New CIO Role: Change Warrior

HBSWK Pub. Date: Jun 13, 2005

Today's CIO has opportunities far beyond the hopes and dreams of twenty years ago, says Jonathan Byrnes. More than ever before, the CIO's effectiveness will determine the destiny of the company.

by Jonathan Byrnes

What separates effective CIOs from ineffective ones?

The answer has changed dramatically in the last twenty years. Twenty years ago, technical expertise was the critical variable. Today, it's whether the CIO can move the rest of the company to do things differently.

The problem is that many CIOs developed their management skills in the earlier era when technology assessment and implementation were the key issues. Now they need a completely new set of skills.

I'm grateful to Massimo Russo, vice president and director of The Boston Consulting Group, for co-developing and coauthoring the material in this column.

I recall reading an article a few years ago on why so many software implementations in areas like customer relationship management (CRM) were failing. In fact, virtually all of the systems had software that worked properly and users who understood how to use it. The problem was that the underlying business processes had not changed, so the software's capabilities were largely going to waste.

When top management asked whether the software was worthwhile, the answer was no. (Note: "worthwhile" is very different from "working.") In many companies, this led to a pervasive feeling in upper management that software projects were oversold. The real issue was that many CIOs defined their jobs too narrowly and did not take sufficient ownership for the whole change management process.

The consequence of this syndrome is that today in many companies, IT budgets are being squeezed. This leaves the CIOs with even fewer resources to manage change. There is a tremendous opportunity cost because well-implemented IT has the power to rapidly produce huge benefits.

Today, many CIOs are asking how they can turn this around.

Corporate IT lifecycle

Over the past twenty years, the corporate IT function has changed fundamentally. Even as new technologies like RFID continually arise, the corporate IT function, itself, has moved from youth to maturity in its role within companies. This is manifested in three important ways.

1. IT applications have shifted from automating existing processes to enabling new ones. The older applications were chiefly in "back office" areas like Finance and HR, while today's are often in "front-end" areas like the customer interface and in mission-critical areas like Supply Chain. For example, twenty years ago, remote order entry systems allowed companies to replace paper orders with online orders. This produced efficiencies and required new processes, but the changes were incremental in nature.

Today's software enables managers to do fundamentally new things like identify the best customers and sell to them differently. At the same time, they have to change the way they sell to other customers, or stop selling to them completely. This requires paradigmatic changes in the way users structure and conduct their core business, along with parallel changes in critical related areas like planning, compensation, and resource allocation. Unless these occur, the software's capabilities will be underutilized.

2. IT capabilities today are much more powerful by orders of magnitude than they ever were. Twenty years ago, I developed my first analysis of a company's customer/product profitability. It took over a month to construct and run the database on a PC-AT. Today, leading companies have data warehouses that allow

managers to run their businesses with precision in real time. It's almost like culture shock. Today's capabilities are far outrunning an organization's ability to utilize them.

3. Software packages are proliferating more and more rapidly. Each software package may well show value in a business case analysis. The problem is that organizations can't possibly digest all the potentially useful software packages, even if they all have positive net benefits. As a result, in many companies, less than 10 percent of their software's capability is actually being utilized. In this context, it is critical to sort and prioritize the software in order to create an integrated change process, rather than a seemingly endless series of independent projects. The CIO must carefully meter and manage the change.

In classic product lifecycles of technical products, the emphasis shifts from getting the technology to work, to using it to do existing things better, to doing new things because of it. Today, in the world of mature corporate IT, many users don't fully know what new things IT will enable them to do, and don't fully appreciate how differently they will have to do things in order to reap the benefits of these new capabilities.

In consequence, today's CIO must shift fundamentally from managing activities within the IT department to managing change throughout the rest of the company. The problem is that the history of corporate IT has created a sea anchor on the ability of CIOs to make this shift.

In the mid-to-late 1990s, when CIOs were shifting focus from back office automation to front-end systems that changed the way business could be conducted, Y2K hit. Y2K focused CIOs on ensuring that their core systems would not fail, reinforcing the role of the CIO as technologist.

The burst of the Internet bubble followed soon after. The Internet's promise was oversold, with business expectations far outrunning the technology's ability to deliver. When the bubble burst, many managers became very skeptical about the overall potential of IT, and a pervasive backlash resulted.

Many CIOs found themselves stuck in a very difficult position: They had primarily technical skills in an era when business change management was becoming critical, and at the same time, their companies had lost faith in IT.

How GE got it right

The case of GE is very instructive. After wandering through the desert a while, the company created a new vision of a powerful, effective CIO.

Before 1997, the CIO function at GE was primarily oriented toward back office applications, and these were not really on top management's "radar screen" as strategic capabilities.

When the Internet bubble developed, GE's top management focused on changing the company's culture. Their goal was to bring GE managers closer to the technology so they would embrace the new possibilities. They even set up a program for "e-mentoring," pairing experienced top managers with young, technology-savvy managers.

At the same time, GE established e-business groups in each business unit in order to develop new technology-enabled opportunities. GE top management's objective was to stimulate demand throughout the company for new IT, and to force the IT departments to respond and change.

The problem was that these changes created tension between the e-business leaders, who were business people, and the traditional IT executives. GE solved this by merging the two groups. The goal was to fulfill a new vision: a set of new business-minded CIOs.

In some divisions, e-business leaders replaced traditional CIOs, while in others, business-minded CIOs replaced the e-business leaders. The acid test was that a new CIO had to be a credible partner of the CEO, capable of strong business involvement. For example, the CIO of GE Aircraft Engines was formerly the Six Sigma leader at NBC, and had strong process improvement skills, strong business leadership experience, and some IT experience.

