What We Were, Who We Are, and Who We Are Becoming

Since time is all one substance, one is able to use the experience of the past and the observation of the present to decipher the language in which information about the future is conveyed.

—Kristen Lippincott

BRIEF GENEALOGY OF THE IT PROFESSION

The exact time and place that the IT profession began is impossible to determine. Depending on one’s frame of reference, information and technology gradually move from tablets and hammers and chisels to bits stored on computer media. Information is the very substance of human communication, and, consequently, the history of information technology tracks the ways that people have applied scientific innovations to commercial, industrial, and artistic information communication applications. In ancient times, the great historians used teams of people to index, organize, write, and translate a permanent chronology of human events using the most advanced information technology of their day—paper. “Most advanced” is always a highly relative term in any discussion of information technology. Western information technology had not discovered pagination by the time of Johannes Gutenberg (1397–1478). With the advent of the printing press in the 1450s, Gutenberg and his thirteenth-century partners were using the most advanced information technology available.
Naturally, the definition of the information technology professional followed the career most associated with innovative technology. Those who were compensated in some form or fashion for their information communication expertise were the IT professionals of their day. It may seem like a long technological reach from paper to the advent of electronic tabulation and computation devices, but consider how quickly these devices have become an indispensable, ever more specialized human technology; consider the exponential acceleration of information technology innovation. Now imagine how long it might take at this pace before some form of biomechanical interface technology relegates today’s state of the art into the history books.

Because electronic tabulation and computation remain the domain of our most pressing, current professional responsibilities for the foreseeable, budgetable future, a review of the electronic history of human communication illustrates the ever increasing importance of the professional as technology specialist and information manager. The IT profession began with Herman Hollerith (1859–1929) and his work with the 1890 census. Hollerith invented the punched card and the tabulating machines used to read the cards for that historic record-keeping innovation. Like so many innovators throughout history, Hollerith was a savvy entrepreneur who founded the Tabulating Machine Company in 1896, which he subsequently sold to the Computing-Tabulating-Recording Company (CTR) in 1911. CTR was created when International Time Recording Company merged with Computing Scale Company to specialize in clocks and grocery weights and measure information technology products. The IT organizational genealogy becomes more familiar to twenty-first century professionals when, in 1924, the combined companies were renamed to International Business Machines, IBM (see Exhibit 1.1).

Hollerith not only invented the machines and the media, but he seems to have been a regular fixture at the census bureau, watching over, managing, and fixing the machines and working with the people to keep the census work going, thereby placing the inception of the modern-day IT profession around 1890. This earliest expression of the profession was, of course, highly mechanical and highly supervisory (and probably not very professional).

The next major milestone in the IT profession was the development of one of the earliest computers built that was worthy of the name “data center”: the Colossus. Using more than a thousand state-of-the-art vacuum tubes, this computer, designed and built in 1943 by a team headed up by Alan Turing was used to decipher German messages. It is considered to be the first all-electronic calculating device. While the details about what it took to manage this computer on a daily basis remain undocumented, it’s not difficult to imagine, based on just a photographic comparison with a modern-day computer. A close analogy would be a comparison between early automobiles and today’s cars: The ancestors in the IT innovation genealogy were less complicated but needed more minute-to-minute care and
feeding while the present-day descendents are significantly more complicated but require much less constant attention.

Following World War II, and the classified examples like the Colossus that provide little information about actual IT management focuses, the pace of technology development and management increased, qualitatively speaking, exponentially. Interestingly, compared with today’s IT environment, this same period is historically distinguished by a lack of interest in the development of the computer business in terms of the customers and companies that bought computers. Working from available records, including collections of personal experiences and anecdotes, the common wisdom suggests that the starting point in large-scale commercial computing was inaugurated by IBM’s announcement and introduction of its System/360 product family in 1964 and 1965. This innovative product line forced all other computing companies in the market to follow suit.

Moving from the IT production industry to the IT function implications within computer-dependant organizations, this same generation of products introduced the facility concepts of the data center or the data processing center—also known as the raised floor—with all the significant attendant implications for the future of IT management. Along with this new technology facility structure came the data center manager, or the DP manager. And as the expectations,
responsibilities, budget, and scope of the person in this role increased over the years, the functional leadership position evolved from that of technician to manager to technology manager to production manager to business manager to executive to senior executive.

