



The
New Voice
of the
CIO

*Insights from the
Global Chief Information
Officer Study*

Introduction

In a fast-moving business environment, how can today's Chief Information Officer (CIO) make the biggest impact on behalf of the entire organization? To answer that question, we listened to over 2,500 CIOs worldwide. The electronics industry was well represented, with 128 CIOs from 26 countries. They covered various industry segments, from consumer electronics and industrial automation to semiconductors and office equipment.

As part of our research, we also sought to understand the differences between the responses of CIOs from organizations with high profit-before-tax (PBT) growth (referred to in this report as "High-growth CIOs") and those of CIOs from organizations with low PBT growth ("Low-growth CIOs"). For details about our research methodology, please see "How our research was conducted."

These one-hour, face-to-face conversations, along with our statistical and financial analyses, made clearer the changing demands on CIOs. Not content to be known only as consummate IT experts or perpetual seekers of savings, CIOs are redefining their role.

The voice of the Electronics CIO is being heard in new ways – as Electronics CIOs are increasingly recognized as full-fledged members of the senior executive team. Successful CIOs are much more actively engaged in setting strategy, enabling flexibility and change, and solving business problems, not just IT problems.

Today's Electronics CIOs spend an impressive 53 percent of their time on activities that spur innovation. These activities include *generating buy-in for innovative plans, implementing new technologies* and *managing non-technology business issues*. The remaining 47 percent is spent on essential, more traditional CIO tasks related to *managing the ongoing technology environment*. This includes reducing IT costs, mitigating enterprise risks and leveraging automation to reduce costs elsewhere in the business.

Electronics CIOs universally acknowledge that some of their most important objectives too often seem to clash: *How can I support the introduction of new services while avoiding the disruption of existing services? How can I reduce costs while improving services? How can I balance the need to influence business strategy with the need to provide top-notch IT support?*

Complementary, yet sometimes conflicting roles

One Electronics CIO summed it up well: “In IT, we are not magicians, but we are certainly jugglers.” On any given day, CIOs are poised for the unexpected, leading an organization that solves a myriad of problems for customers, both internal and external. Without question, IT functions represent the lifeblood of most businesses. But CIOs told us that they can only turn more attention to new technology ideas after addressing current IT needs.

After thousands of interviews, we found that successful CIOs actually blend three pairs of roles. These dual roles seem contradictory, but they are actually complementary. To characterize each role, we have coined a term that describes its dominant quality. At any given time, a CIO is:

- An Insightful Visionary *and* an Able Pragmatist
- A Savvy Value Creator *and* a Relentless Cost Cutter
- A Collaborative Business Leader *and* an Inspiring IT Manager.

By integrating these three pairs of roles, the CIO:



Makes innovation real

It's not enough to just plan for innovation – it needs a robust foundation. When acting as an Insightful Visionary, a CIO is perceptive, promoting a broad technology agenda to help the business profit from leading-edge initiatives. The flip side of the Visionary is the Able Pragmatist role. As a Pragmatist, a CIO deals with the realities of the business. The Pragmatist also facilitates the productivity of current IT solutions to allow more time and budget for innovation.



Raises the ROI of IT

Using IT to produce greater business value is vital, accompanied by an ongoing focus on lower costs and higher efficiency. A Savvy Value Creator finds new ways to help customers and the organization profit from how data is used. The Relentless Cost Cutter, its counterpart, is focused on managing budgets and processes to eliminate or reduce costs.



Expands business impact

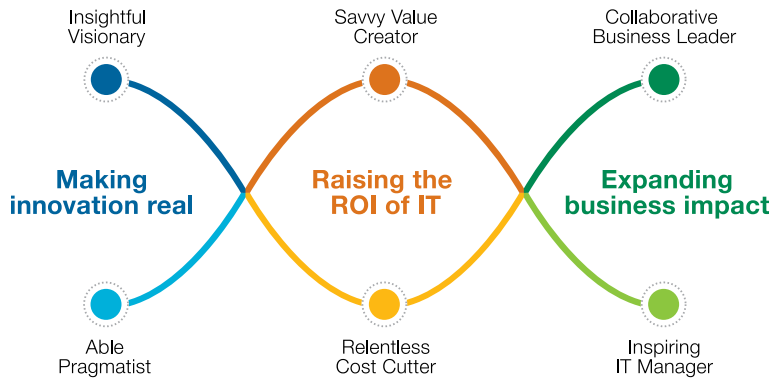
To contribute the most to the organization, proven expertise in both business and technical matters is vital. Part of the time, CIOs will engage with the enterprise as Collaborative Business Leaders, to drive new business initiatives and cultural shifts jointly with fellow CxOs. At other times, the Inspiring IT Manager role occupies center stage to motivate the IT organization and deliver superior IT performance.

