



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 more than 2,500 CIOs worldwide, including 72 Healthcare Provider CIOs – that is, CIOs of clinics, hospitals and regional health organizations. As part of our research, we also sought to understand the differences between responses of CIOs from organizations with high PBT growth (referred to in this report as “High-growth CIOs”) and 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, together with our statistical and financial analyses, illuminated 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 CIO is being heard in new ways. Successful CIOs are much more actively engaged in setting strategy, enabling flexibility and change, and solving business problems, not just IT problems.

Today's Healthcare Provider CIOs spend an impressive 62 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 38 percent of their time is spent on essential, more traditional CIO tasks related to *managing the ongoing technology environment* – such as reducing IT costs, mitigating enterprise risks and leveraging automation to reduce costs elsewhere in the business.

Like their peers in other industries, Healthcare Provider CIOs acknowledge that some of their most important objectives too often seem to clash: *How can I support the introduction of new services that promote innovation, safety and quality, 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

Healthcare Providers are at the epicenter of efforts to create more value-focused healthcare, in which health promotion and care delivery decisions provide evidence-based and increasingly personalized healthcare. A robust supporting IT infrastructure is essential to provide the information required to achieve these goals. However, balancing the needs to minimize clinical and administrative waste, improve clinical productivity, inform and empower consumers, and stimulate innovation – is no easy feat.

One 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 pay 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. At first glance, 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 Public Sector CIO:

Makes innovation real

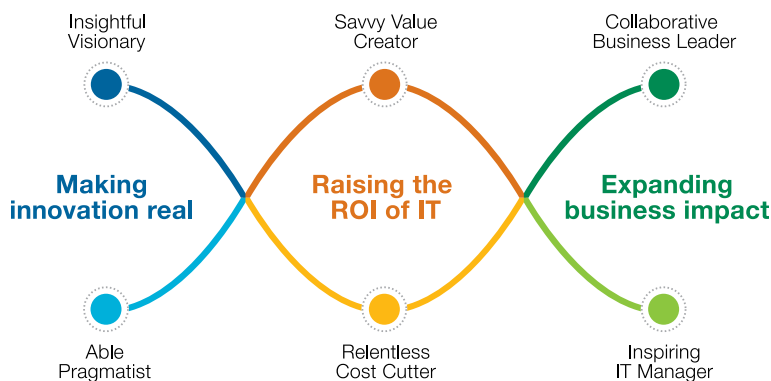
It's not enough just to plan for innovation – it needs a robust foundation. When acting as an Insightful Visionary, a CIO is perceptive, promoting a broad technology agenda to help the business profit from leading-edge initiatives. The flip side of the Visionary is the Able Pragmatist role. As a Pragmatist, 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 they individually face influence how each CIO can, and should, manage change at any given time. Many factors affect their decisions about how much emphasis to place on any single role, including macroeconomic and regional conditions; industry-specific forces; organizational characteristics; and their 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 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 organization 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 extend CIO influence. Key Pragmatist actions are to: enable the corporate vision, make working together easy and concentrate on core competencies.

Healthcare Provider CIOs must be particularly able to navigate a path between these two roles, as the healthcare system is transformed. They must drive sustainable change across organizational, departmental, work group and individual levels, for example. Such change cannot happen without strong leadership and a clear vision.

High-growth Healthcare Provider CIOs provide some useful lessons here. They *actively integrate business and IT across their organizations* 16 percent more frequently than their counterparts in low-growth enterprises in order to stimulate innovation. They are also more likely to *co-create innovation, proactively suggest better ways to use data and encourage innovation through awards and recognition*. However, almost all Healthcare Provider CIOs, whether they work for high- or low-growth organizations, place equal emphasis on one priority; when asked about their visionary plans for making their organizations more competitive, 93 percent put *business intelligence and analytics* at the top of the list.

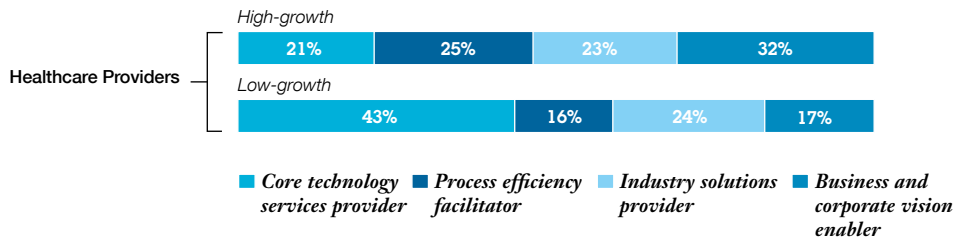
“Healthcare delivery is increasingly expensive, and consequently, we are considering a variety of changes to the healthcare provider business model. We need to explore new ways of effective and efficient service delivery, including the innovative use of service provider partners.”