The 1970s were dominated by these large mainframe computers and everything associated with them. Computer system operation and management were dominated by centralization paradigms; that is, all decisions, funding, management, operation, and even “most use” was channeled through a central IT authority. The 1980s witnessed the rise of so-called smart terminals and personal computers that acted like smart terminals (also known as terminal emulation). At the same time, a new dominant IT focus entered the genealogical picture: the computer user. The burgeoning number of computer users found that it was more and more difficult to get what they needed done by their IT organizations (functions) working to address their own provincial priorities in the same time frame. As it turned out, the cost of the personal computers became affordable within departmental budgetary limits—and this did not escape the notice of the end users.

Driven by a marketplace influenced by a new generation of users, the 1980s also saw the dispersion, or decentralization, of IT business solution decision making, acquisition, and application development. In other words, IT lost control, and the end users were ecstatic about finally being in control of their own destinies. Going into the 1990s, like the slowing of a pendulum, IT organizations made some movement back toward centralization, but they were not able to make up all the ground that they had lost. They found a more balanced point at which the end users still retained a modicum of control and independence but the IT organization reestablished its leadership responsibilities according to the new interdependencies in the emerging dynamics of the overall IT genealogy. Looking back, it was predestined. The costs of providing a dedicated IT support person (officially or unofficially, by assignments, short straw, or personal interest) must be measured and calculated in terms of degree of difficulty, dollars, efficiency, and efficacy, to name a few, all in a discipline where few users have the time, inclination, or expertise to do it themselves.

Entering the 2000s, IT professionals and their users almost had the pendulum balanced, until a new technology changed the dynamics of their relationship once again: the personal digital assistant (PDA). This new technology on the genealogy followed the same dispersion dynamics as its predecessors: At first, only a few people had them; then everyone wanted one; then many got one; then anarchy broke loose with the support problems they created; then they were forbidden (but people bought them on their own); then companies decided they had to deal with them (many senior executives got one as a holiday gift); soon they will reach an IT management equilibrium within most information systems. Heading toward the 2010s, one thing will be certain: IT organizations and their leadership will experi-
ence several more swings of the centralize/decentralize IT pendulum relative to the eventual equilibrium point at which, in the end, specialists and users learn how to integrate a new technology so that everyone is better off.

This discussion has focused on the extremely rapid rate of development in the technology lineage of the overall IT genealogy, so one might assume that the professional management lineage has matured with equal rapidity. One would be wrong to do so. Humans simply aren’t so easy to build or program. A major academic study conducted in the early 1990s traced the origin of the chief information officer title to a conference presentation quoted in a 1980 Computerworld article on information resource management. Following this article, the term CIO finally reached 100-plus citations in the professional literature in 1988 (see Exhibit 1.2). In short, while this leadership role has been evolving alongside an applied organizational technology more than 100 years old, it is really only in the last 10 years that the term CIO has become a matter of human awareness—let alone a subject of extensive management or functional leadership experience.

**STATE OF THE PROFESSION**

The state of the information technology leadership profession is no different from any other profession in its earliest stages: It is evolving. The difference between a positive and negative perspective on the IT profession depends largely on when you last took a look.

From an organizational context, because all companies work at a unique level of IT management maturity, the responsibilities of the person at the top of the IT organization follow those same idiosyncratic centralization cycles and respond to

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**EXHIBIT 1.2 CIO CITATION IN THE PROFESSIONAL LITERATURE**

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influences that the prevailing business climate has from the standpoint of overall organizational maturity. Amidst all this flux, CIOs can count on one consistency from organization to organization at all levels of IT maturity: the horizontal reach of and expectations put on the CIO are significantly greater than they were 10 years ago. Whether the CIO reports to the chief executive officer (CEO), the CIO is expected to be more businessperson than technologist; he or she is expected to lead and manage directly, by means of influence, or through a combination of both. Within this same context of greater horizontal reach, the organization may or may not expect the CIO to perform as a key member of the senior executive team directly participating in the development of key company strategies, tactics, and initiatives. No, this lack of clarity is not a mistake. Depending on the company, the culture, and the CEO in particular, the CIO either holds a key executive position with all its obligate leadership responsibilities or works as the head manager of the company’s IT utility.

