

Knowledge Evolution: Tools of the Trade

Executive Summary

This Yankee Group Report explores E/KM's high-impact focus areas and how more effective management of these resources can combine with traditional asset management practices to help organizations survive and thrive in the 21st century's knowledge evolution.

Advances in technology and industrial-era management approaches have taken us a long way in terms of asset productivity. Dramatic examples of growth, however, will not come from incremental change. Intangible assets, on the other hand, represent a new frontier that is ripe for order-of-magnitude productivity improvements. In this Report we profile areas where organizations will dramatically increase management attention and investment resources over the next five years (see Exhibit 1).

Exhibit 1 E/KM High-Impact Focus Areas

Source: the Yankee Group, 1999

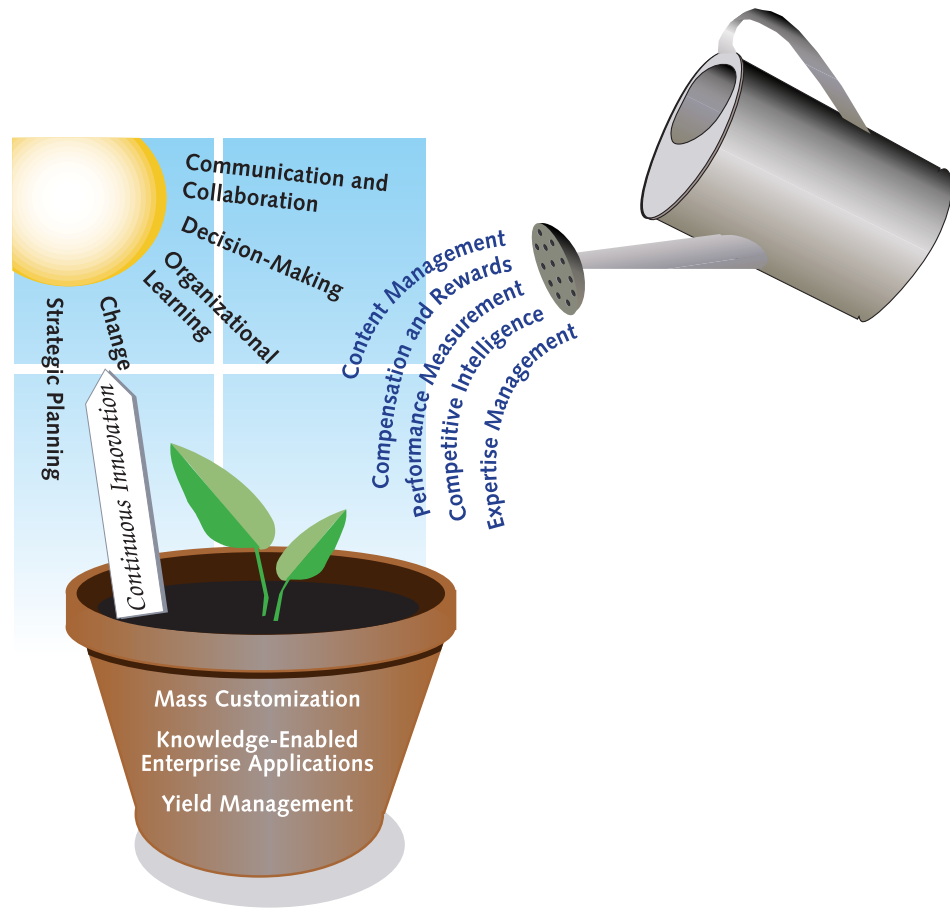


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I. Introduction

What E/KM is really about is striking a more appropriate balance between the tangible and intangible assets of an organization (see Exhibit 2). The particular emphasis an organization places on its intangible assets, however, will depend on two factors: the number of people involved in the process of delivering value to customers and the value of intangible assets relative to their more tangible forms.

The Yankee Group has identified a number of high-impact areas on which E/KM initiatives should focus. The combination, priority, and urgency of implementation will be dictated by factors that are unique to the organization. Organizations in the same industry may take different approaches to solve the same problem. E/KM's best practices combine these categories to leverage knowledge that has been identified as valuable and strategically different from that of the competition.

