Introduction

How are technology leaders helping their organizations adapt to the accelerating change and complexity that mark today’s competitive and economic landscape? To find out, we spoke in person with 3,018 CIOs, spanning 71 countries and 18 industries. These in-person conversations, along with our statistical analyses of responses, underscore the ever-more vital role of the CIO.

CIOs increasingly help their public and private sector organizations cope with complexity by simplifying operations, business processes, products and services. To increase competitiveness, 83 percent of CIOs have visionary plans that include business intelligence and analytics, followed by mobility solutions (74 percent) and virtualization (68 percent). When asked to rank the impact of external forces, the newest ranking by CIOs more closely matched the list that CEOs identified in our 2010 study.

Where the paths diverge: The CIO Mandate

Perhaps the most useful insight to emerge from this study, however, is not what makes CIOs the same, but what makes them different. The primary differences among the CIOs we spoke with lie in their organizations’ business needs and goals, and how CIOs can achieve those goals by leveraging business and information technology.

CIOs everywhere spend at least part of their time on IT fundamentals. Beyond managing the prerequisites, our research identified four distinct “CIO Mandates.” These mandates were derived from iterative analysis, including state-of-the-art statistical and textual analysis of the thousands of CIO responses. It revealed typical response patterns associated with each mandate. Each pattern indicated a distinct approach to IT leadership derived from specific organizational needs.

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“The most value will come from being able to provide the right data to the right people in a secure way, and to deliver effective and stable operations.”

Birgitte Drewes, CIO, Lægemiddelstyrelsen, Danish Medicines Agency

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Figure 1

The CIO Mandate

Effective CIOs know and deliver on a mandate that is defined by the predominant goals of the enterprise.
Deliver on the Leverage mandate

Organizations that demand high-performance IT need CIOs to focus on managing essential IT activities and getting information to decision makers faster and more accurately. The business expects CIOs operating with the Leverage mandate to concentrate about half of their efforts on the fundamentals of delivering IT services.

*Internal collaboration and client interaction* are among the principal goals of Leverage mandate CIOs. Nearly three out of four expect changes to their internal collaboration processes to have high transformative potential for their organizations. And almost as many view changes in client interaction processes as high-impact initiatives.

Figure 2
Collaboration and communication are key. These IT leaders look to new technologies to improve how they work with clients.

- Low transformative potential
- Average transformative potential
- High transformative potential

- In what ways will you enhance relationships and improve communication throughout the organization?
- What is your plan to get, keep and grow people with the IT and business skills that your team needs most?
- How many disparate architectures does your organization currently have, and why?
- Are you aggressive enough in rationalizing hardware and the application portfolio as part of controlling costs?
- How do your dashboards measure the value of IT in terms of business benefits?
Deliver on the Expand mandate

CIOs focused on cross-enterprise growth continuously tune business processes and internal collaboration to gain tighter integration. Like all CIOs, those working with an Expand mandate are responsible for the fundamentals—a well-run digital infrastructure that offers data security, integrity and system availability. Yet, they must also continually refine operations to optimize efficiency and seek substantial competitive advantage with the help of IT.

Possibly the most critical requirement of organizations that demonstrate the Expand mandate is to enable better decision making. That’s why process and product simplification, and analytics to drive better real-time decision making are top priorities for Expand mandate CIOs. An overwhelming 98 percent of those CIOs said they would lead or support efforts to simplify internal key processes. A full 95 percent said they would lead or support efforts to drive better real-time decisions and take advantage of analytics.

Figure 3

Simplify and conquer CIOs with an Expand mandate streamline business processes and enable better decisions by leading in the use of analytics.

- No involvement
- Support
- Lead

- Simplify internal key processes
  - 2% No involvement
  - 16% Support
  - 82% Lead

- Drive better real-time decisions
  - 5% No involvement
  - 23% Support
  - 72% Lead

- Take advantage of analytics
  - 5% No involvement
  - 25% Support
  - 71% Lead

- What leading-edge collaboration tools have you implemented across the enterprise to help integrate technology with business?
- How deeply are your internal customers involved in your key planning and decision making processes?
- What is your plan to engage partners to outsource information technology functions?
- Which persistently inefficient processes can you eliminate or improve to increase customer satisfaction?
- How do you work with internal customers to ensure that dashboards measure enterprise-wide key performance indicators?
Deliver on the Transform mandate

CIOs look beyond the boundaries of the enterprise to simplify business processes and generate real-time insights up and down the value chain. Organizations that operate with a Transform mandate expect IT, more than anything else, to be a provider of industry-wide solutions to support business. On average, Transform mandate CIOs are expected to spend more than one-third of their time or budget fulfilling that role. Somewhat less of their energy is devoted to either visionary responsibilities or business process improvements.

