

# **THE KNOWLEDGE PARADOX:**

## **How to Manage Your Most Strategic Asset**

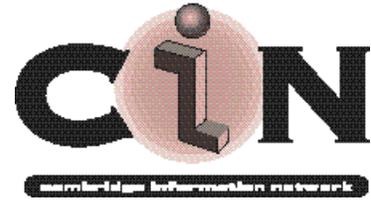
**THINK TANK:**

**Communicating the Opinions of CIOs Worldwide**



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## **THE KNOWLEDGE PARADOX:**

### **How to Manage Your Most Strategic Asset**

The CIN Think Tank is a dynamic online forum where senior IT executives debate today's most pressing IT topics. CIOs express their opinions and concerns using a variety of different media, including online discussions, online surveys, online consultants, phone interviews and in-person events.

Each Think Tank explores one issue in depth; this report communicates the results of the latest CIN Think Tank on knowledge management.

CIN surveyed its membership — an international pool of more than 3,500 senior IT decision-makers from a wide array of industries — to provide a snapshot of the current state of knowledge management. CIN wanted to know how companies are handling issues of intellectual capital and intangible assets, and what CIOs are doing to turn these strategies into action.

Whether you have initiated a knowledge management program or not, we hope that you find the report useful in planning your own IT strategy. And don't forget to have a look at the results of our current CIN Think Tank on our web site at [www.cin.ctp.com](http://www.cin.ctp.com).

#### **ED BAUM**

*President,  
Cambridge Information Network*

#### **ABOUT CIN**

Cambridge Information Network (CIN) — a division of Cambridge Technology Partners — is a professional online network of senior IT executives providing the first Internet-based research, advisory and consulting service specifically designed for corporations' lead IT strategists. CIN's fast-growing membership of more than 3,500 executives from around the globe (including 1,100 in Europe) collaborate in a secure online environment to share experiences, solve common problems, and exchange bench-marking data and other information. For more information on CIN, or to become a CIN member, please go to CIN on the Web: [www.cin.ctp.com](http://www.cin.ctp.com). Membership is free to qualified executives.

#### **HOW TO JOIN**

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## EXECUTIVE SUMMARY

### **CIOs MADE IT CLEAR THAT MANAGING THEIR INTANGIBLE ASSETS IS CRITICAL:**

- ▶ 85% assert that managing knowledge creates a competitive advantage
- ▶ CIOs attribute that advantage to faster (84%) and better (83%) decision making
- ▶ And more than 90% will be leveraging key knowledge tools like intranets, data warehousing and document repositories by 2002

### **HOWEVER, THEY HAVE GREAT DIFFICULTY ADDRESSING THESE INTANGIBLE ASSETS AT A STRATEGIC LEVEL:**

- ▶ 35% of CIOs consider knowledge management a top priority
- ▶ Only 7% of CIOs are asking for increased knowledge management
- ▶ Only 8% have a strategic knowledge initiative that spans the enterprise
- ▶ Only 6% appointed a CKO to manage knowledge across the enterprise

### **THE PROBLEMS THEY FACE TAKING KM BEYOND THE GRASS ROOTS LEVEL INCLUDE:**

- ▶ The concept of “knowledge” is not credible in the boardroom
- ▶ Bean-counter mentality typically wins over intuitive benefits
- ▶ Knowledge management solutions are still immature
- ▶ Embracing a disciplined approach to knowledge management requires significant cultural shift
- ▶ Top-down approaches would stifle worthy local knowledge programs

### **KNOWLEDGE PROGRAMS ARE STILL IN THE EARLY ADOPTER PHASE, BUT THE TIDE MAY BE TURNING:**

- ▶ Companies which resist the technology hype see the value of knowledge management
- ▶ CIOs must become advocates for knowledge management, translating business strategies into knowledge management initiatives
- ▶ Enlightened executives are sponsoring these knowledge programs with significant budgets
- ▶ European companies are ahead in leveraging knowledge management, and beginning to apply their knowledge toward an aggressive competitive advantage

### **THE KNOWLEDGE PARADOX:**

#### **ON ONE HAND ...**

Companies believe that knowledge is a strategic asset.

#### **ON THE OTHER HAND ...**

Companies are not managing knowledge strategically.

## **WHY?**

## KNOWLEDGE IS A STRATEGIC ASSET

### CIN STATISTIC:

**81% HAVE PRODUCT DEVELOPMENT CYCLES UNDER TWO YEARS**  
**45% UNDER ONE YEAR**

Source: CIN; N=221

### CIN STATISTIC:

**92% OF COMPANIES ARE MULTI-LOCATION**

Source: CIN; N=221

### CIN STATISTIC:

**51% LOSE AT LEAST ONE OUT OF 10 EMPLOYEES EACH YEAR**

Source: CIN; N=221

### UNDER PRESSURE

In today's knowledge economy, many companies watch their most valuable assets walk out the door every day. And it's these intangible assets – the knowledge that people possess – which equity markets so often favor. Newer technologies such as the Internet are transforming more than just the way knowledge is managed – they are changing the way business models work altogether. New partnerships have extended business processes beyond the boundaries of the enterprise, yet most corporate cultures have not evolved to support the necessary level of openness and communication to make these joint ventures successful. To assess the state of this new economy, CIN turned to its members to talk about knowledge management. In our latest collaborative research project, CIOs told us about the business and technology pressures their companies face, and how far along they are – or want to be – in their knowledge management efforts.

- 1. TIME TO MARKET.** The pressure is on to create new products at a faster rate – and get it right the first time. Never have the competitive pressures been higher. Since reengineering has already streamlined processes as much as possible, a new approach is needed to continue to accelerate innovation rates.
- 2. DISTRIBUTED WORKFORCE.** If all of your employees work in the same location, you are in a very small minority. Most corporate environments today are multi-location, many with more than 50 different locations. Communication, collaboration and coordination across these locations has become a problem that is growing exponentially with each new merger.
- 3. FLUID LABOR POOL.** Knowledge workers (i.e., professionals) comprise more than 20 percent of the population in many companies, and their training, experience and institutional memories make them tremendously valuable. Yet more than half of these same companies are experiencing painful turnover rates and losing core talent — expertise that is often snapped up by the competition.

So faced with an economy that is changing so fast that everyone feels left behind, what should a company do? Is there a way to satisfy customers, retain employees, manage complexity and compete more effectively in the emerging digital economy?

### THE ANSWER IS KNOWLEDGE

Many CIOs are betting that managing knowledge is the best way to reinvent the corporation and achieve a strategic competitive advantage. By treating knowledge as an asset, they aim to build

learning organizations that continually embrace, share and expand the use of knowledge.

Sounds easy, but there remains a simple question: what is knowledge management? At its most basic level, *knowledge management is a disciplined way to exploit expertise for competitive advantage*. Since there are several important concepts in this definition, let's take it apart:

**DISCIPLINED WAY** = *planned, structured and measured approach*

**EXPLOIT** = *extract tangible value*

**EXPERTISE** = *capabilities, core competencies and know-how*

**COMPETITIVE ADVANTAGE** = *a defensible market position that leads to sustainable value creation and retention*

Our research destroys the myth that knowledge management is simply a matter of using the right tools and technologies to capture knowledge. Rather, it's about integrating intellectual capital into the fabric of a business. Far from being an add-on to your business, it is a foundation upon which the future of your business depends.

## THE BENEFITS ARE SPEED AND CONSISTENCY

Knowledge management helps companies move faster in their decision making, problem resolution and experience transfer. In other words, it helps them identify the best course of action quickly. Banish the idea that knowledge management is the concoction of a bunch of theorists in an ivory tower. Knowledge management is about action, innovation and responsiveness. Fundamentally, it is about speed and the ability to get something done right the first time.

Kevin Milliken, CIO of Cadence Design Systems, an electronic design automation company, explained that knowledge management is essential for combating the time-to-market demands he faces in the high tech industry, and requires innovation in the form of experience transfer and consistency. "Everybody wants it better, faster, cheaper. When you're talking about designs that have literally millions of gates, the trick to better, faster, cheaper is to have the right tool sets, the right flows, the right people, and reusable intellectual property," he said. As Milliken is quick to point out, if you start each new chip design as a completely new project, you can't possibly move faster than your competition.