This marked the end of the era of predominantly back-office, technology-oriented CIOs at GE.

Similar changes are occurring at other leading companies. A top executive at a large consumer products

company stated that they would not hire a CIO who had not managed a P&L business or a major business operation. And one of the big-three automakers recently moved to appoint a new CIO who had some IT experience, but was primarily a change agent.

In these situations, the new CIOs need a capable Chief Technical Officer or Chief Architect on staff. Unlike the past, however, the technology role is decidedly supportive.

Business-minded CIO leadership

How, then, can a CIO make the transition to the new world of business-minded IT leadership? Two areas are particularly important: project selection and change management.

Project selection. I recall the CIO of a major company telling me years ago that IT priorities were set in a monthly meeting, and if a business manager couldn't make the meeting to advocate for his projects, the projects were simply cut. In today's business world, the CIO has a completely different role: co-creator of IT opportunities to change the business.

The CIO must be conversant with the strategic goals of the business and the alternative ways that the company can meet them. Armed with this knowledge, the CIO can partner with the operating managers to create more powerful ways to do business utilizing new IT capabilities. The CIO must go far beyond rank-ordering managers' requests, and in many cases actually take the lead in redefining the business. This requires, first and foremost, that the CIO deeply understand the business, far beyond the day-to-day operations as currently conducted.

But simply identifying new value opportunities is not enough. The business-minded CIO concurrently needs to assess the attitudes toward change of the respective business units. This has two components: (1) How entrenched are current business processes; and (2) how willing and able are the business units to make the business changes necessary to gain the full potential of new IT.

These two factors are crucial indicators of the likely success or failure of IT projects, and of the expected magnitude and pace of payoff. They will allow the CIO to project the difficulty, speed, and nature of the business change management process that must accompany IT deployment.

With a view of the potential value of different projects, and an understanding of the nature and likely pace of actual change of each, the business-minded CIO can develop a set of strategic IT plans that span both system deployment and business change management.

Here, it is especially important to balance "quick hits," having fast payoff, with longer-term initiatives. This will motivate the business managers to see the whole change program through to its completion.

In many ways, the strategic IT plan is analogous to a company's strategic market management plan. In a good marketing plan, the company's marketing managers scan the current and potential customer base. They evaluate alternative programs of market development by assessing customers according to potential margin gain, willingness and ability to partner, and operating fit. A good strategic IT plan should do the same.

Change management. In partnering with the business units to drive change, the CIO must engage at three levels: senior management, operating management, and project management.

At the senior management level, CIOs in several leading companies have found it effective to implement a senior executive IT council. This is a steering committee with joint CIO-business leader ownership of IT initiatives and priorities. Together, the top IT and operating managers develop a clear understanding of business strategy and how IT links with it.

In particular, company-wide IT spending and deployment must be transparent and coordinated. In some companies, IT is very decentralized. This can, over time, lead to a hodgepodge of applications, with high operating costs and inflexible processes that are difficult and expensive to change. The IT council can play a critical role in managing the company-wide IT program by steering towards a well-understood application architecture that standardizes critical, common elements while maintaining flexibility where required in key business processes.

At the operating management level, director-level business advisors are crucial. These are experienced IT managers assigned to work with company business units. Their goal is to develop with their counterpart business managers a joint understanding of the value opportunities and change issues. Based on this, they and their counterparts can create programs of linked IT deployment and business change management in order to realize the full promise of the IT investments. In a number of leading companies, these business advisors actually lead the change process in their business units.

Obtaining effective business advisors is a big issue in many companies. Finding IT professionals with a strong knowledge of business issues can be difficult. In more and more leading companies, however, the business advisory role is recognized as a key leadership position, instrumental in driving business change.

At the project management level, the implementation process for applications that change the business must be completely different from traditional back office implementations. Traditionally, implementations are sequential: Software is developed and deployed, then people are trained to use it.

Today, there must be two parallel tracks in the implementation process: business change management, and software deployment and training. In fact, the business change management process must precede the software part. Managers must understand their current business processes, and what the future "to be" process vision is, *before* a commitment is made to develop a new system.

In a good change management process, business process change will create a groundswell of IT demand. The IT department then can engage the business units in joint programs of change management, with the ultimate deployment going much more smoothly. There is less resistance, and much fuller use of the new capabilities.

The effective CIO

Dennis Bowman, a very effective CIO, reflects on his experience. "The game is really won or lost before the project selection process. If the project is scoped too narrowly because of vision or budget constraints, you are in trouble even if it gets ranked to the top of the list. One of the key issues in my ten years as a CIO has been the need to respond appropriately to the many small projects generated by middle management. Some of these have to be done, but they should be fill-in work around the few strategic initiatives that will matter to the shareholders.

"Unfortunately, few senior business executives are skilled in leading all the major changes necessary to capture value from major IT-intensive initiatives. That is where the effective CIO comes in. The CIO can and should shape the vision with the senior executives, marshalling *all* the resources necessary to get the job done, including training, business process redesign, and new hires if needed."

Today's CIO has opportunities far beyond the hopes and dreams of twenty years ago. The key to success is actively engaging the business, partnering with counterpart business leaders throughout the company to drive paradigmatic change. More than ever before, the CIO's effectiveness will determine the destiny of the company.

See you next month. WK

Copyright © 2005 Jonathan L. S. Byrnes.

Jonathan Byrnes is a Senior Lecturer at MIT and President of Jonathan Byrnes & Co., a focused consulting company. He earned a doctorate from Harvard Business School in 1980 and can be reached at ibyrnes@mit.edu.