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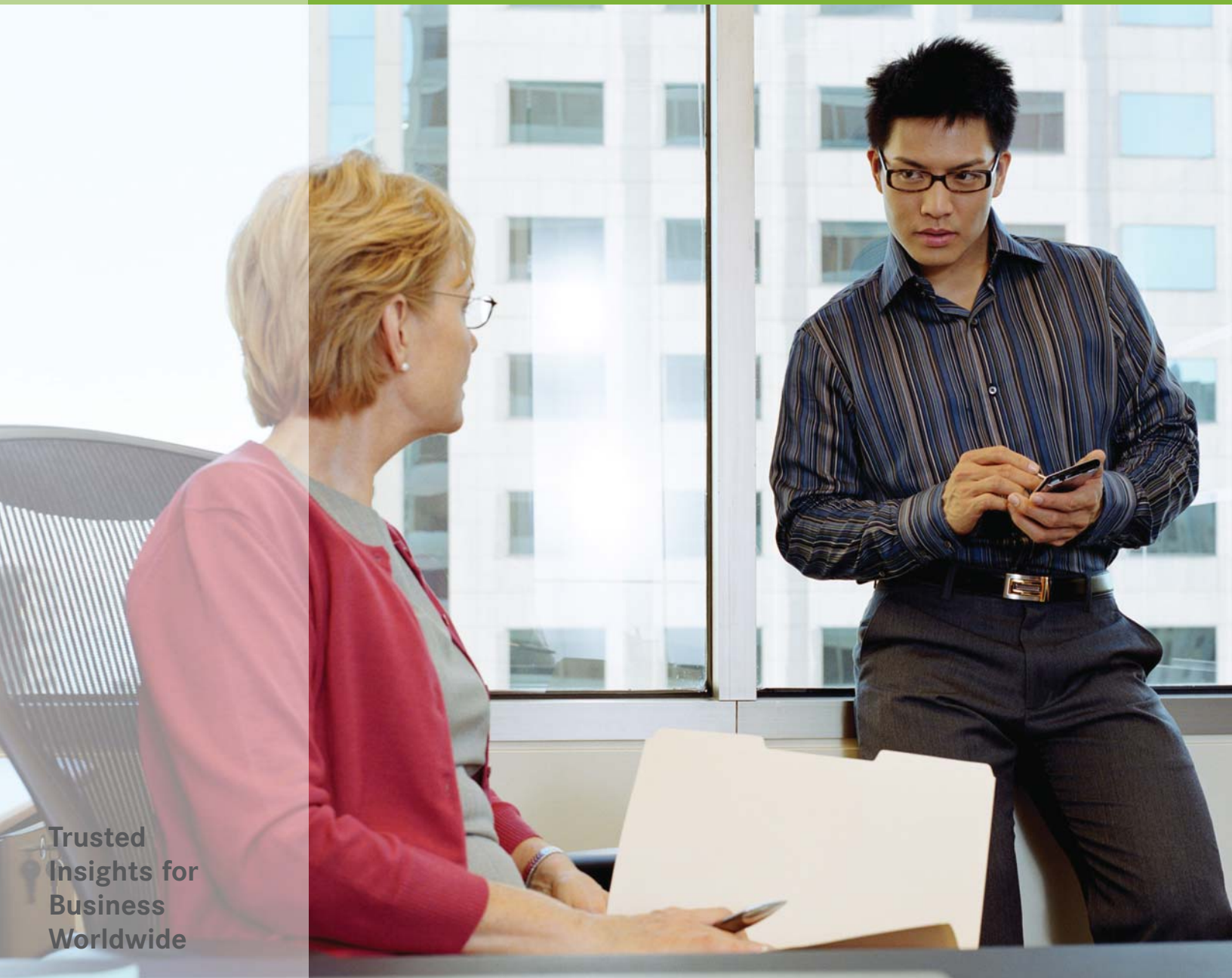# Bridging the Gaps

How to Transfer Knowledge in
Today's Multigenerational Workplace

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Bridging the Gaps

How to Transfer Knowledge in Today's Multigenerational Workplace

by Diane Piktialis and Kent A. Greenes

Contents

Introduction

As the baby boom generation of corporate leaders approaches retirement, businesses in the United States, Canada, and many European nations face a loss of experience and knowledge on an unprecedented scale. Despite both the risk and cost of losing intellectual capital, most companies still have no plan for the management and transfer of knowledge, and even fewer factor cross-generational challenges into business strategy. The Conference Board Research Working Group on Multigenerational Knowledge Transfer explored this topic with a special emphasis on the knowledge-retention challenges that organizations face due to shifting demographics and the shortage of new talent in the pipeline.

Bridging the Gaps: How to Transfer Knowledge in Today's Multigenerational Workplace identifies the dynamics of knowledge transfer, paying special attention to differences in learning styles between generations. Its comprehensive Knowledge Transfer Guide serves as a practical manual for companies interested in selecting and applying any of 15 methods for facilitating the flow of information and insight from those who have it to those who need it.

This handbook is based on a review of generational learning research and actual knowledge transfer applications conducted by members of The Conference Board Research Working Group on Multigenerational Knowledge Transfer, which met from April 2007 to January 2008. The group's focus was to examine which knowledge transfer techniques work, why they work, when to use them, and how to adapt them for more effective cross-generational knowledge transfer.

Many companies are concerned about transferring knowledge from older to younger workers, yet research indicates few are doing anything about it. As Mary Young and others have pointed out, knowledge transfer is, for many companies, more an aspiration than a reality. [1]

Organizations hope that their retiring employees will act as stewards of the organization and its future. In effect, employers say, "Give us sufficient warning so that we can line up a replacement and capture and pass along what you know to those who will remain." [2]

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[1] Mary Young, *Gray Skies, Silver Linings: How Companies are Forecasting, Managing, and Recruiting for a Mature Workforce*, The Conference Board, Research Report 1409, 2007.

[2] Ibid

In the past, the expectation of passing along knowledge and "leaving a legacy" fit well within the cultural values of long-tenured employees who spent their careers with the same company.[3] But what about today's workplace, where four generations work side-by-side, yet are separated by the invisible chasm of the "digital divide?" This report focuses on the capture and transfer of knowledge across these generations, with emphasis on:

- Understanding generational learning preferences of both the givers and the receivers of knowledge and their impact on knowledge transfer

- Adapting knowledge transfer methods to accommodate multigenerational preferences and learning styles

- Choosing the best knowledge transfer methods for specific needs

- Making the business case for cross-generational knowledge transfer

- Using best practices: what some companies are doing today

The practice of knowledge transfer is complex and can be analyzed through many different lenses. The learning and cultural differences that exist in a diverse workforce, an organization's history and culture, and the changing employer-employee contract are only a few. This report examines the barriers and opportunities for knowledge transfer through a generational lens.

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3 Marcie Pitt-Catsouphes and Mick Smyer, "The 21st Century Multi-Generational Workplace," The Center on Aging and Work/Workplace Flexibility, Boston College, Issue Brief 9, June 2007.