### PERCEPTIONS OF KNOWLEDGE MANAGEMENT

**79%** think KM supports the development of core competencies

**72%** believe KM is a way to prepare for the knowledge economy

**71%** define KM as a disciplined way to exploit expertise

Source: **CIN;N=307**

### KEY BENEFITS OF KNOWLEDGE MANAGEMENT

**Faster Decisions** **84%**

**Better Decisions** **83%**

**Faster Solutions** **78%**

**Consistent Operating Procedures** **77%**

Source: **CIN;N=222**

## CIN STATISTIC:

**85%**

DESCRIBE KM AS  
A STRATEGY FOR  
CREATING COMPETITIVE  
ADVANTAGE.

Source: CIN; N=307

*“I would like more focus on how to create something new. What can we use to make our people smarter and faster? How do you generate new ideas that aren't in anyone's head?”*

BOB BRAMMER

SR.VP AND CHIEF TECHNOLOGY  
OFFICER, TASC

Many benefits accrue from speed and consistency. Sure, you can save money, but according to 64 percent of the CIN members participating in our research project, knowledge management can have a tangible impact on key business metrics like market capitalization and EVA<sup>1</sup>.

Is knowledge intangible? Yes. Is it difficult to quantify its value? Yes. But only 27 percent of CIOs will argue that the value of knowledge cannot be measured. Our respondents also indicated that knowledge management projects typically achieve payback in less than two years, and projects like intranets have an accelerated payback of less than six months!

The most compelling argument CIOs give in support of knowledge management is that it can be used to create that holy grail of business — a sustainable competitive advantage. John Old, Texaco's knowledge management leader, described the competitive advantage he is trying to achieve: “There is really only one way to get any competitive advantage, and it's not by having smarter people than everybody else. If you can get your people to interact in fundamentally better ways than other organizations, then you have something that absolutely cannot be copied. You can tell people exactly what you are doing, and it cannot be copied. We label that collective intelligence.” By working in a fundamentally better way, Old's fellow employees achieve the speed of innovation and responsiveness that creates a competitive advantage in his market.

## **BUT KNOWLEDGE IS NOT MANAGED STRATEGICALLY**

We can safely conclude that CIOs have confidence in the strategic value of managing knowledge, but that isn't the whole story. While these executives are declaring that knowledge is strategic, they also report that they are not taking a strategic approach to managing knowledge. The CIN research project identified several explanations.

<sup>1</sup>EVA — or Economic Value Added, is the net operating profit minus an appropriate charge for the opportunity cost of all capital invested in an enterprise. As such, EVA is an estimate of true economic profit, or the amount by which earnings exceed or fall short of the required minimum rate of return that shareholders and lenders could get by investing in other securities of comparable risk. For more details, go to:

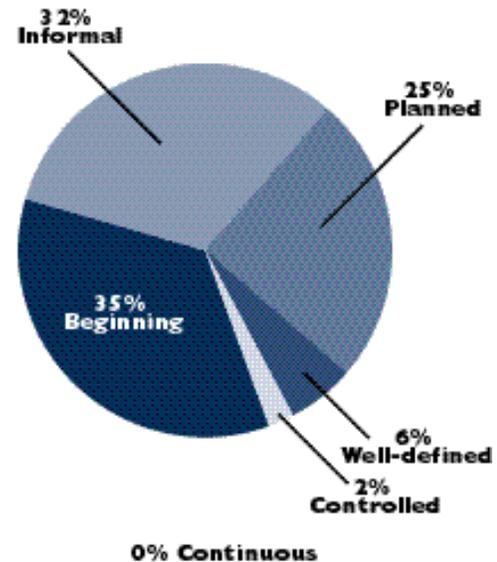
[www.sternstewart.com/evaabout/whatis.shtml](http://www.sternstewart.com/evaabout/whatis.shtml)

**CAUGHT IN IMMATUREITY**

CIOs unanimously report that their companies have not yet reached a mature stage of managing knowledge assets. Adrian Pepper, an IT project manager at Pfizer, has adapted the Capability Maturity Model<sup>2</sup> for use in measuring the maturity of knowledge management:

The Knowledge Management Maturity Model tracks the progress of a strategic knowledge initiative from its earliest stages until it becomes an institutionalized component of the corporate culture. Using this model as a framework, CIN examined the maturity of knowledge management principles and programs -- and the results were striking. None of the companies in the CIN population rated themselves in the most advanced stage of the maturity model, where strategic goals are being demonstrably achieved and the positive impact is reflected in financial metrics. While a goal of knowledge management is to build a nimble, learning organization, few companies have begun to address knowledge on an enterprise level. By comparing the knowledge management maturity ratings to our traditional technology adoption bell curves, we begin to see three distinct populations emerging: early KM, grass roots KM, and enterprise KM.

**MATURITY RATINGS  
RESPONDENTS' COMPANIES**



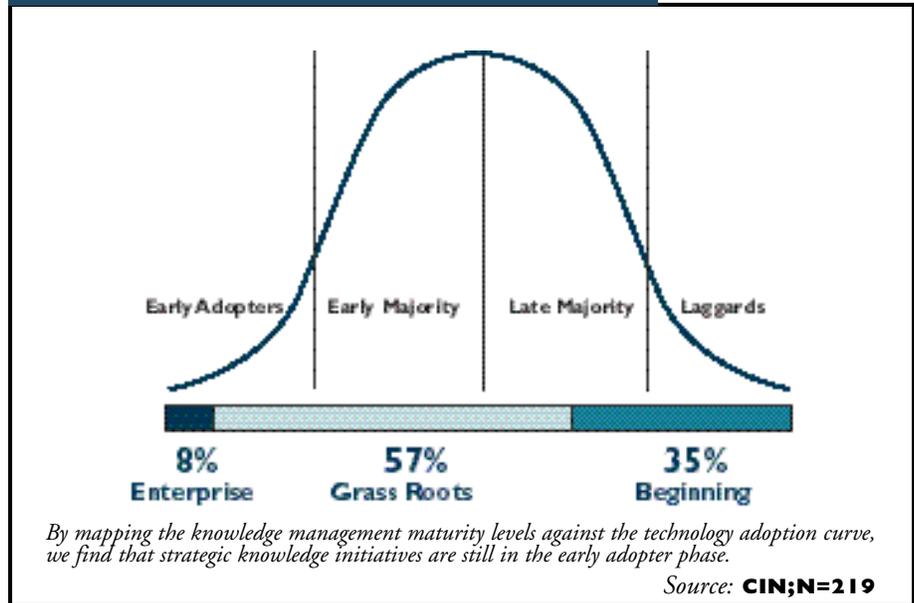
Source: CIN; N=219

**KNOWLEDGE MANAGEMENT MATURITY MODEL**

<b>1. AT THE BEGINNING</b>	<i>There is no broad awareness of KM principles</i>
<b>2. PERFORMED INFORMALLY</b>	<i>Individuals are making heroic efforts</i>
<b>3. PLANNED AND TRACKED</b>	<i>Local processes are in place and information is used</i>
<b>4. WELL-DEFINED</b>	<i>Learning is shared across the organization through standards</i>
<b>5. QUANTITATIVELY CONTROLLED</b>	<i>Broad information usage metrics are captured</i>
<b>6. CONTINUOUSLY IMPROVING</b>	<i>Improvements have been demonstrated through metrics and KM goals are broadly strategic</i>

<sup>2</sup>The Capability Maturity Model is the commonly accepted industry standard for software process maturity. Its six levels of maturity provide a top-level measure of corporate software capability. It was developed by the Software Engineering Institute (SEI) to improve the capability of government contractors, but the principles are applicable to any software endeavor. See [www.sei.cmu.edu/managing/managing.html](http://www.sei.cmu.edu/managing/managing.html) for more information.

## TECHNOLOGY ADOPTION CURVE



### CIN STATISTIC:

**22% HAVE COMPLETED NO KM PROJECTS**

Source: CIN;N=221

### EARLY KM

This group of companies falls into stage one of the maturity model — they are the stragglers of knowledge management. They have not yet implemented a knowledge management project, and in many cases they are working with their first collaboration tools, which are typically e-mail or intranet programs. The cultures of these organizations make it very difficult to embrace the principles of knowledge management. Information is often shared on a “need to know” basis, and there is no motivation for individuals to share. These cultures thrive on the accomplishments of individuals who get rewarded for using their hoarded knowledge to save the company. And as long as these companies are growing and presumed successful, there are no incentives to change.