Healthcare Provider CIO, Canada

High-growth Healthcare Provider CIOs also distinguish themselves in their role as Able Pragmatists. Fifty-four percent use *third-party business or IT services* to facilitate more transformational, forward-thinking aspects of their organizations, compared with only 36 percent of Low-growth CIOs. Similarly, as Figure 1 shows, High-growth Healthcare Provider CIOs spend more time *enabling the business and corporate vision* than their Low-growth counterparts. Conversely, Low-growth Healthcare Provider CIOs spend nearly twice as much time *providing core technologies services*.

Figure 1 Healthcare Provider CIOs in the most successful organizations focus on strategic issues

High-growth Healthcare Provider CIOs devote more than half their time to enabling the organizational vision and providing industry solutions.



How well-versed are you in how emerging technologies and innovative processes can create new business value for your organization?

How do you measure implementation results so that colleagues not only understand the results, but are convinced and inspired as well?

In what ways will you leverage partner capabilities to increase the time you devote to focus on new opportunities?

How can you expand the use of collaborative and communication tools to widen the information networks with stakeholders, like other providers, patients and insurers?

Raising the ROI of IT

Savvy Value Creator and Relentless Cost Cutter

The Savvy Value Creator devises better solutions by understanding stakeholders' 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. These two roles are especially important in the healthcare arena.

Many healthcare organizations have manual processes and non-standardized systems that have been added to extensively over time – a state of affairs that seriously hampers their ability to manage patient data and clinical knowledge efficiently, as well as driving up costs. These difficulties have been compounded by the exponential increase in the volume of information they must deal with; keeping up is a Herculean task.

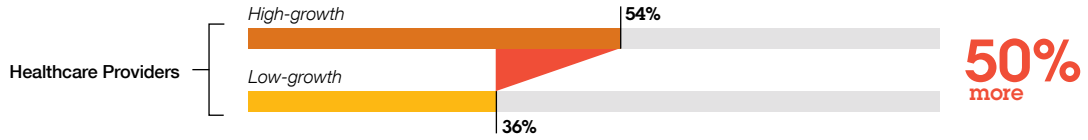
Our study shows that Healthcare Provider CIOs are initiating various value-creating and cost-cutting measures to overcome the challenges. High-growth CIOs *proactively craft data into actionable information* 50 percent more often than Low-growth CIOs (see Figure 2).



"IT is really viewed as an enabler. The business looks to IT to help provide cost savings across the enterprise."

Healthcare Provider CIO, United States

Figure 2 High-growth Healthcare Provider CIOs invest in savvy value creation
 They proactively craft data into actionable information much more than their peers in low-growth organizations.



And all Healthcare Provider CIOs are focusing firmly on costs; they anticipate having a *strongly centralized infrastructure* and implementing more *standardized, low-cost business processes* in five years.

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

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?

How are you proactively reaching out to your colleagues to jointly capture relevant information and collaborate on ways to provide value?

To what degree do you seek out best practices to further optimize business and IT processes?

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.

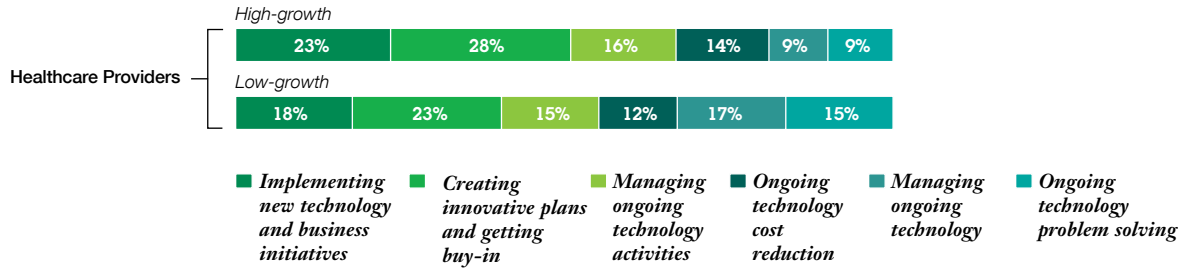
Many healthcare organizations currently have cultures that are individualistic, provider-focused and highly resistant to change. If they are to become more efficient and effective, they need to develop cultures that are much more patient-centric and collaborative – across both internal and external boundaries – to encourage greater teamwork, a sense of shared accountability, and continuous improvement and innovation.

Healthcare Provider CIOs are playing a significant part in driving that change. When it comes to Business Leadership, for example, High-growth Healthcare Provider CIOs report that their senior management teams are 61 percent more likely to *rate technology's contribution to the organization* "high" or "very high" than those working in low-growth enterprises. High-growth Healthcare Provider CIOs are also more likely to focus on *implementing new technology and business initiatives* – a key attribute of the Inspiring IT Manager – whereas Low-growth CIOs spend more time on *ongoing technology problem solving* (see Figure 3).