Exhibit 2 Enterprise Evolution: A Balanced Proposition

Source: *the Yankee Group, 1999*

Tangible Assets	Intangible Assets
Efficient	Adaptable
Consistency and Stability	Continuous Change
Tradition and History	Fashion and Currency
Power and Control	Autonomy and Collaboration
Hierarchical Structures	Self-Organizing Networks
Functional Standards	Creative Freedom
Mass Marketing	Mass Customization
Financial Capital	Intellectual Capital
Vertical Integration	Virtual Integration
Static Marketplace	Dynamic Market Space



II. High-Impact Focus Areas: Tools of the Trade

These are E/KM's 13 high-impact focus areas:

1. **Decision-Making and Analysis.** Make higher-quality decisions that incorporate input from relevant sources, unencumbered by geographic limitations.
2. **Expert Networks.** Understand who the experts are throughout the organization (including the extended organization), and more appropriately employ that expertise within a broader range of business contexts for better decision-making.
3. **Communication and Collaboration.** Communicate and collaborate across cultural, expertise, and geographic boundaries.
4. **Content Management.** Share explicit material such as documents, databases, e-mail, reports, copyrighted publications, patent portfolios, chemical formulas, customer lists, and strategic and market information, as appropriate for each user's business needs.
5. **Competitive Intelligence.** Manage the competitive environment globally, disclosing and responding more quickly and with a higher degree of accuracy to competitive threats.
6. **Performance, Compensation, and Rewards.** Tie personal and organizational goals to performance, outcome, compensation, and nonfinancial rewards to motivate employees to work for common organizational goals.
7. **Organizational Learning.** Ensure that employees, customers, partners, investors, and other stakeholders share a vision and strive for continual "personal bests" that align with the organization's overall strategic objectives.
8. **Mass Customization.** Offer personalized products that conform to the requirements of global customers who have not been served adequately, rather than asking clients to modify needs to accommodate product or service features.
9. **Yield Management.** Manage yield of the organization's products and services, more closely aligning the price with value received throughout the virtual value chain.
10. **Change.** Manage the process of change. This is necessary when the underlying philosophy of E/KM is discontinuous with prevailing business methods and employee behavior.
11. **Strategic Planning.** Manage the strategic agenda, creating a better-integrated global perspective that is shared, understood, and tactically institutionalized throughout the organization. Continued communication of top-management commitment and desires is key.

12. **Knowledge-Enabled Applications.** Knowledge-enable enterprise applications by integrating disparate systems more closely, incorporating real-time interactive exchange with structured and unstructured content, and the ability to evolve processes incrementally.
13. **Continuous Innovation.** Transform innovation from an accidental event into a continuous by-product of the E/KM process.

III. The Net/Net

Perception: Technology has made information available in a more timely manner, allowing managers to make better-informed business decisions.

Reality: Information adds an extraordinary level of complexity to the decision-making process.

The assumption is, of course, that better decisions will be made when actionable information is readily available. Decision-makers, however, often ignore much of what is available because they don't realize it's there, don't have access to it in a manner that suits their personal skills, or simply are not willing to invest the time to locate it.

Instead, senior managers often employ an "inner circle" of confidants who cut through all they deem to be extraneous. Estimates are created for categories of information that were never collected. Decisions are made based on a fraction of the available information, which may be a fraction of what is necessary to make an appropriate decision. Management moves along to the next crisis, relying mostly on an imperfect understanding of who was involved, how information was used, in what context, why the decision was made, and who supported or opposed it. Retrospective analysis, in this case, becomes a fruitless exercise, since the history required to do an effective job is woefully inadequate.

Does this sound like an unusual scenario? Probably not. The first high-impact area of E/KM involves employing technology to better manage the process of making decisions and to take a look at actual decision outcomes relative to expectations. The thirteenth area involves tying it all together to innovate on demand. The objective is to learn something from the process, to improve decision-making capability, to shorten the decision-cycle time, and to improve business results.

IV. Cases in Point

General Motors

General Motors has evolved a process it calls the Dialogue Decision Process for the past seven years, employing many of these principles. An organization the size of GM changes slowly, but many of the fruits of its efforts are now being realized. In his 1995 book, *Meeting of the Minds: Creating the Market-Based Enterprise* (HBS Press), Vincent Barabba, GM's vice president of strategy, profiles some of the early work that was done in this area in collaboration with Russell Ackoff's Interact of Bala Cynwyd, Pennsylvania. GM's overall objective has been to better manage strategic

decision-making. Managers explore decisions in a more collaborative manner, using decision-making applications and support tools. The project has been successful, and GM has begun to realize benefits in many ways. Participation in the decision-making process is much broader than it had been, incorporating cross-functional input. Decisions tend to take longer, but results require fewer adjustments later on. Participants also tend to have a much better understanding of the overall implications of decisions beyond traditional functional silos. With a clear understanding of why a decision is made, those affected by it tend to support it more enthusiastically. GM senior management is convinced that the process is paying off and that the overall impact on its business is significantly positive in terms of financial returns and the overall quality of decisions themselves.