Part I

The Art and Practice of Knowledge Transfer

In our private lives, often we transfer knowledge so easily and efficiently we don't know we're doing it. Example: asking directions. However, in organizations, effective and sustainable knowledge transfer is complex, and involves the continuous and dynamic process detailed below:

Figure 1
Knowledge Transfer Life Cycle
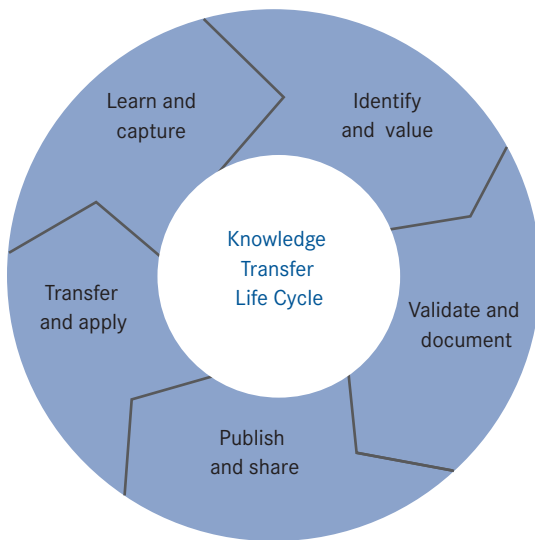
Step 1
Identify and evaluate the knowledge.

Knowledge doesn't exist in a vacuum. It must be defined in terms of its context, impact, application, and contact information. These answers are essential to any transfer process. The following questions are a practical way to obtain them early in the process.

To those who will be the sources and receivers of the knowledge:

- What is the nature of the knowledge to be transferred?
- Why is it important to transfer the knowledge?
- How will the knowledge be used?
- Who are the targeted users?
- What are their learning styles and levels of expertise?
- What knowledge is critical for success?
- How will the users find and access the knowledge?
- How will it be maintained and remain relevant and useable?

To business leaders and operations managers:

- What knowledge do we need to deliver today's performance?
- Who needs the knowledge to deliver value to the company?
- What knowledge do we need to grow and deliver new value in the future?

Good sources for answers to these questions are:

- Strategic and operational plans
- Quarterly and annual performance reviews
- Knowledge exchanges within and between functions, networks, communities of practice (CoPs), centers of excellence, and other peer groups across organizations

Step 2
Validate and document the knowledge.

Knowledge is usually complex. Most successful transfer efforts actively involve both the source of the knowledge and its receiver. It's almost always a "two-way street." The receiver gains from the transfer in an obvious way: he learns something new. But the knowledge source or giver may need to be persuaded of the value of the process. Putting a value on the knowledge:

- helps those involved to prioritize their time and effort accordingly

- motivates people to participate in the process

- helps both sources and receivers to determine if participation is worth their effort

It's important to establish performance expectations for those who will use the knowledge. This further quantifies the value of the transfer process. It is particularly important when the transfer will involve people other than the knowledge receiver, or when the effort will be time-consuming and incur costs that need to be justified.

Performance expectations can be created in several ways:

- Asking the source to provide documented value of the knowledge or practice as he/she has used it

- Asking subject experts within relevant functions, peer groups, and communities if they have used the knowledge

- Collecting anecdotes or stories that reflect the benefit received by those who have used the knowledge

Step 3
Publish and share the knowledge.

Knowledge can be made public in two ways. The "push approach" involves publishing on websites, intranets, and in newsletters and other company publications so that practitioners can find the knowledge. The "pull approach" involves facilitated sharing between sources and receivers through one of the knowledge transfer methods described in this report.

Step 4
Transfer and apply the knowledge.

In this step, the receiver finally acquires and applies the knowledge. The knowledge may be transferred using one of the 15 methods described later in this guide. At this point, an understanding of multigenerational learning styles (see page 9) can facilitate trust and ease of knowledge acquisition.

Before acquiring the knowledge, the receiver should specify his timing needs—is his knowledge need long-term or strategic in nature? Are there deadline issues?

After acquiring the knowledge, the receiver should estimate its potential impact. This evaluation will provide a means to measure impact after the knowledge is applied, and will further motivate both source and recipient.

Step 5
Learn and capture the knowledge.

After the recipient has applied the knowledge, there should be an assessment of its effectiveness relative to expected results. If the knowledge was adapted or modified for a different use, the changes and associated results should be captured. Reflection at this stage will glean insights for future use.

A caveat: This knowledge transfer cycle is intended as a guideline, not a step-by-step "cookbook" approach. While the process may seem long and complex, in practice it can sometimes be accomplished quickly: in a few hours in a peer assist (see page 50 for more on this method) for a specific piece of knowledge. However, several iterations through the process may be necessary when the knowledge is deep, complex, or large in scope.

Types of Knowledge

Just as users of knowledge have different levels of skill and experience – this report uses the categories of "novice," "practitioner," and "expert" – not all knowledge is created equal. Knowledge management expert Richard McDermott identifies three types of knowledge:

Specific Knowledge Building blocks specific to a domain or discipline. Examples include systems, tools, clients, structures, contacts, partners, and mean time between failures. The value of this knowledge decays over time since systems, tools, and relationships change and transition.

Analytic Knowledge The logic that holds the specific knowledge together and points to potential problems, concerns, possibilities, and courses of action. Examples include processes, cookbooks, frameworks, guidelines, and patterns. This type of knowledge has a longer life span since changes will occur less often.

Intuitive or Embedded Knowledge The flow of practiced expertise, in which specific and analytic knowledge become automatic. Examples include simulations, case studies, and the computer software applications known as serious games. This type of knowledge is generated through application and encompasses thinking, interpretation, pattern-matching, knowing, and improvisation. It can include social, relationship, and organizational knowledge.

In short, if knowledge is a chocolate soufflé, specific knowledge is the list of ingredients, analytic knowledge is the recipe, and intuitive or embedded knowledge is the skill to cook it.

In Knowledge Transfer, Age Matters

The way you make a soufflé depends on when you learned to cook. In other words, how you learn is to a large extent a function of your age and the teaching methods used during your early education.

Personal dynamics and communication between source and receiver can make or break the transfer of knowledge, especially between generations. In a 2004 study by the Society for Human Resources Management, the second-most common reason cited as a cause of intergenerational conflicts was that employees believe other generations don't respect them.[4] Another study by Randstad found that only 56 percent of younger workers relate well to older workers.[5]

Consider the following:

"A student at the university, Eric wakes up and peers at his PC to see how many instant messages (IMs) arrived while he slept. Several attempts to reach him are visible on the screen, along with various postings to the blog he's been following. After a quick trip to the shower, he pulls up an eclectic mix of news, weather and sports on the homepage he customized using Yahoo. He then logs on to his campus account. A reminder pops up indicating that there will be a quiz in sociology today; another reminder lets him know that a lab report needs to be emailed to his chemistry professor by midnight. After a few quick IMs with friends he pulls up a wiki to review progress a teammate has made on a project they're doing for their computer science class. He downloads yesterday's chemistry lecture to his laptop; he'll review it while he sits with a group of students in the student union working on other projects. After classes are over he has to go to the library because he can't find an online resource he needs for a project. He rarely goes to the library to check out books; usually he uses Google or Wikipedia. Late that night as he's working on his term paper, he switches back and forth between the paper and the Internet-based multiplayer game he's trying to win."[6]

Was your typical college day like this? If you are a Baby Boomer, definitely not. If you are a Gen Xer, probably not. If you are a Millennial, then this sounds a lot like you.

Because so much knowledge transfer is cross-generational, an understanding of different learning styles facilitates the process. Understanding generational learning preferences can make the difference between merely harvesting knowledge and actually using it. In most cases, the knowledge provided by a source will need to be adapted to fit the needs of the receiver. This may require adapting transfer techniques to key differences in generational learning styles and motivations.

Four Generations of Learning Styles[7]

Matures or Veterans (born 1925–1945): This generation reflects "American values," is loyal, has respect for authority, prefers "command and control" leadership, and will make sacrifices to get the job done. Matures, who are sometimes called Veterans or Silents, are still a powerful force in many organizations.