In the context of the significant economic and technological growth periods and significant economic downturns, more enlightened senior executive teams look to the CIO in times of growth to help them maximize the opportunities for the company and its employees to benefit from that growth: to gain significant competitive advantage. Similarly, those same enlightened senior executive teams look to the CIO in times of downturn to help them make the most of what they have, find ways to leverage any advantage against the competition, provide the technology to get the greatest productivity from their workforce, and, of course, to find ways to get more for less throughout the company.

For example, human resources (HR) now occupy a central position in the strategic management of a company’s human capital. HR executives need the high-level perspective and experience of senior IT executives so that each can contribute to a solution that gives the employees and the company their money’s worth for their IT dollars.7 Clearly, the senior HR executive who has an effective relationship with the senior IT executive will be well positioned to work to realign the resources so that they are spent most effectively.

Looking at the CIO in the context of organizational authority, it is interesting to look at the range of CIO reporting responsibilities. In an InformationWeek survey, 26 percent of 500 of the Fortune 1000 had CIOs who reported to the CEO, chairperson, or president, with the remainder reporting to lower-level executives. In the same survey, the 30 percent of the 100 CIOs in the top-ranked companies reported directly to the highest executive.8 In another survey by the executive recruiting firm Heidrick & Struggles, 34.3 percent of the senior IT executives reported to the CEO, 37.2 percent reported to the chief operating officer (COO), 16.7 percent reported to the chief financial officer (CFO), and the remaining 11.8 percent reported to lower-level executives.9 In a survey, by Giga Information Group, 33 percent of the CIOs reported to the CEO, 29 percent reported to the
COOs, 20 percent reported to the CFOs, 2 percent reported to the senior marketing executive and 16 percent reported to “other.”¹⁰ In a similar survey by CIO Magazine, 51 percent of the CIOs reported to the CEO, 12 percent reported to the COO, 11 percent reported to the CFO, 4 percent reported to a corporate CIO, and 22 percent responded “other.”¹¹ Exhibit 1.3 shows a typical distribution pattern for CIO reporting.

These results will vary depending upon the competitive maturity of the companies surveyed. However, focusing on recent trends, successful, high-performance companies have begun to increasingly value the competitive advantages of a well-run, strategically aligned IT function led by a person who participates as a peer with other senior executives to determine how IT can address short- and long-term priorities.

Chapter 2 discusses the practical importance of the CIO’s reporting relationships in greater detail. For now, these studies suggest two important factors that determine the effectiveness of the CIO’s reporting relationship in organizations of all competitive profiles: One, the CIO needs the commitment of whichever CXO (i.e., CEO, COO, CTO, CFO, etc.) has been designated for reporting purposes; two, the CEO must formally recognize the CIO and the IT function as a key organizational asset for business planning and strategic development in front of all company employees.

EXHIBIT 1.3 CIO REPORTING PATTERNS

The inconsistency of CIO reporting relationships betrays how new this corporate management identity remains in the eyes of most executives and executive teams. In short, “What are we going to call it?” To make matters worse, as companies evolve into an organizational structure that captures more and more IT value, they change their understanding of the CIO accordingly. No one doubts the work identity and role responsibilities of the CEO and CFO. Like the behavioral dynamics of any club, the merit and status of the new member must be proven and stand the test of time before “full membership privileges” are granted.

What about the work identity and role responsibilities of the CTO relative to the CIO? The CTO acronym is probably more immediately recognizable than CIO, probably because it has been around for a lot longer and there are many more of them. For example, would you expect a technology-based company to be without a CTO? As the chief technology officer, the CTO is expected to be the senior-level technologist in the company or in the function. In the case where there are separate CTOs for individual business units, and perhaps one for the company as a whole, the CTOs may very well (and most probably do) have different areas of expertise, and all, some, or even none of those areas may be associated with the IT function.