### GRASS ROOTS KM

Many companies that have begun to implement narrowly focused knowledge management solutions to address local gaps or inefficiencies fall into the grass roots KM category. These companies have typically rated themselves in stage two or three of the maturity model, and they are in the clear majority. Managers in these companies find knowledge management difficult to sell to their executives, but at a departmental or business unit level, they have found groups willing and eager to be pioneers. At this level, the goals are usually very clear and individuals are accustomed to working together — so barriers to

### CIN STATISTIC:

**82% HAVE FEWER THAN 1000 EMPLOYEES USING KM**

Source: CIN;N=221

success are much lower. Of course, the resulting benefits are also localized, but these grass roots efforts can often be used to justify a future, larger initiative. The danger of these grass roots initiatives is that they tend to proliferate, fragment the company's knowledge assets, and create unnecessary duplication of infrastructure and resources.

**ENTERPRISE KM**

The early adopters of knowledge management solutions have mostly transitioned into stage four or five of the maturity model, where they are distinguished by their enterprise approach to knowledge management. They have invested in tools and corporate standards. They have implemented multiple projects, both on grass roots and enterprise levels. They believe in the value of knowledge — the present value in today's market and potential value in the future. The leaders of these initiatives have a mission, and they frequently find themselves in evangelist roles trying to incubate, nurture and connect pockets of enlightenment around their company.

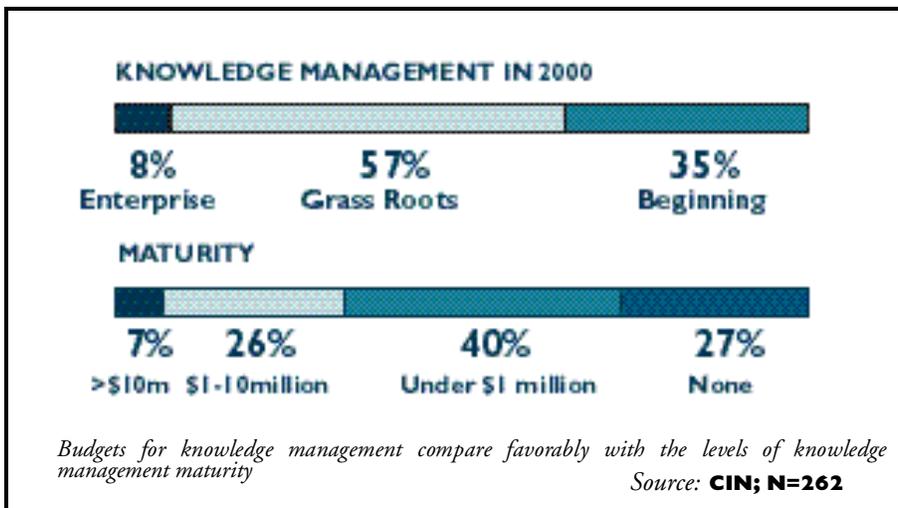
These companies have moved well beyond their first generation of knowledge management, although they would be the first to admit that there is still a long way to go. But initial successes can create unrealistic executive expectations that have to be managed. Eric Eskin, vice president of intranet services at First USA, a Bank One company, is wary of the expectations created when a company tries to broach the enterprise stage of knowledge management. “It is still really in its infancy, and people expect way more than it can deliver today. We don't know the roadmap — there is no blueprint for anyone to go from.” While he feels comfortable managing in this climate of ambiguity, a lot of other companies don't.

*“Sharing information should be a priority, but it is not. In our market, they have made secrecy the first value in the corporate culture. There is a maxim that you should know only what you need to know. If you have such a culture, information sharing is a problem.”*

IS MANAGER

\$900 MILLION  
FRENCH MANUFACTURER

**CIN STATISTIC:** ONLY **3%**  
STRONGLY AGREE THAT  
KM IS PERVERSIVE IN  
THEIR COMPANY  
*Source: CIN; N=307*



## CIN STATISTIC:

OVER **80%** OF KM  
PROJECTS COST LESS THAN  
\$1 MILLION TO DEVELOP

Source: CIN;N=262

**BUDGETS.** The separation of companies into early, grass roots, and enterprise KM categories is also supported by data collected on corporate budget plans for 1999 and 2000. Knowledge management activities tend to fall into one of four spending ranges — spending nothing on KM; nominal sums (less than \$1 million); active pockets (\$1 million to \$10 million); or significant expenditures (more than \$10 million).

As companies begin to take interest in knowledge management, they set aside a nominal sum in order to conduct their first information-sharing experiment. Typically, these budgets are less than \$1 million, and the project focus is very local in nature. Once these initial pilots reach some success point, other departments request new projects and the overall budget increases. Interestingly, CIOs report that typical knowledge management projects take less than one year to design and develop, and cost less than \$1 million, whether those projects are data marts, groupware or intranets. Compared to most IT projects, those numbers are refreshingly low. Finally, the projects get enough attention (and produce enough results) that the corporate buy-in exists to expand to an enterprise level. Although a small percentage of the early adopters have moved into the enterprise phase of knowledge management, that is a leap which most companies are not ready to take.

## IT'S NOT AN EXECUTIVE PRIORITY

Although most CIOs will admit that knowledge management is a valuable pursuit, they still deny it is one of their top priorities. In addition, CIOs report that exploiting the value of knowledge is not high on the CEO's list of goals. Perhaps there is a correlation between executive expectations and the CIO's focus. More likely is that CEOs are focused on improving the effectiveness of their organizations in creating and sustaining value. The challenge for knowledge advocates is to couch knowledge management in terms the CEO can appreciate — like value creation and retention — not in bits, bytes or jargon. Regardless, there remains this surprising fact: Even in companies where knowledge management is an active pursuit and a strategic initiative, the leader of the knowledge management initiative is often not an executive-level individual. There is a lot of debate among CIN members about whether companies should appoint a chief knowledge

## CIN STATISTIC:

ONLY **7%**  
HAVE A CEO WHO IS  
STRONGLY PUSHING KM

Source: CIN;N=307

officer (CKO). CIOs are quick to point out that knowledge management is going to need a strong salesman — either a senior executive or a director with a powerful sponsor. But they also express considerable skepticism over the necessity of appointing another chief officer. “We don't have a CKO, and I don't think we will ever have one,” says Bob Brammer, senior VP and chief technology officer of TASC Inc., a high-end information technology solutions company that is a wholly-owned subsidiary of Litton Industries. “Every manager thinks it is his job to manage the knowledge in his business unit effectively and I want them to think that.” After all, if you already have a chief technology officer and a CIO, why do you need a CKO?

**CIN STATISTIC:**  
**ONLY 6% HAVE A CKO TO MANAGE THE USE OF INTELLECTUAL CAPITAL**  
*Source: CIN; N=284*

**TOOL MARKET IN FLUX**

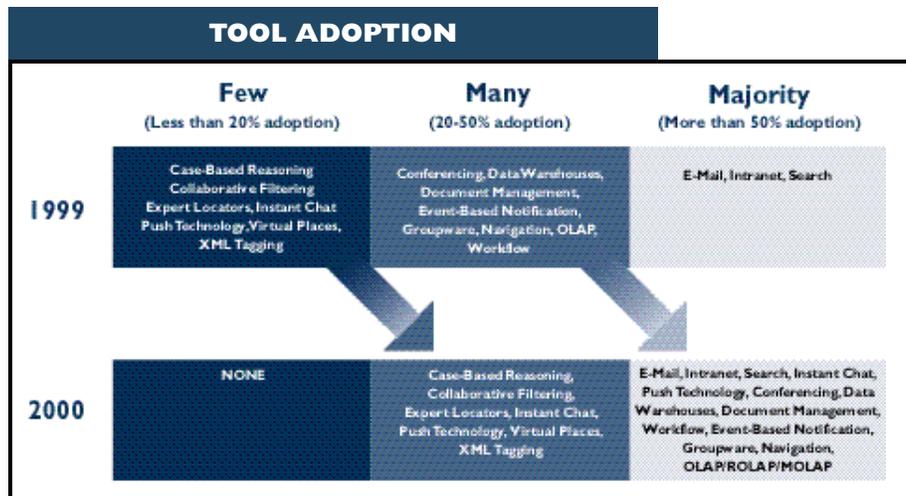
Even though most companies have implemented fewer than 10 knowledge management projects today, CIOs see knowledge management tools as an area with potential for enormous growth. While e-mail is ubiquitous and intranets have almost saturated the market, many other popular tools haven't even broached a 40 percent adoption rate today.

But according to CIOs, the tool-adoption picture three years from now will look drastically different. Every tool category we addressed, from expert locators to XML tagging, will achieve at least 20 percent adoption by the year 2002. And tools which are already in significant use today, such as data warehousing and document repositories, will be adopted by more than 90 percent of companies. So while many CIOs currently display a frenzy of grass roots knowledge management activity, that activity is not yet approached as a strategic initiative.