U.S. Marine Corps

The U.S. Marine Corps may be having an identity crisis of monumental proportions. In the spring of 1999, the U.S. Marines in northern California conducted a series of “Urban Warrior” experiments. These experiments were lightly veiled (they were covered by *The Washington Post*) demonstrations of the U.S. Marines’ high-tech solution to the emergent urban warfare problem. The result was a learning experience in humility and the limitations of high-tech weaponry in urban battlefields.

The reality of urban warfare suggests that a well-coordinated intelligent adversary can purchase sufficient communications gear at RadioShack and adequate firepower on the street to effectively combat the most well-equipped fighting force on the planet. These experiments made it clear that to emerge victorious in urban warfare, decision-making must be left to those doing the fighting. Handheld computing systems connected to sophisticated GPS gear, with commanders and strategists controlling things from secure remote facilities, made for interesting theater. Unfortunately, human factors for the world’s most advanced economy don’t support what appears to be required to do the job. What’s required are intelligent, articulate, well-coordinated teams of soldiers on the street who are actually empowered to make decisions on the fly. Granted, that seems to support the Marine Corps’ fundamental philosophy. The problem is, ideal candidates would rather be watching a battle simulation in secure cyberspace. It’s likely the new millennium’s elite fighting force will spend equal shares of time at Quantico working on people skills and technology-centric tactics, and on Parris Island working on physical and mental conditioning.

McKinsey & Company

Every consultant at this \$2 billion global management consulting firm is responsible for transforming what he or she has learned into the collective understanding of the firm. One of its methods for accomplishing this is through an exercise known as the Practice Olympics. Consultants codify the best of what they have learned and present it at local, regional, country, and global events. McKinsey’s management teams act as competition judges and learn about the best practices during the process. Participants have an opportunity to showcase talents in front of partners who may one day vote on an associate’s partnership prospects. The professional/partnership ratio at McKinsey is 7.6:1.0, so competition is stiff. Contributing to the firm’s base of intellectual capital—or “Practice Development,” in McKinsey parlance—is one of the most important factors of eligibility.

Amazon.com

Amazon.com has revolutionized the nature of competition in the retail book business. Whether it is books, CDs, toys, groceries, or online auctions, Amazon.com is focused on providing a highly personalized online shopping experience. When a customer orders a book from Amazon.com, its application notifies the buyer of related titles that others with similar interests purchased. Many attributes of the look, feel, personal information, preferences, and purchasing experience are leveraged as Amazon.com expands its reach into new market segments. Amazon.com has done an exceptional job of leveraging knowledge to extend its model into complementary business areas. Wall Street has rewarded Amazon.com for its efforts with a market cap of more than \$33 billion.

American Airlines

American Airlines and its Sabre technology subsidiary have transformed the art of booking seats into a science. Over the years, the process of determining airline seat fares has evolved from one where the price of each seat was set for a particular flight regardless of the season or when the reservation was made, to one where the price of each seat varies by purchase date, travel date, distribution channel, travel frequency, and historical trends. The result is a person on the plane who paid \$5,500 for a Boston/Tokyo round-trip ticket yesterday sits beside someone who purchased a \$1,200 nonrefundable ticket five months in advance. The “revenue management” system that American and a few other airlines pioneered a decade ago is used by virtually every major carrier today and has become the ticket of entry to profitably compete in the highly competitive airline industry. American recently announced that it plans to spin off its Sabre subsidiary so it can more effectively compete for the services business of other airlines.

V. Conclusion/Recommendations

Organizations should quickly assess these high-impact E/KM areas within the context of their business requirements. Managers must understand who is involved in the process of providing value to clients, and the value of intangible assets in this context needs to be understood relative to the more tangible forms. A more appropriate balance should be found between tangible and intangible assets, as noted in recent Yankee Group publications.

Incremental improvement in the domain of tangibles is passé. So it's important to view E/KM as a new frontier that is ripe for order-of-magnitude productivity improvements. Management attention and investment resources should focus on related initiatives.

Further Reading

“Value Gap,” *Yankee Group Report, Enterprise Knowledge Management*, Vol. 1, No. 4, November 1999.

“CIO Perspectives: Folklore, Facts, and Fads,” *Yankee Group Report, Enterprise Knowledge Management*, Vol. 1, No. 3, October 1999.

“Enterprise Priorities,” *Yankee Group Report, Enterprise Knowledge Management*, Vol. 1, No. 2, October 1999.

“A Knowledge Perspective: The E/KM Product and Service Domain,” *Yankee Group Report, Enterprise Knowledge Management*, Vol. 1, No. 1, April 1999.

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