This was the case while I was the CTO for the server and storage product group at Dell. There was also a CTO for the desktop and portables product group, a CTO for the CIO, and a CTO for the corporation as a whole (who doubled as the senior vice president for the portables and desktop product group). Each of us had different roles and responsibilities and areas of expertise. Of these CTOs, only one was responsible for technology related to IT: the CTO reporting to the CIO. Consider, also, that Dell was an interesting example because its IT organization at the time was larger than the entire product group. It makes sense when you think about it, because the IT group created significant value in Dell’s ordering process, inventory management, manufacturing process, and service and support. IT is one of the key core competencies at Dell and is a major factor in its success as a company in being the low-cost producer. The CTOs for the product groups had many significant responsibilities, such as: (1) directing the product and system architectures of the product group, (2) leading the product architects for the specific areas within the product group, (3) identifying new technologies relevant to their specific product groups, (4) evaluating potential partners with whom to develop that technology, (5) identifying when that technology would apply, (6) watching for signs of an impending innovator’s dilemma, and (7) being the credible threat for the product group senior vice president (SVP). (Credible threat was the term one of them used to mean that the CTO for a product group was expected to have development, engineering, and management experience, in addition to architecture and technology experience, and could thereby provide a counterbalancing second opinion to the SVP on critical areas of assertion and risk related to the product group’s engineering, test, service and support, and marketing functions.)
And, of course, the product group CTO was in high demand for customer technical and executive briefings and for participation on technology advisory boards and standards and industry association boards. The CTO in the IT function, reporting to the CIO, has a completely different set of responsibilities although the role is similar. The IT CTO is responsible for the product and system architectures of the IT function, leading the application architects for the specific areas within the IT group, identifying new technologies relevant to the products and applications used by the IT groups, evaluating potential partners with whom to develop those technologies, identifying when a technology would apply, watching for signs of an impending innovator’s dilemma, and being the credible threat to the IT groups for the CIO. Often, as a product group CTO, we would find ourselves working with the CTO of the IT function, as he or she was quite interested in what we would be doing next and whether it would apply to that group and its needs. And, similarly, we were very interested in understanding the IT function CTO’s needs because they were not unlike those of similar customers. Of course, if you are in a company where your IT function would not likely be a customer of your product group’s products—for example, a chemical company—this interaction is much less likely to occur. With either type of CTO, though, the emphasis is on technology; and even though we were expected to be able to work through the costs and business aspects, it was from a feasibility point of view rather than a commit-the-business point of view. So the distinction is very clear between the two in practice: the CIO’s emphasis is on business and the CTO’s emphasis is on technology.

A *CIO Magazine* analysis found that information technology was generally a key element of strategic planning and received attention at the board of directors level. Another analysis also concluded that a consensus had not been reached on the use of a particular title for the senior information technology head. Another interesting perspective on CIO identity comes from the accounting profession. In a book on the history of the accounting profession, an entire chapter was dedicated to “Information Technology and the Accountancy Profession.” The chapter is fascinating reading for the history, the relationship between IT and accounting, the accountant’s perspective, and particularly for the accounting author’s conclusion that the accounting profession has continually missed opportunities to assume responsibility for (in other words, *take control of*) the IT profession. The author also implies that the evolution of the IT profession and its responsibilities would function more smoothly and consistently if it were managed according to accountancy principles. The important relationship between the IT information engineers and the accounting information brokers is detailed in Chapter 5. For now, suffice it to say that the accounting profession has not progressed any farther along the path in viewing the IT profession as a true profession than any other function represented on the senior executive team. Biased by the fact that they control the form and distribution of information in its decision-
making form, many accounting and finance function personnel, all the way up to the CFO, still regard the IT profession as if it were some kind of public utility: a lot of work, a lot of people, a lot of money (read: cost), a lot of technical complexity, and hard to quantify in terms of ROI.

In summary, it is very early on the genealogical timeline for the CIO profession compared to the other CXOs (CEO, COO, CTO, CFO) and their professions. As new and disruptive technologies push organizational IT applications and business planning through the predictable cycles of centralization strategies, the CIO will face the same challenges of changing identity that the CTO knows all too well. Thus, part of what we will be working through in this book will be to help you get to the point of doing what you want to be doing. By doing so, you will also advance the status of the profession for all your peers.

Managing IT in the Fourth Dimension

One more important context puts a final spin on the challenges of CIOs as IT leaders: time. Consider some of the realities of managing the infrastructure of knowledge for an entire organization in terms of the competitive realities and disruptive technological innovations of this age of knowledge. For example, CIOs and their executive peers need to understand the half-life of relevant knowledge in each of the knowledge arenas they make decisions. Exhibit 1.4 profiles the useful, relevant half-life for knowledge for four conventional learning environments. Consider the implications for long-term IT investments and strategic planning. Executive teams that manage an organization’s IT knowledge without taking full advantage of a peer IT specialist do so at their own peril.