"We have made great progress at having business and IT share responsibility for technology initiatives. We use a 'co-project manager' model – one from the business and one from IT."

Healthcare Provider CIO, Canada

Figure 3 High-growth CIOs excel by devoting more time to creating and driving innovation
 They spend more than half their time implementing new initiatives and creating innovative plans.



How do you leverage peer relationships throughout the enterprise to expand your scope of responsibilities beyond the IT organization?

How can you maintain or start the ongoing dialogue between the business and IT that drives shared objectives and measurements?

How do you build and adapt a flexible and comprehensive plan to enhance business and technology skills throughout the IT organization?

How is your IT organization passionate about protecting and improving the quality of enterprise data?

Managing dual roles in the future

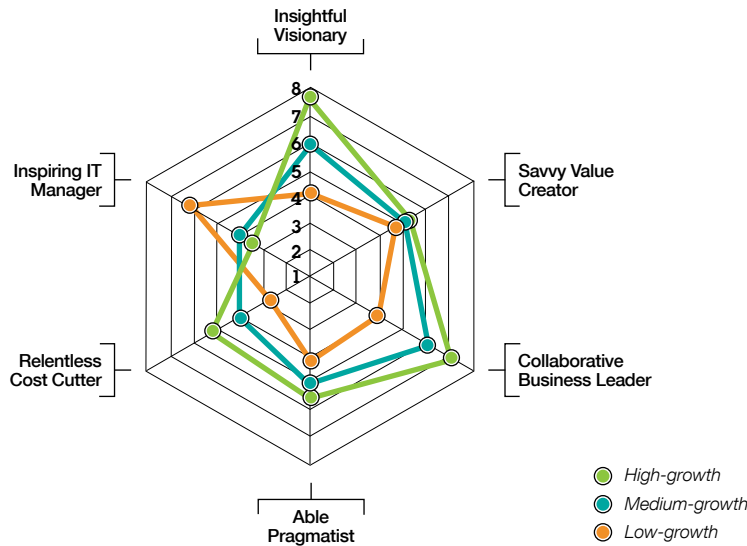
Despite the multiple forces in play, our findings show that CIOs have discovered ways to focus on what matters most to them and their organizations. The collective voice of about 2,600 CIOs worldwide points to key actions to help CIOs attain the primary goals of making innovation real, raising the ROI of IT and expanding business impact.

Based on these study findings, we conducted profile analyses – visually represented by the “spider diagram” in Figure 4 – which offer Healthcare Provider CIOs a more structured approach to identifying areas where they want to concentrate. The spider diagram contrasts CIOs from high-growth, medium-growth and low-growth organizations.

“A new breed of CIO is emerging – one who spends increased time on the clinical side, versus managing technology.”

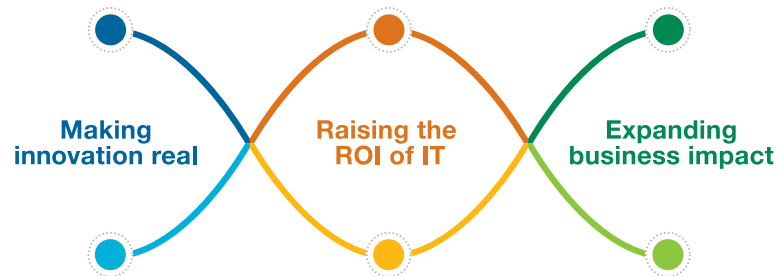
Healthcare Provider CIO, United States

Figure 4 Profiles show significant differences between the three groups
 High-growth Healthcare Provider CIOs stress the importance of acting as Insightful Visionaries and Collaborative Business Leaders.



NOTE: Each CIO role was scored based on responses to a discrete set of questions. The average overall score for each role was plotted within the three performance categories (High-, Medium- and Low-growth). With a possible range of 0 to 10, actual scores fell between 2 and 8.

Low-growth Healthcare Provider CIOs focus on the IT Manager's role more than the other two groups, but place considerably less emphasis on the other roles. Medium-growth CIOs give all six roles almost equal priority. High-growth CIOs also adopt a balanced approach, but pay more attention to proposing innovative change and collaborating with colleagues across the organization.



Over time, we expect CIOs to regularly assess how much emphasis is appropriate on each of the three pairs of roles. 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 Healthcare Providers 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 profit before tax (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.

To simplify the terminology in this report, we will primarily refer to CIOs who work in organizations with high PBT growth as “High-growth CIOs” and to those working in organizations with low PBT growth as “Low-growth CIOs.” Presenting our findings in terms of these categories offers CIOs a more structured approach to identify where they want to increase their focus and how to do it.

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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 and pharmaceuticals; 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.