*“We used to be a fixed asset business — now it is the intangible assets that have more and more value. Business is changing, but not everyone perceives that yet. They hear about it at conferences. They read about it. But going from that to 'this concerns me as well' is sometimes a long shot.”*

FRANCK SIDON

EXECUTIVE DIRECTOR, GOLDMAN SACHS REAL ESTATE INVESTMENTS



## CASE STUDY

### **JOHN OLD** *Texaco*

John Old is not just leading a knowledge initiative inside Texaco, he is creating a knowledge movement. By using knowledge tools and building a culture that embraces knowledge sharing, he is helping Texaco pioneer an entirely new work environment. “I hope that in my lifetime I can create an environment where people are working together in a fundamentally different way. If you are willing to be very open and share what you are doing widely, then people who are not able to get their ideas implemented elsewhere will come to you to get them implemented,” he said. Old’s vision of knowledge management goes well beyond employee retention to impact the entire organization. “My long-term vision is for Texaco to become a magnet for the best ideas around.” In this way, knowledge management becomes a tool for recruiting and retaining the world's best minds.

#### **HOW DID YOU MAKE KNOWLEDGE STRATEGIC AT TEXACO?**

**1.**

##### **START AS GRASS ROOTS**

We've had a fairly long history of deploying collaboration tools, team tools, video conferencing. But it was never put together — it's been mostly a grass roots effort.

**2.**

##### **CREATE AN INITIATIVE**

We pulled together several areas of our IT organization that were working on the kinds of tools and projects that you frequently see labeled as KM tools.

**3.**

##### **CHOOSE THE RIGHT LEADER**

I've worked for Texaco for a long time in many parts of the organization, so I do have some credibility. And I was lucky enough to have people listen to me. Now I can see the seeds of my thinking in other places.

**4.**

##### **GIVE THEM SOME ROPE**

There have been a few of us who have had the freedom to do things we believed in and capture enough business support along the way to keep it going.

## **5. HOLD A "THINKING EXPEDITION"**

We brought people together from all around Texaco's different business units and spent four days trying to think very deeply and differently about how we could do a better job leveraging the know-how of our people.

## **6. FORMULATE A STRATEGY**

If you are an assembly line company, you want to find out the best way to do it and you want all of your plants doing it that way — that is a best practices company. However, if you are a company like us where every new project is different, you want to create an environment where people can connect with each other and share.

## **7. FOSTER AN OPEN, SHARING CULTURE**

For several years, I worked for a guy who was a real visionary. He fostered an open culture, and he left behind a lot of disciples. They are scattered around in pockets, and they are the ones who can quickly accept and adopt these kinds of ideas.

## **8. BE PATIENT**

One of the things you struggle with in a company populated largely by engineers is that it's a "just give the facts" kind of culture. We can get more leverage than that, but it is a difficult sell, and you have to be patient.

## **9. EMBRACE PARTNERS AS YOUR OWN**

We have a lot of joint ventures with our competitors, so we'll work with them to share information. There are wins on both sides, for both companies.

## **10. COMMUNICATE THE VISION**

My long-term vision is to become a magnet for the best ideas around.

## THE KNOWLEDGE PARADOX

### THE KNOWLEDGE PARADOX:

**COMPANIES RECOGNIZE** the strategic value of knowledge, **BUT DO NOT** manage knowledge strategically.

Our survey of worldwide knowledge management practices has led to a very surprising conclusion: companies recognize the strategic value of knowledge, but don't manage knowledge strategically. We are calling this fundamental disconnect the knowledge paradox. Why is belief ahead of action? The CIOs participating in the CIN Think Tank identified several prevailing causes of the knowledge paradox.

### "KNOWLEDGE" IS NOT CREDIBLE

Discuss knowledge management with any CIO and the odds are good you will hear a deep-seated objection to the very term "knowledge management." For one thing, the word "knowledge" is just not credible with business executives; its very definition is unclear. Knowledge is much more than just raw data or even contextualized information. Wim Bouman, IT controller of Friesland Coberco Dairy Foods, discussed the problem: "Knowledge is not an object you can manage. I cannot give you my knowledge. I can tell you what I know, but that is just information. Without a frame of reference to interpret what I tell you, you cannot make sense of it." Bouman continued to explain that in his opinion, knowledge is created in the mind of the beholder, and it only has value when it can be transformed into action.

## discussion

### GROUP

**SUBJECT:** FAD OR FUNDAMENTAL?

**POSTED:** THURSDAY, 4:32 AM

I think knowledge management is fundamental, but not well defined. The term turns off many people — they either think you are going to control their work, or eliminate their job and authority after you capture their knowledge.

### CIN STATISTIC:

IS KNOWLEDGE MANAGEMENT A CLEAR CONCEPT?

**YES 38% NO 49%**

Source: CIN; N=307

It should come as no surprise that CIOs report superior success rates with KM projects when they don't use the word "knowledge" to describe what they're doing. "To stamp something as a knowledge management initiative would make it dead-on-arrival," says Brammer of TASC. "Yes, I can read about something called knowledge management in the literature, but at TASC we would deal with it more as processes and systems that solve specific problems." In short, knowledge management won't be successful if the focus is on "knowledge."

CIOs have found an interesting stealth approach to deploying knowledge solutions in a knowledge-unfriendly environment. Jan Rothman, divisional

MIS director for Chandon Estates, a division of Paris-based Moët Hennessy Louis Vuitton, explained the strategy: “Introducing a concept like this, I would never call it ‘knowledge management’ because it would just be another buzzword. We’ll just call it a useful tool, and that would be more pertinent to the users.” The knowledge moniker doesn’t improve business, but the results do. This may be the reason why CEOs are not asking for knowledge management. They are focused on results, not buzzwords.

Although CIOs hate the word “knowledge,” that doesn’t mean they believe knowledge management is a short-term fad. In fact it’s quite the opposite, said Larry Chait, vice president and corporate director of knowledge management for Arthur D. Little: “We always used knowledge, and we always managed knowledge.” In prior years, that knowledge was not in software databases, it was on paper or disseminated between two consultants on the telephone. Rarely was it called knowledge. “It’s just that today there is a convergence of the understanding of knowledge itself, the technologies that facilitate sharing, and various market forces that make sharing knowledge more critical.” Hence, they have formalized their knowledge sharing processes.

And while CIOs universally object to the term knowledge management, they reiterate its importance. “As a management fashion, knowledge management will come to an end — all of these labels have their lifecycles,” said Bouman. “But as a concept, it will stay. We’ve exploited human labor, capital and other production factors, but not our intellectual capital. Before, we didn’t focus on managing our intangible assets — that is what we will be doing for the next five to ten years. What label you call it, I really don’t care.”

## BEAN-COUNTER MENTALITY WINS

Many business executives with the authority to make knowledge strategic have not recognized its importance – and this is a major contributor to the knowledge paradox. Executives are typically no-nonsense, highly practical individuals. They make a lot of decisions every day, and they typically make them very quickly based on the business merits. Whether evaluating a new factory, retail store or product offering, financial impact is first and foremost in their minds — these are the skills that made them executives in the first place. So when the discussion of knowledge is raised, they often find it very difficult to relate to. Knowledge is intangible and not usually reflected on the balance sheet or income statement. Remember from the maturity model that only two percent of companies are using metrics to track the success of their knowledge management programs.

**CIN STATISTIC:** **21%**  
OF CIOs BELIEVE  
THAT KNOWLEDGE  
MANAGEMENT IS A FAD  
*Source: CIN; N=307*

*“Ninety-three percent of the costs of social security has to do with benefit expenditures, so if one can limit the duration of the benefits by quicker reintegration into work, one can save a lot of money. That is the reason why the ASZ board has assigned knowledge management as one of the four themes for strategic innovation.”*

TON SCHELLART

MANAGER OF INNOVATION, ASZ  
AUTOMATISERING SOCIALE ZEKERHEID BV

## discussion

### GROUP

**SUBJECT:** EXECUTIVE RESISTANCE  
**POSTED:** SUNDAY, 7:19 PM

I've found that KM is too smoky for most executives. The people that I deal with have generally made it to the top by being pragmatic and dogmatic. Ask them to publish knowledge as part of a strategic plan that gets money and changes the company's direction, and they usually back off and center on something more tangible.