Baby Boomers (born 1946–1964): Born following World War II, during the massive increase in the birth rate known as the baby boom. They are competitive, with faith in their ability to change things for the better. They are idealistic but realize that loyalty is "dead." They understand their organizations' histories, enjoy leadership roles, are good team players, and like to be recognized for their contributions and experience.

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[4]   "Generational Differences Survey Report," Society for Human Resource Management, 2004.

[5]   "Older Workers Unappreciated in the Workplace," Randstad, 2006.

[6]   Diane G. Oblinger and James L. Oblinger, "The Net Generation," EDUCAUSE, 2005.

[7]   To facilitate shared understanding, the following sources were used for definitions of the generations: "Emerging Leaders Research Summary Report," Center for Creative Leadership, 2002, emergingleader@leaders.ccl.org; Ron Zemke, Claire Raines, Bob Filipczak, Generations at Work (AMACOM, 2000); Lynne Lancaster and David Stillman, *When Generations Collide: Who They Are, Why They Clash* (New York: HarperCollins, 2002).

Some researchers divide Baby Boomers into two segments: Early Boomers (born 1946–1955) and Late Boomers (born 1955–1964). Social scientists are only beginning to study the differences between the two.

How Boomers and Matures learn: Boomers and their predecessors were educated through formal classroom instruction and texts and remain comfortable with both. They are "digital immigrants" who did not grow up with computers. They like hard copy, and may actually read a company manual from beginning to end. When learning, they generally prefer material be verbal and text-driven, formal, and deductive.[8]

Gen Xers (born 1965–1979): The "business casual" generation. The term "Generation X" became widespread after the 1991 publication of the eponymous Douglas Coupland book. Gen Xers trust themselves, not institutions. They tend to be skeptical, independent, and to seek work-life balance. They dislike rules, red tape, and corporate politics.

How Gen Xers learn: This generation adapts easily to both formal and informal learning. Their highest priority is for action learning in the workplace.[9] They like to find real solutions to real problems. Incidental learning— based on experience and even their own mistakes—is high on their list. Fear of mistakes should not be part of management style; that talented up-and-comer might leave for a more understanding workplace. Gen Xers are comfortable with classroom-based learning, but are not enamored by it. When asked to rank learning styles on a 1 to 5 scale, Gen Xers ranked action learning at 4.8, incidental learning at 3.9, and formal training at 2.1. Having adopted technology in their adolescence, these employees are more visual than verbal. What does that mean? Few words, lots of images, and make it fun.

Gen Yers/Millenials (born 1980–1995): Gen Yers are technically savvy, value diversity, and have a global perspective. They want lots of feedback and communication, are entrepreneurial, and expect managers to help their professional development. They don't expect to stay in one job or career for long.

How Gen Yers learn: Gen Y turns the Boomer learning style on its head. This group, comprised of "digital natives" who were born into the computer world, learns by inductive discovery and exploration. They want to do, not to be told. Jumping right in is their modus operandi, trial and error their preference. A Gen Yer may take that manual the Boomer read from cover to cover and put it on a shelf "for future reference." Connectivity is a hallmark of this generation. Gen Y loves to connect via IMs, blogs, wikis, RSS feeds, and podcasts. But don't get the wrong idea: For a Gen Yer, "It's not about technology. It's about the learning technology lets me do." This generation values group and team learning, constructing understanding from many sources as opposed to a single authority. And although computers have been described as "like oxygen" to Millennials, this generation also likes to connect face-to-face.

(A caveat: When making generalizations about any group, caution is warranted. One will still find many differences within generations, in addition to differences between them.)

"I want information that's quick, concise, and to the point. I don't want to listen to a story."

Gen Y RWG member

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[8]   Oblinger and Oblinger.

[9]   Breda Bova and Michael Kroth, "Workplace Learning and Generation X," *Journal of Workplace Learning*, Volume 13, Number 2, 2001.

Figure 2
Comparing Generational Learning Styles

Comparison of Previous vs. Current Learning Styles	
Characteristics, Dominant Learning Style of Previous Generations (Digital Immigrants)	Characteristics, Dominant Learning Style of Virtual Generations (Digital Natives)
Linear acquisition of information	Nonlinear (hyperlinked) logic of learning
Focused mainly on facts and knowledge acquisition	Focused more on deutero-learning (learning how to learn)
Guided learning	Autonomous learning
Learning in specified time periods	Learning 24/7
Face-to-face learning	Interactive virtual learning
Learning as duty	Learning as fun
Rote learning	Analogical learning

"It hadn't occurred to me that we need to focus on the people who will receive transferred knowledge. I realize now that I know absolutely nothing about how these younger employees communicate."

Baby Boomer RWG member

Insights

Focus on the receiver, not just the source. Knowledge transfer efforts need to shift from a major emphasis on older workers about to retire and focus on receivers, who are often younger workers from different generations. After all, if these receivers don't get the knowledge in a meaningful way, the efforts of the givers will be for naught.

Pay attention to the digital divide. Gen Yers experienced a rapid introduction of new technologies from a young age, resulting in a preference for digital learning. This technology gap also means that younger employees have something of value to impart to older members of the organization.

Younger employees should be involved in deciding how they want to receive knowledge. Boomers and Matures often want to have and to share a lot of context and history. Gen Y employees are usually interested in "just in time" information and knowledge. Knowledge transfer practitioners and storytellers ignore this message at their peril.

Not all generations are equally different. Gen X is closer in learning style to Boomers than to Gen Y. Some techniques may work fine with Gen X, but need to be modified when the transfer is to Millennials.

"So now we have a generation of students that is better at taking in information and making decisions quickly, better at multi-tasking and parallel processing; a generation that thinks graphically rather than textually, assumes connectivity, and is accustomed to seeing the world through a lens of games and play."

-Marc Prensky, Use Their Tools! Speak Their Language! March 2004, www.marcprensky.com

Incentives to Knowledge Transfer

Many barriers stand in the way of knowledge transfer. Some people fear that by asking for help they will be perceived as uninformed. Others, by nature, avoid input from others. In some corporate cultures, pre-retirees are reluctant to part with knowledge they see as a ticket to returning to consult with the firm post-retirement.

So why give up knowledge? According to the literature on knowledge transfer and experience of the authors, three key incentives come into play:

1. Reciprocity
2. Recognition
3. Altruism

Are these drivers the same for different generations? And if not, how can incentives be adapted to different generations? This report does not address these questions. But it is possible to extrapolate some theories from the learning styles and behaviors attached to each age group.

What are Boomers' prerequisites for knowledge transfer?

1. Relationships
2. Trust
3. Believing that the effort taken to share hard-earned experience will be worthwhile—that is, that someone will actually use the knowledge

Do these prerequisites hold for younger generations? It may be that over time, people build significant ownership for what they know and feel that they have "paid their dues" to gain the knowledge they have. As such, older generations may not as easily part with their knowledge, whereas younger people have less vested interest in what they have learned and may be more inclined to share it. In addition, Gen Y's lifelong use of the internet and social media, where information is easily accessible and personal information is shared openly, has likely changed the notion of "knowledge as power" forever.

Reciprocity As the saying goes, "It takes two to tango." Little is likely to be captured or applied if a Gen Yer thinks he has nothing to learn or a Boomer thinks he has nothing to gain. A Boomer may not see reciprocity in a transaction in which he is providing knowledge, while a younger employee may see that both can benefit from the exchange. Mentoring can become reverse mentoring, for example, when a younger employee teaches new technology to that Boomer. Once each party understands potential gains, incentives flow in both directions, bringing reciprocity into the transaction.