The dynamics of knowledge relevance become bleaker when considering the growing complexity of cataloguing and managing the accessibility of the exponential increase in all forms of information. This paradox of the knowledge age is graphically summarized in Exhibit 1.5. Organizations and their leaders simply need more time to figure out the most appropriate solution to any problem because of the increasing work required to sort out information environment complexities in terms of organizational priorities. At the same time, these same executive teams need to react faster in the face of extremely short knowledge relevance half-lives. Simply put, by the time many teams finally discover a solution, the solution will no longer be timely. Who needs a CIO? Well, that depends.

WHAT CEOs REALLY WANT IN THEIR CIOS

What do CEOs really want from their CIOs? This will be a continual theme throughout our journey together, so this section lays a foundation for further
analysis. Part of the problem is discovering the difference between *want* and *need*. Answering this question is straightforward, but not simple, because the answer for this very young profession must be pieced together from a collection of studies, conversations, and experience, all from a variety of perspectives, including the practitioner, the academic, and different management professions. Some of the most important focuses include what the CEOs *want* (and/or *need*) from their perspec-

**Exhibit 1.4 Knowledge Relevance Half-Life**

![Knowledge Relevance Graph]


**Exhibit 1.5 Paradox of the Knowledge Age**

![Paradox Graph]

tive, from the CIO’s perspective, and from the CIO’s peers’ perspective. In the end, the most important question becomes what should you as the CIO be certain that you give your CEO?

CEOs really want a technical advisor who is a strategic business partner; they want and need this. Even if they do not know they want it, they need it. Of course, CEOs do not always know that they need. In a Computerworld interview, when asked about the new role of the CIO, Scott McNealy, chairman and CEO of Sun, replied:

Sun’s Bill Howard is an example of a new-wave CIO. He understands that his job is not managing data centers or the network for us. The CIO shouldn’t be worried about assembling computers, or running data centers, or managing the network, or getting the printing stuff to work. So what does he spend all his time doing? He’s building a world-class, LDAP directory registry implementation that will have every employee, customer, reseller, shareholder, and piece of equipment in the Sun community in a directory with a profile for each one, across all our business processes. That job alone will keep every CIO on the planet solely focused on being chief information officer. The old-style CIOs were all mechanics. They tended to buy their 10-speed bicycles and pay extra to have them unassembled.15

From this, it would appear that McNealy views his CIO as more of a technician and service developer than strategist and technology advisor. Along the same lines, Jack Brennan, chairman and CEO for the Vanguard Group, emphasized his view of the CIO’s strategic importance. “It’s our view at Vanguard that the business management team should be taking the lead on business technology projects, looking to IT for facilitation but not leadership.”16

Contrast these views with the insights of two CIOs who work for forward-looking companies (and probably CEOs): John J. Ciulla, CIO of Vignette, and Monte Ford, CIO of American Airlines. Ciulla says CIOs today are expected to operate at the same business, strategic, and professional levels as their CXO-level peers.17 Ford said that American’s former CEO Don Carty looked to him to get them into the leading technology position in their industry because Carty saw technology as the key driver for their business over time.18

And, in the same quarter, marketing expert Regis McKenna and former Dell CIO Jerry Gregoire both favor giving CIOs additional responsibilities. McKenna asserts that the CIOs are well-positioned to take on several of the responsibilities formerly held by marketing: customer strategy and outreach.19 He bases his belief on the view that the CIO is the person who has the infrastructure for the Web center and the call center—the primary points of contact by customers with a company. Gregoire proposes that there should be a CIO or former CIO on the board of directors of every company to help companies regain investor confidence by providing experience-based and customer-experience-based input on development and spending alternatives.20
In short, people hold a multichotomy of CIO expectations—multiple and contradictory. As part of our journey together, we will analyze the multichotomy from different value perspectives and work together to identify the optimal approach for you using a set of parameters that acknowledge who you are, where you are, and who you want to be. Along the way, we will look at “pictures of success,” or profiles of people who are or have been successful with the particular perspective, idea, or approach this book explores.

**TEN QUESTIONS THE CIO MUST ASK THE CEO**

The CIO’s relationship with the CEO is unique, regardless of any other CIO direct reporting responsibilities. The CIO and CEO each bear unique communication responsibilities in this relationship. As the senior IT executive, the CEO expects the CIO to understand and communicate important company business strategies, IT organization focuses, and executive peer/partnership values relative to information technology. The CEO also frequently calls on the CIO to work with external customers on behalf of the company.