Often, justifying a strategic knowledge initiative means finding the right metrics. Steve Mullins, technical director at Pacific Bell, a company of SBC Communications Inc, described the measurement issues he faces. "We have a very clear objective, which is to increase shareholder value. It's very bottom line. I intuitively know that if I do knowledge management, we're going to improve value overall; however, I cannot associate knowledge efforts to a direct bottom line change. In a world where we quantify or die, knowledge management is going to be grass roots until we can come up with a way to demonstrate to the board of directors that knowledge management means direct bottom line improvement."

*"We're in a commodity business. You have the products, and if you add the know-how to that, then what you are selling is the total package. We have great products, but we have even better knowledge of how to use them. It is recognized at the highest levels up through our CEO; he feels our growth is going to be tied to that arena."*

LEE PARKS

GLOBAL INFORMATION SYSTEMS  
MANAGER, DACRON BUSINESS UNIT,  
DUPONT

## discussion

### GROUP

**SUBJECT:** IF YOU WERE A CEO...  
**POSTED:** TUESDAY 8:38 AM

Senior executives are, by necessity, bottom-line people, and KM is difficult to quantify. While executive management understands KM intellectually, it is all about ROI. If you were CEO, would you chose a project that demonstrates economic payback or one that feels good but has no timeline for payback?

CEO advocacy is necessary for any strategic knowledge initiative, so CIN asked members if knowledge management was on the radar screen of their CEOs. "Not as a concept," said Eugene Chapman, director of finance and administration systems for JT International, formerly RJ Reynolds International. "Our company is moving from 100 different

companies who happen to sell the same products, to one company. We are globalizing the organization and we need measures to support that. At that point it will get onto his radar screen.”

At Goldman Sachs, executive director Franck Sidon believes that it will take a shift in fundamental market forces to raise knowledge management to the executive agenda. “What is going to make it happen is the realization that if you are not going to do it, you are going to lose to your competitors. In most companies, this is what makes people change their ways. The question is how early are you going to get that warning, and how responsive are you going to be?” So the issue of whether to make knowledge management a strategic, top-down initiative goes back to the same question as any other business initiative: Do you need it to survive?

A negative business cycle — which is inevitable — will have a profound impact upon corporate knowledge adoption, said First USA’s Eric Eskin. “When we finally see a recession, the need for knowledge management will become clear to organizations,” he explained. In his view, today’s companies are being reckless, both with their human capital and with outsourcing. Because of the economy’s strength, they can get away with it. But once the inevitable economic downturn occurs, companies will try to initiate cutbacks, only to realize how the ensuing loss of intellectual capital has left them vulnerable. Suitably chastened, companies that do survive

## discussion

### GROUP

**SUBJECT:** POST-DOWNSIZING  
**POSTED:** FRIDAY 10:19 AM

It will be a long time before IT can be used to provide knowledge to replace the skilled staff that firms have right-sized out of existence over the last decades.

the belt tightening will then emerge with a mission to make sure that intellectual capital is never put at risk again. That is when strategic knowledge management programs will proliferate.

While many CIOs are frustrated trying to sell strategic knowledge initiatives to their top executives, some have demonstrated that it can be done. Eskin described his approach to selling knowledge management initiatives to business executives. “It’s a give and take,” he explained. Clearly a CIO’s vision must be strategic; he or she must guard the long-term technology interests of the company. In order to sell his or her more

*“Our CEO sees that the real value of a company like ours is our employees and their relationships. Their knowledge is our real, and almost only asset. The key issue for us is to make life better for them to keep them here in the company, so he is willing to invest in this kind of project.”*

LARS BJONNES

DIRECTOR OF TECHNOLOGY,  
MERCANTILDATA

*“One of the members of our Board of Management has taken the initiative and made "innovation" a project for the Board. People don't pay much for a liter of milk, so we have to have innovative products. It's all based on making better use of the knowledge we have. If we can innovate better, we will have longer product lifecycles, shorter time to market, and a better business”*

WIM BOUMAN

IT CONTROLLER, FRIESLAND COBERCO  
DAIRY FOODS

experimental knowledge projects to top executives, Eskin bundles them together with projects that have quick and measurable return on investment. Experimental projects have tremendous potential for payback, but they are more like research and development, where success is not guaranteed — you just have to try it. “There is a leap of faith involved, so you have to have something to bargain with. It becomes a negotiation.” That approach to selling such things as knowledge management, he said, consistently works.

## **SOLUTIONS ARE IMMATURE**

Another objection that CIOs raise to knowledge management is its relative immaturity. They argue that technology vendors have produced general-purpose tools, but not applications. And while the broad usefulness of the tools is attractive to some, others find this generic approach alienating. “Except for huge companies, who can afford R&D in domains other than their core business? What we need are tools, not concepts,” explained the IT manager of a \$900 million French manufacturer. He and his peers — especially in companies with less than \$1 billion in revenue — don't want to grapple with generic technology frameworks; they are looking for complete solutions to their business problems.

CIOs also recognize that most of the technologies involved in knowledge management are relatively new, and these emerging

## **discussion**

### **GROUP**

**SUBJECT:** IS KM MATURE?  
**POSTED:** FRIDAY 5:54 AM

I still think that KM is an underdeveloped technology, not suitable for rollout in most, if not all firms.

**SUBJECT:** WHY WAIT?  
**POSTED:** SUNDAY 7:19 PM

I do get a little worried that people are waiting for KM to “mature.” It either benefits you immediately or you'll be reading articles about why it failed in a few months. As soon as the KM concept began emerging, I tried to find practical low cost ways to apply the strategy — the benefits are real.

technologies bring their own set of challenges. “Part of the problem we have, and we are not alone, is that it is typically associated with emerging technologies,” said J’T International’s Eugene Chapman. “As long as it is developing technologies, everyone needs to be involved at all levels, and a very fluid approach is needed.”

Companies that have managed to move their knowledge initiatives to a strategic level have accepted knowledge management's infancy. “People are looking for a silver bullet where it doesn't exist,” said Eskin. “They think it is a lot more mature than it is.” He believes that knowledge management is not at the stage where it is ready to have a lot of dollars thrown at it because he is particularly concerned that it will be oversold. There is a huge potential, but to realize that potential, said Eskin, it will be necessary to proceed methodically and carefully, moving project by project rather than with a big bang, save-the-world mentality.

Experimentation will be the key to success in the early days of a new technology trend. “We're in the basic research stage today and you have to be patient and learn from the mistakes that you and others make,” Eskin added. “In three to five years there will be a model to point to. But between now and then we could have two or three generations of technology: the bandwidth capability will be much greater, the processor on the desktop will be more powerful, we will be able to speak into the computer, and it won't be hard to transmit audio.”

## CULTURAL CHALLENGES ARE DAUNTING

Creating a learning, knowledge-sharing organization often requires much more than just installing technology. CIOs unanimously agree that technology is not the most difficult issue when approaching

### CIN STATISTIC:

**ONLY 15%**  
OF CIOs ADDRESS KM  
AS JUST A SET OF TOOLS  
AND TECHNOLOGIES

Source: CIN; N=307

### UNIVERSAL SUCCESS FACTORS FOR KNOWLEDGE MANAGEMENT PROJECTS

- ▶ identify a business partner/sponsor
- ▶ include users in the design
- ▶ build a business case
- ▶ manage the project closely
- ▶ internal communication
- ▶ train users

Source: CIN; N=229

*Given the grass roots approach to many knowledge projects, these success factors are especially important since knowledge management must be approached methodically.*

## KNOWLEDGE MANAGEMENT?

### EUROPEANS LEAD THE WAY

Companies from a wide range of industries and locations participated in the CIN Think Tank on Knowledge Management. The data from the survey revealed a very interesting geography-based trend: European companies are ahead of their counterparts in the United States in many aspects of knowledge management implementation. Specifically, when it came to an active pursuit of knowledge management (i.e., tools in place, underway, or attempted) versus a passive pursuit (i.e., implementation planned or considered), Europeans exhibited more experience applying knowledge management tools and technologies. They acknowledged that knowledge management is pervasive and a top priority in their companies.

True, Europeans are experiencing the “knowledge paradox” seen in the rest of the world, but it is not as pronounced. And while it is too early in the life of knowledge management to say that anyone has solved the puzzle, European companies have internalized the benefits and taken greater action than U.S. companies.