Recognition Both giver and receiver should acknowledge the value the other brings to the knowledge transfer. Recognition can also come from an outside party, in the form of a boss's praise, a bonus, a check mark on an employee evaluation, or a similar acknowledgement.

Altruism Many people are simply willing to help others without expecting anything in return. That includes freely sharing what they know and have learned. It may be that younger generations have not yet been as tainted by negative experiences in their relatively short journey through life, and, as a result, are more inclined to openly share what they know.

Making the Business Case for Knowledge Transfer

Shifting workforce demographics have heightened attention and concern about knowledge retention, which in turn has put renewed emphasis on knowledge transfer in many organizations. Transferring what someone knows involves time and effort. So while knowledge transfer typically results in doing things better, faster, and cheaper, it's not without cost. It makes sense to deal with this head-on, since no one in business should expect to get something for nothing.

Before focusing on costs, it's important to understand the benefits side of the equation. (Benefits must be understood as *potential* benefits to organizations, since actual value isn't realized until knowledge is actually applied.) The metrics here are slippery, because the process of application, unlike the process of transfer, is less easily controllable and quantifiable. Moving knowledge from one individual or team to another is only the beginning. Then comes the hard part: managing or even monitoring how the receiver applies that knowledge to make a tangible difference to his business operation or strategy.

Benefits

Assuming the knowledge is applied, the potential benefits typically resulting from knowledge transfer range from tactical to strategic, and include:

- **Step-change in productivity** Most people learn by slowly changing their approach over time. Others might run into a colleague at Starbucks and find that he already solved the problem they've been working on. Or some can learn by leveraging what others know through a knowledge transfer method. This third way is faster than the first approach and more reliable than the second. Knowledge transfer enables people to accomplish their goals more quickly and cheaply. If an organization has a lot of repeatable processes, the incremental improvement provided by knowledge transfer can result in a significant benefit at a very low cost (since the time and effort to gain the knowledge is only spent once, but the knowledge is used many times).

- **Speed and agility** Fighter pilots who can maneuver inside their opponent's turning radius win every time. It's the same with knowledge transfer. When organizations make knowledge transfer routine they can learn at the speed of change. A good example is the U.S. Army. They perform missions they cannot be trained for because the enemy is constantly shifting tactics. However, knowledge transfer methods are embedded in company commands, enabling the Army to move critical learning and better practices across thousands of companies in hours or days. Thus soldiers adapt quickly, changing the battlefield. How important is it for your team or organization to learn, decide, and adapt faster than the competition?

- **New profit and growth** Imagine what new products or services a company could create if it were able to tap the brain power of thousands of people-years of experience. Knowledge transfer methods enable organizations to more effectively leverage the collective know-how of employees, partners, and suppliers. Take, for example, an organization entering a new market. If the company can transfer local knowledge from partners and suppliers in a region where they have never operated, they can deliver more quickly and avoid having to learn the hard way.

Employing knowledge transfer methods to operations, Kent Greenes and his knowledgement teams at BP and SAIC were able to:

- reduce cycle time by 50 percent for a new consumer product brought to market in Malaysia

- reduce time, costs, and risks in installing and maintaining electric submersible pumps in Alaska for Unocal

- save an estimated $260 million on refinery maintenance, drilling costs, retail market entry, and site construction for British Petroleum

Costs

Factoring knowledge transfer costs into the process at its start is important because:

- It forces planners to think more concretely about what specific knowledge is needed and why

- Knowing the level of resources needed for knowledge transfer lets the organization budget for it

- Acknowledging the cost is tantamount to acknowledging its importance to management, which is essential for motivating employees to participate

The Cost of Senior Leadership Knowledge

Many organizations are most concerned about the impacts of knowledge loss when their senior leaders leave. Carlota Vollhardt, founder of the consulting firm Executive Knowledge International LLC, identifies the transitions that if managed properly can yield high ROI:

Senior level successions

External hires

Internal cross-divisional transfers, promotions

Senior expatriate transfers

Developmental stretch assignments

High organizational dependency on unique expert knowledge

Critical function, project, and team transitions

Large scale reorganizations, mergers, and acquisitions

The first three are frequently driven by retirements, the last by major organizational change.

David DeLong, author of *Lost Knowledge* and other research on the topic, recommends that every organization:

- Identify where it is most vulnerable

- Evaluate current processes and practices for transferring critical knowledge to determine how its culture, systems, and processes enable knowledge loss

- Define lost knowledge as a strategic business issue, and articulate changing workforce threats to the management team—don't assume they get it

According to DeLong, identifying the people whose lost knowledge will have a serious impact on the organization is a critical early step in making the business case.[10] Once specific threats are identified, a risk assessment of those threats against business strategy and performance objectives can be undertaken and a value placed on those risks.

Northeast Utilities developed a five-year corporate development program and funding plan. One of its components is the business case for retaining critical knowledge: to ensure that operational performance does not suffer as a result of known workforce transitions. In the proposal that follows, notice the main headings. These proactively address the business questions and concerns that management is sure to raise.

10   David DeLong, "Diagnosing the Costs of Lost Knowledge on Organizational Performance," Working Knowledge Research Report, Babson College, Waltham, MA., 2005.

Northeast Utilities Knowledge Transfer: **Business Proposal**

Overview and Design

One of NU's workforce planning strategies is retaining critical knowledge in order to perform our core business processes seamlessly as our workforce transitions in and out of the organization. It will be as important to proactively and intentionally look for ways to retain the knowledge as it will be to retain our key people.

Knowledge Retention refers to the processes and/or tools an organization uses to collect, analyze, store, and disseminate its intellectual capital. Knowledge transfer is one process organizations use to retain their most critical intelligence between a source and a receiver. The knowledge that is hardest to find, easiest to lose and, often, most valuable is what is known as tacit knowledge. This is knowledge that is learned with experience, not documented and in someone's memory. The challenge is to tap into this knowledge and transfer it in a timely manner.

It is proposed that in 2008, two transfer methodologies be introduced across NU: a peer mentoring process via a work session and two on-line communities of practice.

Target Audience

- Incumbents in critical positions

- Critical people holding critical knowledge that, if lost, could have negative impact on a core business process or result.

Business Challenge/Need

- Baby Boomers comprise 82% of our leadership workforce. As they retire, a great deal of tacit knowledge could be lost.

- Past budget cuts and downsizings mean that in many cases, critical knowledge is limited to one person.

Current Situation

Currently, knowledge transferring initiatives are integrated into our leadership talent management annual process in such a way that critical positions and critical people are matched with risk mitigation action plans.

In a new career development application within Performance and Talent Management, we will source and identify subject experts across NU. This will enable us to search for knowledge experts by the specific knowledge they have.

This sustains and supports the 2007 Knowledge Transfer initiative conducted in our CL&P Operating Company.

Value to the Business

- Accelerates development and on-boarding for new hires

- Captures knowledge before it leaves

- Reduces risk

Critical Success Factors to Effective Implementation

- Leadership sponsorship

- Facilitator/leader for each program/ community of practice

- Selection of most critical positions/ most critical knowledge

- Communications plan

- Partnership with Information Technology and Resources to set up communities of practice

- Incentive to share information

Business Objectives

- Cross-functional knowledge is shared

- Corporate process is standardized and has consistency (vs. everyone creating own)

Learning Objectives

- Retrieval, storage, and applying of skills, knowledge, and experiential information from one practitioner

- Incremental performance improvement

- Development within employee's functional area

- Evolving of informal coaching relationships

What We Learned

The following insights are the product of a research review, discussions with outside experts, and the experience of Research Working Group members who have undertaken the application of relevant knowledge transfer practices in their own organizations.