According to the 2010 IBM CEO Study, better performers manage complexity on behalf of their organizations, customers and partners. An overwhelming 99 percent of Transform mandate CIOs identified initiatives to simplify internal key processes as among those they would lead or support, while 97 percent said they would lead or support efforts to simplify for clients. More than half also plan to lead initiatives to simplify for external partners, while a substantial portion will support such efforts.

What are your plans to simplify the customer experience, products and services to increase functionality, use and satisfaction?

Does your dashboard design include real-time metrics, such as internal and external customer satisfaction levels, end-user time savings and talent retention?

Are you introducing social media and collaboration capabilities to customers and partners, as well as internal clients?

How do you take advantage of Big Data and new IT capabilities to achieve real-time insights?

In what new ways are you exploiting leading-edge analytical skills and technology?
The Essential CIO

Deliver on the Pioneer mandate

These CIOs exhibit an entrepreneurial spirit and enable the radical redesign of products, markets and business models. With a Pioneer mandate, CIOs are seen as critical enablers of the organization’s vision and typically spend less than one-quarter of their time or budget on delivering fundamental IT services or business process efficiency.

This group of CIOs ranked product/service profitability analysis and product/service utilization analysis as their top two priorities for turning data into usable intelligence. And they cited adding new sources of revenue as the highest impact of IT on their organizations over the next three to five years. Nearly half also cited revenue model changes as a key area of focus for IT over the same period. They help generate and have access to customer preference data, supply chain patterns, emerging trends—both within their organizations and from competitors—Internet behavior and response patterns, and so much more.

Business view of IT

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8%</td>
<td>Provider of fundamental technology services</td>
</tr>
<tr>
<td>14%</td>
<td>Facilitator of organizational process efficiency</td>
</tr>
<tr>
<td>26%</td>
<td>Provider of industry-specific solutions to support business</td>
</tr>
<tr>
<td>52%</td>
<td>Critical enabler of business/organization vision</td>
</tr>
</tbody>
</table>

Figure 5
Transformation through revenue and profit
Pioneer mandate CIOs prioritize initiatives that drive new revenue and boost profitability.

- Which channels can you leverage to share ideas and co-create new products and services that delight your customers?
- How will you leverage social media and business intelligence to spot trends that present new customer opportunities?
- What are you doing to converge disparate technologies for the benefit of your organization, customers, value chain and beyond?
- How can you develop the talent to apply predictive intelligence to radically change your business model, products or industry?
- How will you design dynamic dashboards that leverage real-time data and predictive analytics?
Excelling in your mandate

Delivering on the CIO Mandate is the key to success, all while keeping an eye on the horizon and fostering innovation. CIO Mandates represent a single point in time. A mandate can change when an organization’s needs and objectives change, perhaps in response to economic, competitive or technological forces. Regardless of mandate, our study shows that certain “essential actions” can prove valuable to CIOs.

“Ensure you understand the vision, have a clear strategy and execute where the business wants to go.”
Charlotte Jones, CIO, Reliance Petroleum

Leverage mandate
Streamline operations and increase organizational effectiveness
- Standardize infrastructure and processes
- Control legacy costs
- Implement collaboration tools
- Conservative introduction of technology

Expand mandate
Refine business processes and enhance collaboration
- Outsource to focus on differentiators
- Communicate and collaborate internally
- Focus on business process management
- Review and update legacy environment

Transform mandate
Change the industry value chain through improved relationships
- Use “Big Data” and real-time info
- Simplify for clients/partners
- Enhance and expand the value chain
- Use risk management frameworks

Pioneer mandate
Radically innovate products, markets, business models
- Pilot technology for social value
- Explore new sources of revenue
- Enhance customer experience
- Pursue non-stop growth

Yet whether an organization requires an emphasis on delivery of essential IT services or challenges the CIO to pioneer new opportunities, CIOs need to innovate. With ongoing technological shifts, the seemingly endless onslaught of data and the increasingly frenetic pace of change, making incremental improvements to operations may no longer be sufficient.

Continue the conversation at ibm.com/theessentialcio
For further information

For more information about this study, please send an e-mail to the IBM Institute for Business Value at iibv@us.ibm.com. We will arrange for you to be contacted by the appropriate IBM industry or regional expert.

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