Consider that Europeans responded significantly more positively to the following:

- ▶ **KM IS PERVASIVE IN MY COMPANY**
- ▶ **KM SUPPORTS DEVELOPMENT OF CORE COMPETENCIES**
- ▶ **KM IS A STRATEGY FOR ACHIEVING COMPETITIVE ADVANTAGE**
- ▶ **KM IS NOT JUST A FAD**
- ▶ **KM MINIMIZES OPERATIONAL RISK**

It is especially interesting that Europeans responded more favorably to “minimizes operational risk,” because it promotes and supports an innovative culture. Innovative companies are more likely to take chances – and create new opportunities -- when operational risks can be reduced. This strategic-level view is backed by the fact that Europeans favor the Board of Directors or CEO for the sponsor role. U.S. companies, on the other hand, are more likely to rely on the CIO to play sponsor.



Furthermore, tool adoption rates indicate that Europeans are ahead, especially in data-driven and enterprise-oriented areas. Tools which show significantly higher adoption rates for Europe compared with the U.S. include:

<b>ACTIVE TOOL USE</b>		
	<b>Europe</b>	<b>United States</b>
Best practice repositories	77%	70%
Database mining	62%	54%
Data warehousing	84%	71%
Document repository	78%	68%
Innovation management	41%	22%
OLAP tools	61%	46%
Workflow tools	67%	59%
Workflow applications	60%	47%

*Source: CIN*

U.S. companies appear to be ahead of Europeans specifically in Internet-enabled knowledge management technologies such as search engines and navigation tools. But it will take less time and effort for Europeans to close that gap than it will for U.S. companies to get up to speed on more mature knowledge management tools.

European systems -- especially IT and data intensive ones -- appear to be further down the path than their U.S. counterparts. The implications for non-European companies are vast. If the successful application of knowledge management is a decisive competitive advantage, then European companies already have an edge. Furthermore, knowledge management isn't static. Merging unstructured with structured information is the next phase of knowledge management evolution, especially as companies move to implement corporate portals. Companies that pull ahead today will likely be leaders tomorrow. The word to U.S. companies is simple: when it comes to knowledge management, you might look to your European counterparts for guidance.

## TOP KM INCENTIVES IN PLACE

1. PRIVATE RECOGNITION
2. TEAM RECOGNITION
3. PUBLIC RECOGNITION
4. MBO
5. BONUSES

Source: CIN

knowledge management as a strategic initiative. Instead, cultural issues are the number one challenge. To understand those cultural issues, CIN asked members whether they already had a culture of sharing in their companies. “No, that is the \$1 million dollar question,” said Lars Bjonnes, director of technology for Merkantildata. “To be honest, we are not sure today how to do it. We are sure that we have to change the culture. We have to make people behave in a different way than they do today, but we are moving fast — maybe sometimes too fast.” This statement is coming from someone whose company has doubled its revenue 100 times in the last 10 years. In that environment, he added, it is difficult to get people to focus on capturing knowledge, even though the organization’s size now requires it. Knowledge collection suffers when everyone is already operating on overdrive just to keep the business going.

Larry Chait faces a similar issue at Arthur D. Little. Even though the century-old consulting business is completely dependent on the knowledge of its employees, rallying the company around capturing and leveraging that knowledge is still difficult. “Our culture is built around the concept of business impact. Selling and being billable are way at the top of the list of what people have to do. That leaves precious little time for anything else.”

In a company with such a clear hierarchy of priorities, Chait has tried to translate the importance of knowledge into concepts the company already values. “What we have done intellectually is to build the argument that knowledge management can help you be more effective in selling and delivering services, and we have a constant lookout for testimonials to back that up,” he said. By expressing knowledge in terms of service sales and delivery, he is able to get the backing of executives who might otherwise be disinterested.

CIOs point to many critical cultural success factors for knowledge management initiatives. Fundamentally, all of the top five factors — users, project management, user training, internal communications, identifying business partners — can be used to align all levels of the corporate population behind the knowledge banner. “I believe firmly that the technology is about 20 percent of the solution,” Chait added, and “understanding content and having good processes and people in place working through the culture are the other 80 percent.”

Whatever knowledge management solution a company decides to implement, the core problem is getting people to use it. As Kevin Milliken of Cadence described, “It’s a bit of a chicken and egg issue. To get something out, it has to be populated. For people to populate it,

they've got to view value.” And that takes time, said Chait. “You capture knowledge as it goes by, and in order to have 10 years of knowledge in your knowledge base, you have to have 10 years.”

How do you break through this chicken and egg problem? Some companies advocate using different incentive schemes, from the carrot — rewarding employees with prizes and bonuses for exceptional contributions — to the stick — building it into explicit job objectives. Other companies have identified new positions with responsibility for harvesting and disseminating knowledge, although most CIOs did not identify this as a critical success factor. So far there is no clear agreement on how to best implement the changes that will be required to make knowledge sharing work, although Milliken described a simple approach that goes a long way. “Engineers like to show what they can do, and they have a great forum to do that with intranet technologies.” By leveraging public recognition for providing good, reusable content in the knowledge bases, he encourages his engineers to post their ideas, solutions and quick fixes.

The appeal of knowledge sharing is even taking root in the command-and-control culture of the military. “The greatest potential is in facilitating collaboration, and I'm looking to find the policies we can put in place to encourage that,” said Dr. Edward Schmitz, director of enterprise knowledge for the U.S. Department of the Navy. “There is a tradition of fairly compartmentalized knowledge and information within the organization, and that's going to be a real big challenge. We don't have any easy answers for that.” While the cultural aspects are daunting to any organization trying to create a strategic knowledge initiative, our research with CIOs reveals this is clearly a shared challenge.

## **TOP-DOWN WON'T WORK**

Perhaps the loudest objection to knowledge management as a strategic initiative is that top-down won't work. As we have already observed, few CEOs are sponsoring knowledge initiatives in their companies, and most executives are not embracing knowledge as a key differentiator. In such an environment, CIOs find that they have much more success with grass roots knowledge projects. “The people down in the trenches have a better understanding of what it means to have the right data at the right time,” said Mark Hazlewood, manager of IT for Bluewater Engineering. “If you try to sell the idea to management and wait for it to trickle down, it has a low probability of success.”

### **KM IN MILITARY EXERCISES**

#### **► OPERATION URBAN WARRIOR**

In Oakland, California, U.S. Marines recently tested the applicability of “networked individuals” to urban combat. Real-time collaboration allowed soldiers to communicate in the field, receive updates about enemy positions, and leverage the power of the entire organization during combat. KM helped them learn about their environment and optimize their life-and-death decisions.

*“The competitive world off campus means that students are in for a lifelong learning expectancy. Things are changing so fast that students recognize immediately that they will need to maintain a connection to the university. It’s only been recently that asynchronous distance learning has started to take hold — before, the technology wasn’t there for us to access it.”*

DAVE KING

DEPARTMENT HEAD OF  
AGRICULTURAL COMMUNICATION,  
PURDUE UNIVERSITY;  
EXECUTIVE DIRECTOR OF THE INDIANA  
HIGHER EDUCATION  
TELECOMMUNICATIONS SYSTEM

Unlike other IT projects, knowledge projects are very personal. When discussion of knowledge management first begins, employees become very concerned that their employer is attempting to capture their knowledge, put it in a database and eliminate their jobs. Employee fears are anything but quelled by executive-initiated knowledge programs. Rather, many CIOs argue, it is when the drive for knowledge systems come from the rank-and-file that the initiatives are better targeted to address real problems. These grass roots movements are much less likely to encounter staff-level resistance.

On the other hand, Dan Holtshouse, who leads the knowledge initiative at Xerox, believes that high-level sponsorship is also mandatory for a company to get the full benefits from knowledge management. “We had air cover and the ticket to travel,” when starting Xerox’s knowledge management project, he said. “The initiative itself was sponsored by the chairman, and he wanted the results of the first year’s work to be fed into our strategic decision making. That’s really key to a lot of these knowledge initiatives — is somebody waiting for your output, and is that somebody high enough to sponsor it?”

Here’s the dilemma: If knowledge management is not sponsored from the top, companies risk bumping into one set of serious obstacles, but if it is sponsored from the top, another set of obstacles awaits. These are further indications that knowledge management is still in the “early adopter” phase of the maturity model. Obstacles are common and no universal solutions have emerged. Many CIOs are experimenting with tools and preparing their companies for the eventual adoption of knowledge principles, but to date, most companies have chosen to remain in a grass roots modus operandi. CIOs must take a strong knowledge management advocacy position, helping to nurture grass roots efforts while making KM a board-room issue.