- Effective knowledge transfer is challenging, more so when it crosses generations.

- When transferring knowledge it is important to ask "Who is the customer?" thereby considering not only the source but the intended receiver as well.

- Generational differences in today's workplace, especially those between digital natives (Gen Yers) and digital immigrants (Boomers and Gen Xers) affect many aspects of knowledge transfer.

- Corporate culture determines how far a firm can go in using social media to make captured knowledge accessible.

- Organizations need a holistic knowledge transfer approach that considers such factors as technology, generational differences, and cultural diversity.

- One size does not fit all. Each organization will have unique needs and solutions.

- In the future, metrics will be increasingly important in making the business case and getting executive support for knowledge transfer.

Advice from Practitioners

- The time to transfer knowledge is now, not when people are ready to walk out the door. Waiting too long limits the transfer techniques that can be used and can prevent the capture of critical knowledge.

- Integrating knowledge transfer into employees' daily routines greatly increases the chances that knowledge will be used. Otherwise, organizations run the risk of knowledge transfer being seen as additional work on top of everything else people have to do.

- Take the time to understand generational differences and use this awareness to facilitate knowledge transfer.

- Involve younger generations from the beginning. Younger employees are the likely customers for the knowledge that the organization wants to capture. Understanding what knowledge they need is critical if you want them to use it.

- Create awareness in older employees of the benefits they stand to gain, such as recognition.

- Build the human element into the process. After all, you can't force people with knowledge to share it, and you certainly can't force people who need someone else's knowledge to use it.

- Reciprocity and recognition are the foundation for changing the way we transfer knowledge.

- Emerging knowledge transfer methods such as reverse mentoring provide opportunities for behavior change in both the source and receiver.

- Knowledge transfer is a complex process and for many, still in its infancy. Although there is no right or wrong way, there are proven methods that can be effective when implemented correctly.

- Go for small wins and use the evidence to expand knowledge transfer initiatives. Employees can only do so many things differently without losing focus regarding current objectives.

- Just try something! You will likely have some success. In the worst case, you will bring attention to the need for knowledge transfer.

A Look Forward

Web 2.0 and social media, from blogs to virtual collaboration environments to augmented realities, are creating emerging learning styles in users of all ages.[11] These media hold great promise in knowledge transfer.

Moreover, these media will likely be more attractive to younger employees, encouraging their easy acceptance of knowledge. And the virtual nature of social media may help eliminate age bias, facilitating better dialogue and subsequent transfer.

In his recent book, *Gadgets, Games, and Gizmos for Learning*, Karl Kapp builds a strong case for leveraging social tools and techniques to transfer know-how from Boomers to gamers (Gen Yers and Millenials). These methods are already making an impact in universities and the workplace.

According to Kapp, "Gamer values such as the use of cheat codes, the love of gadgets, the need to play games, and the desire to be constantly connected can be used as methods for moving information from the heads of Boomers to the fingertips and gadgets of the gamers." He describes how these tools and skills can accelerate performance and take collaboration to new levels.

For example, when a worker is solving a problem under time constraints, instant messaging with one who has solved the same problem can provide immediate assistance. And podcasts provide timely technical training. Imagine viewing a downloaded podcast of an oscillating valve, accompanied by an explanation of what to do about it, versus hearing the same instruction on the phone or reading it in a manual.

There's no doubt that time is on the side of the younger generation. This means that Boomers need to think about meeting these newer entrants to the workforce where they are, rather than waiting for the gamers come to them.

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[11] See note 8 above.

Conclusion

Is the sky falling because Boomer knowledge and business wisdom are leaving organizations at an unprecedented rate? Probably not. After all, people have been retiring from the workforce ever since people began working. But there is significant opportunity in strategic and targeted knowledge transfer. Technology has created a larger gap between the outgoing and incoming workforces than employers have ever experienced, increasing the demand for knowledge transfer at the organizational level. More and more, companies are realizing it just makes good business sense.

Knowledge transfer is not as widely practiced as the potential business benefits and workforce demographics suggest it should be. In a knowledge economy, firm-specific knowledge is critical to the sustainability and innovation of organizations facing the imminent retirement of large numbers of Baby Boomers.

Employers need not build generational considerations into every aspect of information-sharing in their organizations. But adaptations should be made when the knowledge is firm-specific and mission-critical and when the intended receiver of critical knowledge is likely to have specific generational learning preferences.

Other aspects of multigenerational knowledge transfer need further research. What's uniquely Gen Y with regards to learning preferences and leadership challenges? How can companies optimize reverse mentoring for two-way knowledge transfer? And how does the dramatic shift in the employment contract affect the motivation of retirees to leave their legacy of knowledge for their employers?

Clearly, generation is only one of many factors that affect whether knowledge is effectively moved from those who have it to those who need it. Cultural diversity, language, and geographic distance also play a role in today's global economy. How these factors influence knowledge transfer and learning preferences are obvious avenues for future research.

Part II

Guide to Knowledge Transfer Methods

How to Select a Knowledge Transfer Method

There are many ways to transfer knowledge. This guide offers 15 different methods. But how to choose which method works in a given situation?

First, there is no "right" answer. This is not an exact science. The method you choose depends on:

- Why you want to transfer the knowledge
- The receiver's level of expertise
- The receiver's learning styles and preferences
- Whether the knowledge will be applied in the same or a different environment
- The type of knowledge to be transferred

(A caveat: these models assume that your knowledge givers are ready to share what they know, and your receivers are anxious to learn from them.)

Below are three approaches to selecting a knowledge transfer method.

Select a knowledge transfer method by user needs—can be used when an individual, team, or organization has specific needs in mind.

Select a knowledge transfer method by context and types of knowledge—can be used when an individual, team, or organization has a specific type of knowledge to be transferred.

Select a knowledge transfer method by level of experience—can be used when the potential receiver of the knowledge has a specific level of experience.

Here's how to work the system:

Start where it makes the most sense. In most cases, it is best to start with the first approach: the need you want to meet. Go through the eight scenarios in the first approach (Selection Method 1) and choose the one in which the user and the need most closely match your situation. Then review the other two approaches to determine if this method also fits the criteria presented.

For example, if you use the first approach, select the peer assist method for an upcoming project that will require new knowledge on your part, and then check to see where peer assist fits in the other selection approaches.

According to the second approach, peer assists are useful for situations in which both specific and analytic knowledge is being transferred between people who share a similar context. If these people have done similar work in similar environments, the peer assist method is likely to work well. If the peers come from different environments, i.e., have different contexts, the peer assist may not be effective.

The third approach shows that peer assists are most useful among people at the "practitioner" level of experience. If your intent is to transfer knowledge between peers at that level, then it is likely to work.