Adjusting the mix, one pair at a time

It’s no surprise that CIOs must reconcile seemingly opposing mindsets. But our findings revealed ways in which they can be more effective in this everyday balancing act. Even some experienced CIOs acknowledged that they are sufficiently strong in just one or two of the six CIO roles. Yet every role requires at least some attention.

The realities facing each individual influence how that CIO can, and should, manage change at any given time. Many factors impact the decisions about how much emphasis to place on any single role. They include macroeconomic and regional conditions, industry-specific forces and organizational characteristics; the development of new business models in response to globalization is a particularly important concern in the electronics industry, for example. They also include the CIO’s own skills and aspirations.

But despite the multiple forces in play, our findings show that successful CIOs discover ways to focus on high-value projects in support of their organizations. **We share with you the voices of many Electronics CIOs and what they are doing to achieve three primary goals: to make innovation real, raise the ROI of IT and expand business impact.**



Making innovation real



Insightful Visionary and Able Pragmatist

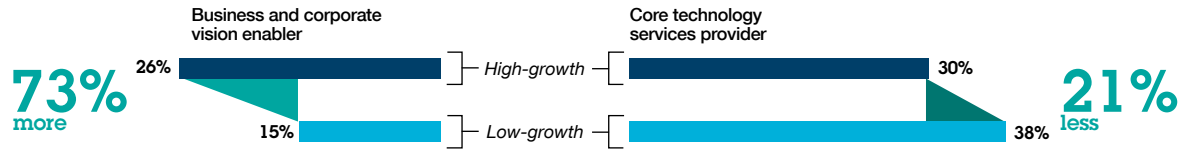
The Insightful Visionary is active in setting strategy and helping the business explore how technology can drive innovation. The Able Pragmatist sets the stage for enacting innovation. Key Visionary actions are to: push business/technology integration, champion innovation and expand CIO influence. Key Pragmatist actions are to: enable the corporate vision, make working together easy and concentrate on core competencies.

High-growth Electronics CIOs recognize that successful innovation requires deep involvement with the business. But they are not just Insightful Visionaries; they are also Able Pragmatists who help to realize innovation while “keeping the engines humming.” They spend 73 percent more time *enabling the business and corporate vision* than their peers in low-growth electronics companies. Conversely, Low-growth Electronics CIOs spend 21 percent more time *providing core technology services* (see Figure 1).

“If more than one out of three people in IT are not working on tomorrow’s stuff, then I, the CIO, have failed.”

CIO, Consumer Electronics Company, Asia Pacific

Figure 1 Able Pragmatists set the stage for innovation
 High-growth Electronics CIOs spend more time enabling the business vision, while Low-growth Electronics CIOs spend more time providing core technology services.



Are you well-versed in how emerging technologies (like Cloud computing) and innovative processes (like embedded software development) can address uncovered business needs in your industry?

In what ways do you plan to partner with third parties to increase the time you devote to driving innovation within the business while capturing changing customer demands?

How can you expand the use of collaborative and communication tools to widen the knowledge networks of employees and partners throughout the electronics value chain so that there is better supply and demand management?

Do you measure – and explain – the results of new IT initiatives in such a way that colleagues and partners (like contract manufacturers and retailers) not only understand the results, but are convinced and inspired as well?

Raising the ROI of IT

Savvy Value Creator *and* Relentless Cost Cutter

The Savvy Value Creator devises better solutions by understanding customers' needs, while the Relentless Cost Cutter is vigilant about trimming expenses wherever possible. Key Value Creator actions are to: make the data "sing," reach customers in new ways, and enhance integration and transparency. Key Cost Cutter actions are to: standardize to economize, centralize the infrastructure and keep cost reduction a top priority.

As Savvy Value Creators, Electronics CIOs concentrate on finding out what customers really want and proactively crafting data into actionable information. But they are also under tremendous pressure to cut costs, as new business models based on global manufacturing and global sales and marketing become the norm for leading electronics companies. Sixty-seven percent of High-growth Electronics CIOs – 16 percent more than Low-growth Electronics CIOs – therefore *expect to standardize their global business processes* over the next five years (see Figure 2).



