coming to bear and then extending those projects around the world - that’s globalization.” - Brent Rasmussen, Credit Suisse
- More than half capture demand information from customers and partners. “We know what shoe sold where, at what day, at what price, who bought the shoe, and where they bought it, whether it was online or in a store. This information is turned into money. A fashion shoe has a 13-week life. It’s very important that at 13 weeks it is gone – it has to make room for the new products. Analytics helps.” - Cathy Curless, Payless

Survey warning signs:

- About two-thirds do not consider emerging markets as a top three priority
- Global sourcing maturity is relatively low
- Regarding customer loyalty, 30 percent said personalization is of low or no importance
- About 40 percent believe using analytics to gain customer insights is a top three priority
- Leveraging global talent is a relatively low priority
- Leveraging offshore analytic capabilities is a relatively low priority
- Value chain visibility is not a top three priority for more than half
- Few efforts are focused on increasing speed of response, despite the belief by most that it is important



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