Selection Method 1

Selecting Methods by User Needs

(Note: Transfer methods are described in detail in later chapters)

Table 1

User's Knowledge Transfer Need	Traditional Knowledge Transfer Method(s)	Multigenerational Adaptations
A **novice** wants to accelerate his/her learning curve in a particular subject or domain	Attend formal education and relevant training offered online or in a classroom. Seek out someone with relevant expertise for mentoring. Search for relevant lessons learned, good practices and procedural knowledge on the internet, your company intranet, people directories, and relevant communities of practice. Serve as an apprentice to a subject matter expert or master practitioner in the relevant subject area or discipline.	"Novice" doesn't always refer to someone from a younger generation. However, when it does, it's important to understand differences in learning preferences. For instance, making knowledge highly visible and easily accessible in small chunks of content using wikis, blogs, and podcasts will likely appeal to Gen Yers, especially considering their preference to search and tap multiple sources of information and knowledge and their desire for only what they need. In the case of mentoring, younger generations might prefer to receive some of their guidance via instant messaging while they are actually in the midst of doing whatever it is they need advice for, rather than a phone call that has to be scheduled in advance.
An **individual** wants to improve his or her operational performance while implementing a task or project	Use online discussion forums within your networks of peers or a relevant community of practice to seek advice, ideas, and answers to problems as they emerge during your task or activity. Simply ask people in your personal network, "Who may know about this?" and seek them out for conversations via email, meetings, or the phone. Search for relevant lessons learned, good practices, and procedural knowledge on the internet, your company intranet, people directories, and communities of practice.	Timing is everything when someone needs knowledge to meet an operational need. That means a conversation between people is often the best way to quickly identify the specific need or knowledge for transfer. Younger generations tend to prefer "digital conversations" using instant messaging when problem-solving, whereas many Baby Boomers often prefer a phone call or face-to-face exchange. Regardless of the method used, a degree of relationship and trust is required between the source and receiver for knowledge to move from one to the other. Boomers need to consider the possibility that trust can be built in ways other than face-to-face interactions.
A **key contributor** is leaving a position or the organization	Use facilitated knowledge elicitation interview and knowledge distillation methods to harvest critical learning, experience, and insights. Package and publish specific and analytical knowledge using a knowledge capture process. Self-document your own knowledge via templates and inquiry approaches using a knowledge self-capture method. If the person is a senior leader, or in a key leadership position, he or she can hold a facilitated leadership transition workshop to identify and transfer critical knowledge between the outgoing and incoming leaders and the team.	Understanding the learning preferences of both the source and potential customers (receivers) for his or her knowledge will make the difference between harvesting useful knowledge and actually using it in the future. For instance, if the source is a Boomer, he/she may prefer to be interviewed face-to-face, whereas a younger person may be more inclined to create a blog of his experience. Just as important, if the ultimate user of the knowledge is a Gen Yer, there's a good chance he would prefer to read a blog or a wiki. If the intended receiver of the knowledge is a Boomer, a one-page document that concisely describes key insights and experience from a departed employee may be something he would actually make the time to read.
A **practitioner** wants to accelerate his/her learning curve in an existing practice area	Join or start a relevant community of practice to share and transfer experience between peers. Participate in relevant peer assists to contribute experience and learn from others. Seek out a mentor with relevant expertise. Ask some experts to share their experience through storytelling.	Your peers are not always generational peers. If your peers in a community of practice or who are participating with you in a peer assist are from younger or older generations, they are likely to have different preferences for giving and receiving knowledge. Communities of practice have always been about connecting peers who work in different times and places. So virtual interaction and knowledge exchanges should increase with the addition of younger members. But this will only happen if existing communication channels such as instant messaging are provided to enable more "just in time" requests and offers for knowledge sharing. Younger peers will also likely prefer to contribute their lessons learned and experiences in a more collaborative manner using a wiki rather than formally submit content for publishing on an intranet site or content management system. Baby Boomers will likely need to increase their participation between the periodic face-to-face meetings of their communities, or risk becoming alienated from the virtual conversations and "digital conversations" that occur. Peer assist facilitators must be more aware of the generational learning preferences of the participants. This awareness will help minimize barriers to knowledge flow between peers of different generations, and help maximize lessons learned and good practices that are raised in the session. For instance, a long and colorful story told by a Boomer to convey a hard-earned experience or lesson will probably not get the attention of a peer from a younger generation. That peer would likely prefer to hear the one or two things the Boomer thinks he needs to know. If the peer wants more context or background, he will ask. Another new way to stay current in your practice area is to subscribe to relevant RSS feeds of relevant blogs on your company's intranet and on the internet.

User's Knowledge Transfer Need	Traditional Knowledge Transfer Method(s)	Multigenerational Adaptations
A **team** is about to begin a challenging project or task	Hold a facilitated peer assist session after the team has created its plan and understands its challenges and knowledge gaps, but before it begins implementation. Publish their approach and plan in a wiki, and openly seek ideas and advice for improvement from others.	Younger generations are more inclined to seek input from other people and multiple on-line sources. Boomers also want to learn before doing, but are typically not as open about seeking knowledge from others. As a result, a lot more effort is needed to entice a Boomer to publicly make a request for a peer assist or to share upcoming challenges on something as visible as a wiki. Peer assists are typically held face-to-face. If some of the peers who participate are from a younger generation, the facilitator needs to consider their preferences for sharing or receiving knowledge. Gen Xers and Yers may be more inclined to participate if the session is held virtually over the internet using some form of a web exchange system. For more multigenerational adaptations for peer assists, refer to the section previous in this column of the table.
A **team** wants to improve its operational performance while its members are implementing a task or project	High-performing teams typically meet on a routine basis while they are working on a project or activity. During these meetings, or at the end of the day or work shift during project execution, an action review can be held in fifteen minutes to help the team "learn while doing" and improve its performance the very next day or work shift. Hold a facilitated retrospect session soon after the project is completed to create and capture new learning that emerged from the experience.	Younger team members might be more comfortable setting up an instant messaging (IM) capability to "chat" with team members and relevant peers while their project is underway. Younger team members can also update a team's wiki with status and progress reports, and use it to seek feedback from people outside their team who have been alerted to its existence. Team members from younger generations will be more inclined to collaboratively post the output from a retrospect or other lessons learned to a wiki.
A **team** has recently completed a project or program	Use a knowledge capture process to post the output from the retrospect or other captured knowledge, lessons learned and good practices on the company intranet or other highly visible and searchable digital repository. Consider augmenting the team knowledge that is captured during a retrospect with knowledge elicitation interviews. Members share new learning with peers in a relevant community of practice.	When capturing knowledge from a team, people will naturally look to the older, more experienced team members for insights and lessons learned. However, the younger members will have important knowledge to share and transfer to other novices or other young people who have not yet experienced the same situations or tasks. So it is important to seek out their learning and insights as well as those of the more experienced team members.
The **organization** wants to capture and maintain its collective knowledge about a brand, product, service, function, or critical practice area	Embed peer assists and retrospects into the organization's standard project management process so that learning and knowledge are routinely transferred from those who have it to those who need it. Develop learning histories (see glossary) to harvest knowledge from multiple sources. Use a knowledge capture process to harvest the output from peer assists, retrospects, learning histories, and other learning events and populate the "corporate memory." In this way, knowledge will always available to the current workforce. Establish a cross-organizational community of practice to continuously share and transfer knowledge among practitioners in common business-critical subject areas and domains.	Build and support wikis that openly document what teams and functional groups know and are learning in their practice, product, and service areas. Train the younger generation in the knowledge capture process and as facilitators of the peer assist and retrospect methods. This will not only help them come rapidly up the learning curve in their work domain, but will also embed the expected behavior in the workforce of the future. Use incentives such as rewards and leading by example to encourage individual employees to build blogs and use storytelling to routinely document what they are learning in their areas of interest and expertise.

Selection Method 2

By Context and Type of Knowledge

This approach works by selecting a knowledge transfer method appropriate to the type of knowledge (specific, analytic, or expert) being transferring and the context or environment in which that knowledge was created or is intended to be used.

The **Knowledge Transfer Application Framework** below provides a generalized approach to selection and is a good place to start for people who do not have a lot of experience using knowledge transfer methods. It offers a simplified view of methods, categorized by context and type of knowledge in a two-by-two matrix:

Figure 3
Knowledge Transfer Application Framework
(Simplified view - individual knowledge transfer tools in **bold**)

	Specific knowledge	Analytic knowledge	Expertise
Different application context	**Formal Education** **Training** **Podcasts** Communities of practice	Learning histories "Serious" games	
Same application context	Knowledge capture Wikis **Interviews** **IM** **Blogs**	**Mentoring** Peer assists Apprenticeship **Simulation**	

Note that specific and analytic knowledge are both depicted in the first column. Both of these can be explicit and documented in ways that are understandable by others. However, analytic knowledge tends to be more complex and often requires more explanation and codification before it can be effectively reused and adapted by others.