## THE FUTURE OF KNOWLEDGE MANAGEMENT

Clearly, not every company is a leading user of knowledge. So what is the rest of the world doing to prepare for the knowledge economy? Quite a lot, as it turns out. CIOs are actively pursuing grass roots strategies to try to develop a foothold for knowledge management in their companies. Most companies have completed at least one knowledge management project, and as we saw earlier, collaboration tools are well on their way to universal adoption. Because individual KM projects are relatively short, cheap and have rapid payback, they are very well suited to grass roots, departmental deployment. The big change will come when companies are able to make the leap from grass roots to enterprise-wide, strategic deployments. But according

### CIN STATISTIC:

**78% HAVE COMPLETED  
AT LEAST ONE KM PROJECT**

Source: CIN; N=221

to CIOs interviewed for our research project, that is not likely to happen until knowledge management gets tied to significant financial metrics. “I think that when people start putting intellectual capital on the balance sheet and publishing it to Wall Street, that is when knowledge management will get some notice,” said Eugene Chapman of JT International.

But the need to link knowledge management to financial performance dictates that CIOs become advocates for KM. They need to translate the CEO’s agenda — business objectives and strategies — into focused, pragmatic knowledge management initiatives. “That is one of the dimensions of my job — to watch what is going on in the IT industry and make sure that we aren't missing something,” said TASC’s Bob Brammer. The question is not if, but when senior managers will understand the impact of knowledge and other intangible assets on their business as effectively as they understand tangible assets today. And the CIO’s role is to help them make that connection.

Today, strategic knowledge management may be a paradox for many, but there are visionaries blazing a path through the new economy that will be traveled by CIOs around the world. While the CIN Think Tank research revealed three stages of KM development — enterprise (the early adopters), grass roots (the majority), and early (the laggards) — it has also shown glimpses of a fourth and future stage, where KM becomes a part of the business model. Such companies are starting to reinvent their business models to focus on intangible assets instead of physical assets. It is only a matter of time before breakaway companies emerge with a decisive competitive advantage. In the near future, whole industries will be reshaped by competitors that aggressively leverage knowledge to their advantage. As we move to a networked economy, there is a growing realization that knowledge displays unique economic properties. Rather than being driven by the law of diminishing returns that was pervasive in the old economy, knowledge has increasing returns, and can actually increase in value with use. Companies that successfully leverage knowledge today will command a decisive competitive advantage in the future.

### VISIONARY PROFILE:

#### **ERIC ESKIN** **FIRST USA**

As the vice president of intranet services for First USA, a Bank One company, Eric Eskin has been instrumental in building an infrastructure for information publishing and application delivery. His vision of the perfect knowledge-leading organization is one that retains its employees: “A knowledge leader is an organization where turnover is virtually zero. It’s an organization that really makes knowledge capture part of everyone’s job to share what they do, and where it’s clearly recognized that 25 percent of your time is going to be spent on it. It’s an organization that stresses learning.”

The ideal model has yet to emerge —and it could come from any sector. Somewhere, said Eskin, one person will have an epiphany, and through brute-force application, they will drive their company to success. “They must have the right team, the right technology, and willingness at the executive level to take that risk. It will probably be a company with three or four strong competitors, where one is looking to dominate the industry.” It’s only a matter of time before someone gets it right. ‘Somebody is going to leap over that chasm and become the Microsoft of knowledge management,’ he said.

## Q&A WITH LOTUS

To get an insider's look at the emerging world of knowledge management, CIN talked to Kathy Curley, Ph.D., executive director of Lotus Institute, part of CIN Think Tank sponsor Lotus. This group builds solutions for business problems using collaborative technology and effecting organizational and human behavioral change. It focuses on knowledge management, enabling effective teams, extended enterprise development and distributed learning. Before joining Lotus Institute, Curley received a doctorate from the Harvard Business School, and then spent 14 years as a management systems professor in the College of Business at Northeastern University.



### **WHAT DID YOU LEARN ABOUT KNOWLEDGE MANAGEMENT FROM THE CIN THINK TANK?**



One of my initial reactions was the idea that there's a growing sense of experimentation and learning. People are beginning to try things and they are beginning to see value coming from knowledge management initiatives.



### **WHAT CHALLENGES DO EXECUTIVES WHO START THESE KNOWLEDGE INITIATIVES FACE?**



Today's environment is very difficult to predict. Business management models from the late '70s used an incremental sort of learning — tools, techniques, and metrics for fairly stable and predictable environments. Those skills are no longer applicable in today's environment, it changes so rapidly.



### **WHAT HAPPENS WHEN COMPANIES ENCOUNTER THESE RAPID CHANGES?**



Let me tell you a story — I recently taught an executive MBA class, but my students were exhausted at class every night. I asked why, and they said, "We're in meetings all the time." Meetings happen when a new event (i.e. an event that cannot be handled by an existing process) requires human judgment in the application of knowledge and experience. So I found that they were going to meetings frequently because there was an increase in these new situations.



## **CAN COMPANIES INSTITUTIONALIZE A MECHANISM TO INCREASE RESPONSIVENESS?**



The challenge is not to do away with structured processes, but to identify areas of your business where you can augment a structured process to be more flexible and less brittle so that you can better respond to a new event. That is where knowledge management helps. We need to have specific processes for creating new knowledge, for sharing it rapidly, and for applying real knowledge to new situations.



## **IF THERE WERE A POSTER CHILD FOR KNOWLEDGE MANAGEMENT, WHAT WOULD THE COMPANY LOOK LIKE?**



It would look like an organization that is systematically creating organizational learning processes. It would look a lot like a university, and it would have in place very formal mechanisms for creating new knowledge. It would have a review and editing process so that the new knowledge created was edited and filtered by some kind of peer review. It would have a good taxonomy for finding it, like a library that uses a Dewey decimal system with related ideas linked to the categories. And it would have facilitators -- people who would help you find content and other professionals whose work and ideas you could learn from.



## **IS A CHIEF KNOWLEDGE OFFICER CRUCIAL TO CREATING A STRATEGIC KNOWLEDGE INITIATIVE?**



I think initially, yes. I think you need somebody who's either a chief learning officer or chief knowledge officer who has a responsibility to pollinate new ideas across the company.



## **WHICH APPROACH TO KM DO YOU ADVOCATE — TOP-DOWN OR GRASS ROOTS?**



Through my own experience at Lotus and with our customers, I do think that knowledge management is growing from the ground up. Two years ago, I would have thought that to be successful, there had to be a top-down strategic initiative. But I'm finding that at lots of companies, there are experiments in innovation going on that are proving that people are learning. And as they learn, I think it will inform a mosaic-like building of a knowledge management strategy.

## Q&A WITH COMPAQ

CIN spoke to Sharon Fortmeyer-Selan, North America Enterprise Marketing director of enterprise solutions for messaging & collaboration, Internet & e-commerce, at Compaq Computer Corp., to get an insider's view of knowledge management and to discuss the results of the CIN Think Tank on Knowledge Management. Compaq is the third-largest global computer firm. Ms Fortmeyer-Selan has 20 years experience in sales, marketing and program management of systems, professional services and solutions in the computer industry. She has led knowledge management and e-commerce initiatives for the past four years, most recently for Compaq's North America solutions marketing group.



**PEOPLE SEEM TO HAVE A HARD TIME AGREEING WHAT KNOWLEDGE MANAGEMENT IS. HOW DO YOU DEFINE KNOWLEDGE MANAGEMENT?**



Well, my stock response is that I don't try to define knowledge management. If we ask 100 people what KM is, we'll get 100 different answers, because they're coming from different functional areas, business needs or issues. Having said that, I like the simplicity of the IDC definition, "Making the right information available to the right people at the right time so that they can act on it." That's a gross oversimplification, but it seems to resonate fairly well with lots of folks.



**HOW DID THE CIN THINK TANK FINDINGS COMPARE TO YOUR EXPERIENCE AT COMPAQ?**



While knowledge management as a concept isn't really new, it is in an early stage of visibility due in part to the information glut caused by the Internet. Many more organizations are talking about knowledge assets, trying to find ways to value them on the books and to get serious about the fact that knowledge is a strategic asset. So we see more innovators — early adopter types — ready to do things. What's interesting is that the knowledge management metrics and successful project challenges reported in the CIN Think Tank are very similar to many companies' e-commerce issues. Companies have a lot of difficulty quantifying or even figuring out which metrics to use since a lot of traditional metrics don't apply.