“The financial success of the company is dependent on our IT and systems, and the process efficiency it enables.”

CIO, Network Equipment Manufacturer,
North America

Figure 2 Cost Cutters standardize

High-growth Electronics CIOs aim to simplify and automate essential business processes to reduce costs.



In what ways can you work with the business to extract the maximum financial return from the current IT portfolio?

Do you actively reach out to the business to jointly capture relevant information—about your customers, your competitors, and your ongoing performance--and do you suggest new ways it can provide value?

How can you leverage global and regional competitors' experiences to further optimize business and IT processes?

If you were your own successor, what are the top three things you would do to generate a 20 percent increase in performance from your IT investments?

Expanding business impact



Collaborative Business Leader *and* **Inspiring IT Manager**

The Business Leader thoroughly understands the organization's core business and builds strong partnerships, internally and externally. The Inspiring IT Manager demonstrates personal IT expertise and advocates stronger skills across the IT organization. Key Business Leader actions are to: know the business, get involved with business peers in non-IT projects, and present and measure IT in business terms. Key IT Manager actions are to: cultivate truly extraordinary IT talent, lead the IT forces and enhance the data.

High-growth Electronics CIOs are involved in co-creating the business strategy with their fellow business leaders 29 percent more frequently than their counterparts in low-growth organizations (see Figure 3). They and their colleagues recognize that IT is not just a "necessary evil" but a tool to create competitive differentiation, whether by lowering costs through streamlined processes, delivering faster access to realtime information or enabling the provision of more innovative service offerings. High-growth Electronics CIOs are also doing more to improve the quality and accessibility of data, and to foster in-house IT expertise by creating IT centers of excellence.

"Our role is not just to promote process efficiency, but to differentiate our core competencies and processes themselves, to enhance our overall competitiveness."

CIO, Office Equipment Manufacturer, Asia Pacific

Figure 3 Successful Electronics CIOs work closely with their fellow executives
High-growth Electronics CIOs are more actively engaged in developing the business strategy.



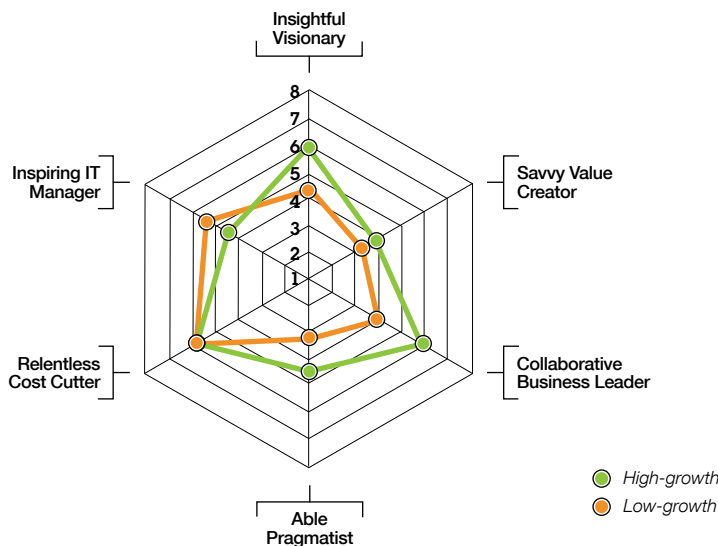
- Do you leverage business relationships throughout the enterprise to expand your scope of responsibilities beyond the IT organization?
- How can you start the ongoing dialogue between the business and IT that also drives shared objectives and measurements?
- Are you a role model with state-of-the-art expertise in at least one IT domain?
- Do you have a flexible, comprehensive plan to enhance business and technology skills, such as embedded software development, throughout the IT organization?
- Is your IT organization passionate about protecting and improving the quality of enterprise data?

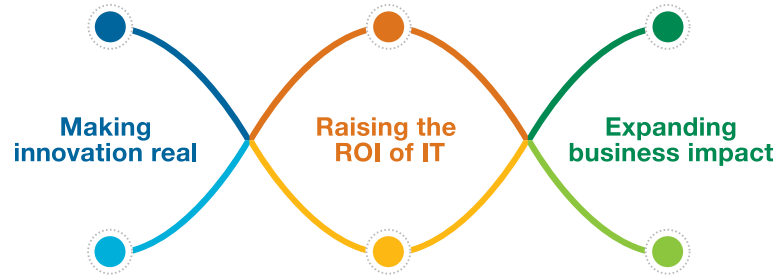
Managing dual roles in the future

Despite the multiple forces in play, our findings show that CIOs have discovered ways to focus on what matters most to them and their organizations. The collective voice of more than 2,500 CIOs worldwide – including 128 Electronics CIOs – points to key actions to help CIOs attain the primary goals of making innovation real, raising the ROI of IT and expanding business impact.