A more complex, and thus more accurate, view is offered by the **Knowledge Transfer Application Spectrum** (see Figure 2). This colorful and multi-layered approach is intended to depict the diverse spectrum of knowledge transfer methods as they apply in real life. Many of the tools overlap, indicating that there is usually more than one way to relay information. Again, different methods resonate with different people, depending on their personal and generational learning preferences and experience. There is no one correct method.

Various knowledge transfer methods are mapped across a spectrum of relevant applications. The method you select depends on the degree of similarity of context between source and receiver and the type of knowledge to be transferred.

Figure 4
Knowledge Transfer Application Spectrum
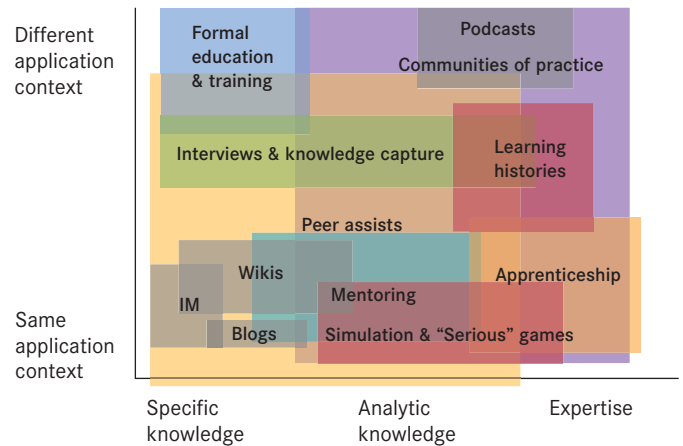
Selection Method 3

By Level of Experience

This approach fixes on the knowledge recipient's current level of experience as the criterion for selection. For instance, a novice may actually read a "how to" manual stored in a digital knowledge repository or wiki to gain specific and analytic knowledge. An experienced practitioner who already knows the basics will probably not read a manual, but might ask a fellow practitioner in a relevant community of practice for advice.

To use this method, follow three steps:

1. Identify where you fit on the y-axis of Figure 5 (below) based on your current level of experience

2. Find relevant knowledge transfer methods associated with your level of experience on the right-hand side of the diagram.

3. Use the table below the diagram to select and navigate to the specific "how to" guides for the appropriate method.

Descriptions and directions for applying some of the methods follow.

Beginner level

Many people new to a subject area or experience will use training or formal education to increase their knowledge, provided it is available and feasible. Baby Boomers will read a manual and other relevant documentation to gains specific knowledge. However, Gen Yers often will not. Fortunately, a lot of documentation is now accessible online.

The high level of "hits" on various Wikipedia sites attests to its widespread use for introductory information and knowledge.

Knowledge capture is the process used to create reusable, codified knowledge content in the form of digital knowledge assets, which can be quickly accessed online through an organization's intranet or externally via the internet. These online repositories may contain specific and analytic knowledge, as well as stories, case studies, and other experiential knowledge gleaned through knowledge distillation interviews. This helps to transfer learning, not just content.

Figure 5
Knowledge Transfer Methods and the Learning Curve

Experts
- Challenge via inquiry
- Research papers & conferences
- Application in new environment
- Introduction of new technology

Practitioners
- Peer assists
- Communities of practice (CoPs)
- Job transfer
- Storytelling
- Wikis
- Interviews
- Blogs
- IM

Beginners
- Formal education & training
- Interviews & knowledge capture
- Mentoring
- Apprenticeship
- Simulation & serious games
- IM

Knowledge, skills, expertise of receiver

Time

Table 2

Expertise level of receiver	Knowledge transfer methods
Beginner	Formal education and training
	Interviews and knowledge capture
	Mentoring
	Apprenticeships
	Simulation and serious games
	Instant messaging
Practitioner	Peer assists
	Communities of practice (CoPs)
	Job transfer
	Knowledge elicitation interviews
	Storytelling
	Wikis
	Blogs
	Instant messaging
Expertise	Challenge via inquiry by others (who are often from a different practice area)
	Research papers and conferences
	Application of knowledge in different or new environments and contexts
	Introduction of new technology

Simulations have been around for a long time as a method for training, learning complex skills, and gaining experience in using them. Recently, serious games have entered the workplace to provide simulated experiential learning in an accessible, user-controlled environment.

Instant messaging is a common method among younger generations for transferring knowledge at the moment it's needed. More and more people have access to online knowledge sources during office hours. For them, this method is a becoming a preferred choice for communicating and sharing knowledge in real time.

Nothing can beat apprenticeship to transfer real expertise, especially when the source has deep, innate knowledge that is hard to codify or explain. But it's costly and time-consuming, and most companies limit its use to situations where job complexity is great and knowledge is business-critical.

Case in point: It is standard practice for many European companies in the nuclear energy industry to use apprenticeships to transfer the deep experience of their mature operations staffs to novices in their organizations. Since the growth of this energy source has continuously expanded in Europe, the need to retain this expertise was obvious. In the U.S., when growth in the nuclear power industry leveled off, the companies that owned these resources stopped maintaining apprenticeships due to cost constraints. As a result, they no longer have the latest knowledge needed to meet the recent increase in demand for new nuclear plants.

Practitioner level

Two common methods for transferring knowledge between practitioners who perform repeatable tasks and processes are CoPs and peer assists. While these methods can be helpful to beginners and experts, the primary participants are peers with experience and knowledge in specific practice areas.

Combining these two methods can greatly accelerate a practitioner's movement up the learning curve. For instance, a practitioner may want to hold a peer assist to learn and transfer knowledge from his or her peers to address a specific challenge in an upcoming project. A CoP is a great place to find sources of relevant knowledge to invite to a peer assist.

Wikis can serve as a wellspring of knowledge and experience from multiple sources. Blogs are similar, but are primarily generated by a single author. Both of these methods contain unverified information. They are included at the practitioner level since some experience in the domain may be required to determine the usefulness of the content. Until recently, blogs were mostly used by Gen Xers and Gen Yers. However, Boomers are rapidly adopting this method, thanks to its accessibility and visibility.

Expert level

The same methods useful at the practitioner level can also be effective for experts. However, social and cultural dynamics in the workplace often limit experts' participation or desire to engage with others who are not also recognized as experts. This is truer for Boomers than Gen Yers. That said, peer assists and CoPs benefit greatly from experts' contributions. In many cases, experts gain new insights by having their thinking challenged when they take part in these methods.

Knowledge Transfer Methods

1 Action Review

Purpose and Description

An action review (AR) is a quick and simple team-learning process held while work is being performed, usually during a break in a process, activity, or task. It is intended to help teams "learn in the moment" and transfer knowledge immediately into the work at hand, as opposed to learning after a project or activity has been completed. It was originally designed by the U.S. Army and is based around four simple questions:

1. What was supposed to happen?
2. What actually happened?
3. Why were there differences?
4. What can we learn and do differently right now?

An AR is designed to quickly identify key lessons and immediate actions and to build relationships, trust, and confidence among team members. All it takes to begin running an AR is a commitment to open discussion, a little time, and paper and pencil to record the results.