Regardless of when you do so, there are 10 (at least) questions you must ask your CEO. Be prepared to either reconcile yourself to the CEO’s responses or advocate for your own (or an alternative) point of view. These questions accomplish much more than simple information acquisition. They establish the foundation of a long-term relationship of two people with the expertise the organization needs to flourish. Accept your expertise fully before engaging your CEO in a discussion of these questions; and remember, if your CEO or anyone else in the organization knew what you know, you would not be the CIO. Simply by asking these questions, you demonstrate how you intend to partner with the CEO to guide and create value for the company. If you believe that Paul A. Strassmann has it right when he defines the CIO as “Commanding Impossible Operations” and the IRM (an equivalent position in government and nonprofits) as “Impossible Relationships to Manage” then it is even more important to ask these questions as soon as you possibly can.

1. What does my being the CIO mean to you?
2. What are you looking for from your Information Technology group?
3. As CIO, am I a member of your C-level Executive team?
4. As CIO, am I a member of your Corporate Strategic Planning team?
5. As CIO, am I a staff Executive or a line Executive or both? Will/Can that change?
6. As CIO, am I the final signature on IT-related investments?
7. As CIO, why do I report to <the person> rather than to you, the CEO? (assuming that you do not report to the CEO)
8. Are you getting the value you want and need from your IT investment?
9. Do you see the IT group as a cost center, profit center, or do you have a different business model in mind?
10. Looking ahead, what would you like to see in 1 month, 3 months, 6 months, and a year from now?

**Number 1: What Does My Being the CIO Mean to You?**

This is a fundamental question when taking on any new position, and especially a C-level position. This question takes top priority because the answer ensures that you can match your understanding of the CIO role with your CEO’s understanding. If you report to someone who reports to the CEO on your behalf, this same question holds equal importance for your boss to understand.

Because this is an open-ended question, the variations on type of answer you can get are endless. How the CEO responds with posture, voice, and other nonverbal cues can be as informative as the words used to answer the question. Look for any information that gives insight into how this person thinks. Naturally, if the CEO talks about any problems with the company, the CIO has some immediate priorities if the problems are in any way IT-related. Beyond the role and its responsibilities, look for information about the CEO’s opinion of you as a person. If the CEO talks only about the job, use a follow-up question to elicit this information by adding “...me in particular.” Use a similar technique if the CEO focuses on you and does not address the role and its responsibilities.

**Number 2: What Are You Looking for from Your Information Technology Group?**

The answer to this question gives the CIO insights into the CEO’s vision (a view from the top) of IT and its relationship to the rest of the company. Listen for words and phrases that suggest (or do not suggest) that IT is an integral part of the CEO’s vision for company business and competitive advantage. In addition, listen for suggestions that the CEO looks to the CIO and IT to lead the way to the next level of business competitiveness. Every IT organization needs to maintain a balance between stretch goals and reality, so this might be your first opportunity to learn how realistic the CEO’s expectation of IT really is. Also listen for words and phrases that the CEO uses to indicate expectations that your group can help integrate the company’s other groups and divisions and become a unifying force in the work-
place. Once again, carefully examine these expectations in terms of the realities of your own experience.

**Number 3: As CIO, Am I a Member of Your C-Level Executive Team?**

The CEO’s answer to this question is going to give you insights into whether the CIO role is a position of leadership. If it is, then the CIO can expect to be included in the discussions and decision-making process for the key planning and strategy activities by the company’s senior management team as led by the CEO. While you can expect to be accorded the respect and consideration due in such a senior-level, responsible position, expect to be held to the same higher level of performance and leadership expectations by your CEO and your executive peers and partners. Conversely, if your CEO hesitates, declines to comment, or answers no, then the C and the O are titles only and you need to examine the long-term opportunities while waiting for the company leadership to develop greater respect for IT as a value creation partner.

**Number 4: As CIO, Am I a Member of Your Strategic Planning Team?**

The CEO’s answer to this question provides insights into whether the CEO sees IT as a key component to the company’s strategic future, or if instead the IT organization serves the company merely as a utility or supporting function to everything else. The answer also indicates whether the CEO plans to use your planning skills and can see your skills as transferable across the senior executive team. If you are new to the company, this provides an opportunity for people to get to know you. If your CEO’s response affirms the CIO as a key strategic role, you will be in an excellent position to enable and support your peers, partners, and company. If the CEO’s response does not reaffirm a strategic role, continue to regularly inquire because expectations may change over time as the company looks more closely at its competitive position and cost effectiveness. Remain in a position from which you can step in and help at any time.