## **WHICH IS GENERALLY MORE SUCCESSFUL, A GRASS ROOTS OR A TOP-DOWN APPROACH TO KNOWLEDGE MANAGEMENT?**



Grass roots — meaning, at the level of a functional group, rather than the total enterprise — seems to work best because people have identified a need and they can more easily identify the value of knowledge management in helping them solve that problem. Start with a project where there's a real business need and use that to prove that there's value. And as your CIOs pointed out, these initiatives can't be driven by IT people or by CIOs. They at least need to have a strong advocate/sponsor that's in a line of business but who also recognizes and appreciates the enabling capabilities of technology to accomplish the goals.



## **E-COMMERCE HAS AMAZON.COM. WHAT WOULD A KNOWLEDGE MANAGEMENT POSTER CHILD LOOK LIKE? HAVE YOU SEEN ONE?**



Well you could almost use Amazon.com for knowledge management as well. One of their differentiators is the whole way they've used information to enhance the customer experience. And how they've learned and evolved their business as a result. They appear to have built a knowledge-based culture and processes leveraging E-business technologies. And look at newcomers like Drugstore.com. When they were preparing to open their business, a key thing that they invested in was information infrastructures -- the data warehouses and other KM tools to support the customer relationship, better service, and making sure they intelligently delivered the products their customers wanted within a framework of continuous learning.



## **WHAT WILL IT TAKE FOR THOSE INSTITUTIONS TO BE SEEN AS KNOWLEDGE MANAGEMENT LEADERS?**



I think the knowledge leaders will be those who are seen to be competitively advantaged as a result of how they learn and adapt. They'll be the organizations that stand out as being the most responsive to their customers and market changes, the most innovative in services, products and customer interaction, and the best at supporting both individual and organizational growth of knowledge. We need to stimulate people to think of knowledge management as less of a buzzword and more as a real, practical means to solving key challenges of innovation, customer and market responsiveness. Certainly creating an environment that is conducive to and supportive of knowledge sharing is critical but people are looking for a place to start, and that's usually in a functional area. .

## RESEARCH METHODOLOGY

The CIN Think Tank is a dynamic, interactive forum where senior IT executives from around the world debate key IT issues. This report is intended to describe the opinions and experiences of CIOs who use knowledge management as a business tool. The Think Tank was launched with an online survey, which was followed by discussions on the CIN web site. Whenever possible, data is triangulated for greater accuracy. Primary research was conducted through the survey instrument and semi-structured telephone interviews. The Delphi method was used to identify survey questions, drawing from experts, practitioners and vendors. Members participated in the CIN Think Tank survey on a self-selecting basis.

**THINK TANK SURVEY.** Every CIN Think Tank includes an online survey that examines some of the key trends of interest to CIO members. There were 307 respondents to the Think Tank survey. All survey data is cross-referenced with up-to-date CIN member information to correlate results on many dimensions, including geography, industry and company revenue.

**THINK TANK DISCUSSIONS.** CIN's online discussions are a qualitative source of information about current IT trends. Names of members who participated in discussions are not included in this report for privacy reasons. Information from these groups is typically reflective of organizational best practices.

**QUESTION OF THE WEEK.** Question of the Week is a feature on CIN which asks a structured multiple-choice question on a weekly basis. On average, there are 250 responses per week. When appropriate, the data is included in the report. Although they reflect a potentially different group of respondents, the quantity of respondents is approximately the same, and they are drawn from the same pool of CIN members.

**INTERVIEWS.** As we began to formulate our interpretation of the survey results, we performed semi-structured interviews with 19 CIN members. All quotations were verified with the member to ensure accuracy. Each subject spent approximately 30 minutes discussing his or her knowledge management strategies. We have not reported any of these interview observations as fact; instead, we have used their insights to shed light on the issues raised in the survey. Where we could use a CIO's own words to elucidate an argument, we did.

**SPONSORS.** The CIN Think Tank on Knowledge Management was sponsored by Lotus, Compaq, and Cambridge Technology Partners. It is important to note that Think Tank research was not influenced by vendor bias. Members participate in all CIN features—surveys, discussions, weekly questions or interviews—without oversight or outside influence.



# CIN Registration Form

To apply for membership, please fill out this form and fax back to Paula Nilsson at 415.547.3601 (in the U.S.), or Christine Marsh at +44.181.334.6722 (in Europe). You may also register online by visiting [www.cin.ctp.com](http://www.cin.ctp.com).

Cambridge Information Network is a private site designed solely for senior information technology executives. More than ninety percent of CIN members are either the highest ranking IT executives in their organization or report directly to the CIO, and are from medium or large-sized companies. Please consider this when registering as we only accept applicants that meet our criteria.

The personal information CIN requests is needed to ensure membership quality. An individual's profile will never be sold or used for any other purpose than determining membership qualification and acquiring demographics on CIN's community.

NAME: FIRST MI LAST

COMPANY NAME

STREET ADDRESS

CITY STATE POSTAL CODE

COUNTRY

PHONE NUMBER FAX NUMBER

E-MAIL ADDRESS

COMPANY URL

### Your Role (please check one)

- Chief Information Officer  Director of Information Technology
- Chief Technology Officer  Vice President MIS  Other: \_\_\_\_\_

If you selected "Other" for your role, do you report directly to the CIO or the most senior IT executive in your organization?

- Yes  No

Desired CIN user name: \_\_\_\_\_ (Limit 10 characters)

Desired CIN password: \_\_\_\_\_ (Limit 10 characters)

### Your organization (please specify)

- Corporation
- Government agency or department
- Association
- Charitable organization
- Educational institution
- Other: \_\_\_\_\_

### Your industry (please specify)

- Agriculture  Automotive  Banking/finance
- Chemicals, Petroleum  Communications  Consumer products and retailing
- Education and other institutions
- Entertainment, media, and publishing  Fashion/apparel
- Food and beverage  Forest products  Government services
- Healthcare  High Technology  Industrial products
- Insurance  Pharmaceuticals  Real estate
- Restaurant  Telecommunications  Travel
- Utility  Other: \_\_\_\_\_

### Total global revenues for your organization in US dollars

- Under \$50 million  \$50 million - \$200 million  \$200 million - \$1 billion
- \$1 million - \$5 billion  \$5 million - \$10 billion  over \$10 billion

### Total global IT budget for your organization in US dollars

- Under \$5 million  \$5 million - \$10 million  \$10 million - \$20 million
- \$20 million - \$50 million  \$50 million - \$100 million  \$100 million - \$500 million
- over \$100 million

### Total IT budget you personally control

- Under \$5 million  \$5 million - \$10 million  \$10 million - \$20 million
- \$20 million - \$50 million  \$50 million - \$100 million  \$100 million - \$500 million
- over \$500 million

### What are your current IT challenges?

\_\_\_\_\_  
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### How did you hear about CIN? (check one)

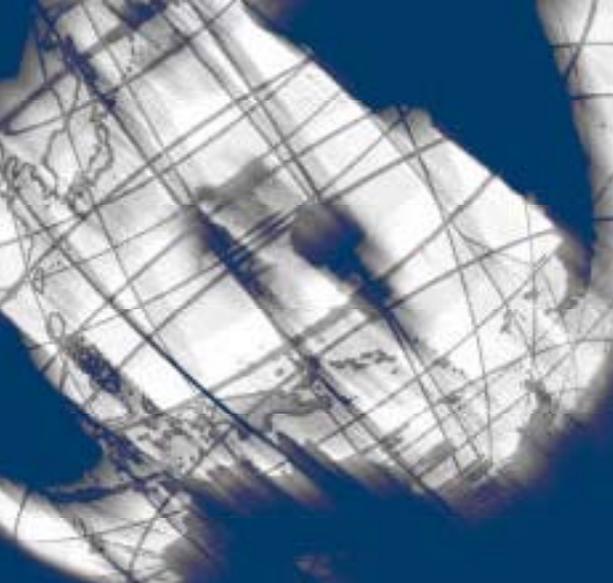
- Mail  Surfing the Internet  Word of mouth
- Event  Peer referral  Press/Publication
- Cambridge Technology Partners  CIN Partner: \_\_\_\_\_

As a member of CIN, you will automatically be included in the following services.

- listing in CIN's membership directory\*
- CIN event notification
- content contributor
- e-mail notification regarding new CIN features
- introduction of other CIN members with similar profiles

Please indicate which services you would NOT like to receive. **X**

\* This directory includes member's name, company, title, and industry. Of course, the membership directory will be available only on CIN and only to CIN members and staff.



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Cambridge Technology Partners provides management consulting and systems integration services to transform its clients into e-businesses. Working in collaboration with Global 2000 and high-velocity middle market companies, Cambridge combines a deep understanding of New Economy issues with integrated, end-to-end services and a proven track record of shared risk and rapid, guaranteed delivery.

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