We have used these insights to complete profile analyses – visually represented by the “spider diagram” in Figure 4 – which provide a more structured way of enabling you to identify the areas where you want to concentrate. The diagram shows that High-growth Electronic CIOs recognize the importance of acting as Insightful Visionaries and Collaborative Business Leaders, while Low-growth Electronics CIOs place more weight on being Inspiring IT Managers. But both High- and Low-growth Electronics CIOs are under so much pressure to be Relentless Cost Cutters that they are in danger of forgetting the complementary role of Savvy Value Creator.

Figure 4 Profiles differ significantly
Both High- and Low-growth Electronics CIOs are focusing on cost-cutting but the former are more successful in juggling other roles, too.





Over time, we expect CIOs to regularly assess how much emphasis is appropriate on each of the three pairs of roles. Our profiles offer CIOs a more structured approach to identify where they want to increase their focus and how to do it. Whichever role you choose to emphasize, we look forward to working with you.

For further information, please send an e-mail to the IBM Institute for Business Value at iibv@us.ibm.com, or to download the complete IBM Global Chief Information Officer Study, visit our Web site:

ibm.com/voiceofthecio

How our research was conducted

This report features Electronics insights from the inaugural edition of our IBM Chief Information Officer (CIO) study – the latest in the ongoing C-Suite Study Series developed by the IBM Institute for Business Value. To better understand the challenges and goals of today's CIOs, we met face-to-face with 2,598 of them, in what is the largest known sample of these executives. Between January and April 2009, we interviewed these CIOs, who represent different sizes of organizations in 78 countries and 19 industries.¹

Our analysis used 2004-2007 PBT growth, relative to peers in their industries, to associate organizations with one of three growth levels: High, Medium or Low. For organizations where this information was not available, we used statistical correlation to assign levels, based on closest overall similarity of answers.

About the IBM Institute for Business Value

The IBM Institute for Business Value, part of IBM Global Business Services, develops fact-based strategic insights for senior business executives around critical industry-specific and cross-industry issues. Browse through our research library at ibm.com/iibv.



© Copyright IBM Corporation 2009

IBM Global Business Services
Route 100
Somers, NY 10589
U.S.A.

Produced in the United States of America
October 2009
All Rights Reserved

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 ibm.com/legal/copytrade.shtml

Other company, product and service names may be trademarks or service marks of others.

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

Notes and sources

1 CIOs we interviewed in the following countries were counted in the Growth Markets category: Argentina, Australia, Bahrain, Brazil, Cameroon, Chile, China, Colombia, Croatia, Czech Republic, Ecuador, Egypt, Gabon, Georgia, Ghana, Guinea, Hong Kong, Hungary, India, Indonesia, Malaysia, Mexico, Morocco, New Zealand, Nigeria, Pakistan, Peru, Philippines, Poland, Qatar, Romania, Russia, Saudi Arabia, Singapore, Slovenia, Slovakia, South Africa, Taiwan, Thailand, Tunisia, Turkey, Uruguay, Venezuela and Vietnam. The Western Europe category includes CIOs from: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Israel, Italy, Luxembourg, Monaco, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and United Kingdom. The North America category consists of CIOs from: Bahamas, Canada, Cayman Islands, Jamaica, Trinidad/Tobago and the United States.

Our CIO respondents represented 19 industries. The Communications sector includes: media and entertainment; telecommunications; and energy and utilities. The Distribution sector includes: agriculture; airlines; consumer products and wholesale; food, beverages and tobacco; life sciences; mail, package and freight delivery; professional services; railroads; real estate; retail; transportation and logistics; and travel and tourism. The Industrial sector includes: aerospace and defense; automotive; chemicals and petroleum; computers and office equipment; electronics; energy (production and refining); engineering and machinery; forest and paper products; industrial products; and network and other communications equipment. The Financial Services sector includes: banking; financial markets; and insurance. The Public sector includes: education; government and public service; and healthcare payers and providers.