**Number 5: As CIO, Am I a Staff Executive, a Line Executive, or Both? Will/Can That Change?**

The CEO’s answer to this question is going to give you insights into how directly responsible and empowered you are to provide leadership and resources for taking
strategy to plan to reality. As a true line executive, the CIO is also likely to be responsible for the company’s overall IT budget. In either role, you are likely to be responsible for working with executive peers and partners to establish overall IT directions and enable them to realize the benefits of those directions. Your job as the CIO is much easier and more straightforward—particularly the accountability part of it—if you have the line responsibilities for IT.

If, however, you prefer a staff role, then you are responsible for obtaining directions and assisting your peers and partners in getting the IT resources they need to achieve their goals. In this case, the CIO is also responsible for helping them retain the appropriate focus on doing so (as IT is not likely to be their primary responsibility). The CIO in this position frequently acts as a go-between and mediator assisting peers and partners to work together and integrate their IT solutions.

**Number 6: As CIO, Am I the Final Signature on IT-Related Investments?**

The CEO’s answer to this question provides insights into whether the CIO can really set and control directions for the IT organization—particularly where there are budget dollars involved. “Follow the money” almost always applies. When it comes to strategic planning for the IT organization, it is important to see that money follows the implementation. Strategic or implementation funding deviations happen for good reasons, and all such changes can be justified against a long-term vision for the IT organization and the company.

If the final signature comes from the person to whom CIO reports, the CIO still has the opportunity to influence the ways that executive leadership strategically integrates the IT organization. Diligently prepare your boss for each key upcoming strategic expenditure in terms of the specific needs of each of the company’s important organizations and their relationship to the overall strategic direction.

When the final signature and the sign-off authority is dispersed throughout the organization, the CIO has to make sure that all of the most senior executives understand the limitations of the IT senior executive position. Specifically, the CIO can influence but not actually ensure, control, or manage adherence to the strategic direction or funding inconsistencies.

**Number 7: Where I, as CIO, Do Not Report to the CEO, Why Not?**

The CEO’s answer to this question reveals three separate important insights:

- A rationalization about the importance of the CIO role
• How involved the CEO expects to be with the CIO on a daily basis
• The slant or perspective from which your CEO sees the IT function and the CIOs role based on which executive the CIO reports to

For example, when the CIO reports to the chief operating officer, a considerable portion of the CIO’s time will likely also be involved in day-to-day operations of the IT functions and supporting partners and peers in meeting their operational objectives. This is not necessarily a bad thing; when you are directly involved in making money for your company, you have an easier time identifying the value of your work and the work of your organization.

If the CIO reports to the chief financial officer, a significant portion of the CIO’s role will likely be related to the costs and investments in the IT organization and to the projections for future costs and investments in terms of the ways they are expected to create value for the company. This is not necessarily bad, either. Costs and investments justified with your CFO sail more smoothly through the approval process because you have more insight into the strategic financial objectives than your nonfinance-based peers and partners.

If the CIO reports to the chief technology officer, the CIO role is likely to be more technical and tactical and with less concentration on the business side. In general, this is not a particularly good place for a CIO to report. Your role should be a strong combination of business with technical understanding if you are to be in a good position to create value for the business.

If the CIO reports to the vice president of operations (who often reports to the COO) a significant portion of the CIO’s efforts will likely be directed at the day-to-day business of the IT group and enabling your peers and partners on a more tactical basis. As this reporting structure places the CIO another layer deeper than the preceding structures, you may not have the access you need to the senior-most management and power base in your company required for leading, managing, enabling, and controlling (as opposed to influencing).

**Number 8: Are You Getting the Value You Want and Need from Your IT Investment?**

The CEO’s answer to this question demonstrates whether you are expected to take the IT group to its next level of development or are going to be expected to be more of a caretaker for an area that is performing “acceptably.” If you were hired to replace someone who is due for retirement or who is leaving because of some other normal (noncompany-generated) reason, then it may well be that your CEO is looking for someone to continue the efforts of your predecessor. If, however, you were hired to replace a CIO who left under other circumstances, the answer to this question is likely to also help you understand your CEO’s IT priorities and view
of the monies and effort the CEO intents to invest in IT to make the company more successful. If you are the first CIO at your company, then undoubtedly one of the reasons for the creation of this position was that the CEO does not believe that your company is getting enough value from the IT organization.

**Number 9: Do You See the IT Group as a Cost Center or Profit Center, or Other?**

The CEO’s answer to this question suggests the approaches the CIO is going to need to take with developing, setting, and implementing IT strategies and plans. If the IT group is treated as a cost center, the CIO can work to justify needed expenses and investments on their merits; once agreement is reached, those costs are budgeted and/or apportioned to the parts of the company’s business as appropriate. The downside for the CIO and the IT group is that the rest of the company will look at the IT budget with a jaundiced eye if IT does not deliver on its commitments as an enabler and partner to the CIO’s peers.

If the IT group is treated as a profit center, the CIO works to justify all expenditures and investments based on the additional revenue they bring to your company; once agreement is reached, those costs will be budgeted and released to IT. However, along the way, the CIO is expected to show (as are your business group peers and partners) how IT tracks profit commitments for expenditures and investments. The downside for the CIO and the IT group is that the rest of the company may look at the IT budget and become dissatisfied with the ways IT spends on areas they care about—especially if IT has not worked on a pet project because its return on investment did not meet IT’s operating hurdle.

This is a tough one: The reputation for cost-based groups is that they get sloppy in their cost management and exude entitlement; the reputation for profit-based groups is that they only work on projects that maximize profit as they are measured rather than maximizing profits of business units or the company. Does the CEO expect you to minimize or optimize expense and investment? Does the CEO expect you to maximize or optimize profit or return? In either case, does the CEO expect you to work on a companywide basis, a business-unitwide basis, or your business-unit-only basis? The answers to these questions are critical to CIO’s success and to the CIO’s ability to enable success for peers and partners, too.

**Number 10: What Would You Like to See in One Month, Three Months, Six Months, and a Year from Now?**

The CEO’s answer to this question is going to give you insights into whether your CEO has given thought to IT’s tactical and strategic needs. A very tactically fo-
cused CEO may expect the CIO to be strategically focused so that the company
is not driving in the dark. It could mean that company leadership does not pay
much attention to anything much beyond the current quarter's shareholder earn-
ings; if that is the case, and you are strategically inclined, you either have an oppor-
tunity or a career death wish.

The very strategically focused CEO is the best of all worlds because as the chief
information officer, your greatest value lies in the strategic area. Consequently, you
need to align your strategy for IT with the CEO's strategy for the company. This is
how you ensure value creation that matters.

NOTES

4. William Aspray, “The History of Computing within the History of Information Technol-
5. The rooms containing the large mainframe computers were called raised floors because the
   floors the computer equipment actually stood on was a second floor approximately a foot
   higher than the building floor. This raised floor consisted of square tiles supported by a metal
   frame of posts and braces. The cables that connected the various computer pieces together
   ran through the spaces between the raised floor and the building floor to keep the cables out
   of harm’s way. Air conditioning and pipes with cooling water for the processors were also
   routed through the raised-floor spaces.
6. James I. Penrod, Michael G. Dolence, and Judith V. Douglas, *The Chief Information Officer in
   Higher Education* (Boulder, CO: The Association for the Management of Information Technol-
7. David Stein, “Measuring the Impact of HR Technology on Your Business,” *Benefits & Com-
8. Richard Layne, “The Best, the Biggest and the Debate,” *InformationWeek* (September 18,
9. Heidrick and Struggles, Inc., *Health Care Chief Information Officers* (Chicago: Healthcare In-
10. Chip Gliedman, *GigaWorld IT Value Program Poll—Still a Long Way to Go* (Cambridge, MA:
    archive/030102/survey_results_content.html (accessed March 1, 2002).
14. T.A. Lee, A. Bishop, and R.H. Parker, *Accounting History from the Renaissance to the Present: A
15. Maryfran Johnson and Jaikumar Vijayan, “Q&A: Sun’s McNealy on Company Plans, Role of
    hardwaretopics/hardware/story/0,10801,78443,00.html.
20  CHAPTER I  WHAT WE WERE, WHO WE ARE

22. Ibid., p. 316.