When to Have an AR

Plan for the AR immediately after a natural break in any work activity, such as after a proposal meeting with a customer or after an operations team has completed a work shift. The AR should fall within the time allotted for the event. It should not appear as an add-on or extra work. An AR should be carried out when:

- Memory is fresh and unvarnished
- Participants are still available
- Learning can be applied immediately

Generational Considerations

Action reviews are typically held face-to-face. However, if the work was performed by a virtual team, then the session should be held virtually, with employees using instant messaging or a chat room to ask the action review questions and generate responses. Boomers and Matures may not be as comfortable with this approach as team members from younger generations. This can provide an opportunity for a Gen Yer or Xer to coach older team members in online approaches.

Conducting the Action Review

First, ask the four AR questions.

"What was supposed to happen?"

Everyone shares his/her answer. This is often the most revealing part of the process. Unless the event had a clear, unambiguous, and well-communicated purpose and plan, it is likely that different members of the team had different understandings of what was supposed to happen.

Facilitator suggestion: Ask people to write down their understanding of what was supposed to happen. Then, after a maximum of two minutes, ask them to read aloud what they wrote.

"What actually happened?"

Establish the facts (the "ground truth," which is the U.S. Army's phrase for the real issues and lessons relating to a team event). The ground truth is used to identify a problem, not a culprit. Save analysis and interpretation for the following two questions.

"Why were there differences?" and **"What can we learn and do differently right now?"**

Comparing the plan to what actually happened is when the real learning begins, as successes and shortfalls are identified and discussed. Agree to create action plans to sustain successes and help remedy shortfalls immediately.

Facilitator suggestion: ask people to quickly write down one key point they will take away from the meeting. Often, the act of writing helps participants focus on what is important and retain what they learned.

Tips for conducting an action review

Open Climate

The key to successful ARs is open and frank discussion. The objective is to fix the problem, not to blame. Accordingly, ARs are learning events, not evaluation events. This distinction may require demonstration by the team leader early on.

Facilitation

The facilitator's job is to guide the conversation. He may be the team leader or an external observer. If external, he or she must be a respected practitioner in the processes of the event and should have been a close observer of the actual event as it unfolded.

The facilitator should also make the process speedy. An effective AR can be carried out in 15 to 30 minutes.

Participation

For an AR to be a successful discussion, it is imperative that:

- Only those involved in the event participate.
- There are no spectators; everyone in attendance participates.
- Everyone is on an equal footing in the learning process—no hierarchy.

Recording

Use a flip chart (or virtual "whiteboard") to record the answers to the questions. Limit the amount of writing and content to one or two charts, which helps focus the team's energy.

Recording the key elements of an AR clarifies what happened and makes it possible to compare that to what was supposed to happen. It can also provide useful information for others in the organization performing similar tasks and projects, but that is not its primary purpose. The purpose of an AR is to help a team learn and quickly apply the learning to improve current performance.

Note: This material, as well as many of the knowledge transfer concepts, principles, and methods contained in this report, is based on the work of Kent Greenes (www.greenesconsulting.com) and his knowledge management teams at British Petroleum and SAIC from 1996 through 2006.

2 Blogs

Purpose

A web log, or blog as it is commonly known, is used to broadcast content created by a single author across an entire organization or the internet.

Description

Blogs are simple web pages designed for frequent updates. Their coding requirements and cost are minimal to none. They are usually written from a personal or individual perspective on a website available to anyone with access.

In a blog the author enters his thoughts, perspective, or knowledge onto a web page, and the postings are displayed in reverse chronological order. Each entry, or post, has its own unique internet address. And each post can contain links to other posts or sites. Readers of a blog can post comments and thoughts but cannot change the original. All posted content remains in a searchable archive.

Personal blogging (i.e. a chronology of someone's pregnancy on the web or a cancer patient's documentation) differs from business blogging. Although blogs are, by their nature, personal accounts, in the business world they are intended to focus on issues relevant to an organization.

A blog's accessibility promotes transparency. Content in a blog is validated only through informal peer review. Since anyone can read a blog posted on the internet or an intranet, the author knows his content will potentially be subject to the scrutiny of experts on this content. This helps keep bloggers "honest" about their contributions.

From a knowledge perspective, blogs provide useful insights about their authors. While a reader should not believe everything he reads in a blog, he may gain important context that will help him make sense of knowledge the author shares.

Benefits of Blogs

In 2005, authors Bill Ives and Amanda Watlington interviewed more than 70 prominent business bloggers and used their findings to write a guide for business blogging. In their view, blogs are more lively and personal than traditional publications, and more permanent and accessible than normal conversation.

"Blogs provide a transparent virtual space for:

- Creation—publishing content within a personal voice
- Collection—managing personal content in a searchable archive
- Context—applying commentary to content you manage
- Connection—discovering others with your interests
- Conversation—engaging in dialogs on an organizational or global basis
- Community—building networks around shared themes
- Collaboration—finding new business partners and increasing team work within organizations
- …and they lower the barriers to entering the web, further reducing the cost of communication."[12]

Common Business Applications

Blogs can be used to track the progress of a project; gather and post information about products, services, and competitors; and disseminate ideas among people in different places. Stewart Sutton, head of Collaboration and Knowledge Management at The Aerospace Corporation, observes two uses of blogs in his service organization:

1. Personal diary/editorial—to communicate the opinion of an individual within the enterprise

2. Project log—an individual (or group) will make periodic entries into the blog log

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[12] Bill Ives and Amanda Watlington, *Business Blogs: A Practical Guide* (Maranda Group, 2005).

"With blogs that have good 'feedback' features, the project blog is a pretty good approach to collaboration," Sutton says.

Blogs internal to an organization provide written, time-stamped, and searchable documentation. R&D organizations, for example, can track the growth and development of ideas in a single location, making blogs great tools for recording the development of a patent or the history and progress of research projects.

Karl Kapp[13] observes that the value of blogs is accelerating their adoption. At IBM, for example, blogs are used to discuss software development projects and business strategies. Senior-level consultants post information about client experiences and problem resolutions, which new employees can review and use in their own projects. In 2005, IBM encouraged its more than 320,000 employees to begin blogging, and many IBM employees now have public blogs.

At some DaimlerChrysler plants, managers use blogs to discuss problems, share information, and keep a record of solutions. Employees can then search through the blogs and find the information they are looking for concerning a certain production technique, design idea, or specification.

At the Dutch technology company Macaw, up to 90 percent of employees blog to share knowledge about technical issues and resolutions. This creates a vast store of knowledge that is used by new and experienced employees alike. The availability of this information has helped to streamline processes and make information more accessible at Macaw. Dr. Pepper/7 UP, Verizon, and Hartford Financial Services Group are just a few other examples of companies that have internal blogs.

Generational Considerations

Kapp has identified some important generational preferences in the application of blogs. "Blogs' inherently open, anarchic nature may be a bit unsettling for some Boomers, but their simplicity and informality are what makes them so appealing to Gen Yers—and are the reason their rapid and widespread adoption was possible." Gamers (Gen Y) will often turn to internal blogs before looking to more formal channels of information.

Getting started

To avoid reinventing what many people have already created, we recommend you read *How to Start a Blog* online at www.Wikihow.com/Start-a-Blog which walks you through the process.

Good practices

IBM bloggers used a wiki to create a set of blogging guidelines that would protect both IBM bloggers and the company itself as the company formally entered the "blogosphere." The guidelines were initially posted internally, then IBM bloggers shared them with the world. They can be found at: www.ibm.com/Blogs/zz/en/guidelines.html

Refer to the references below for other blog policy resources.

As is the case for many social media tools, asking a younger staff member for help here is a good practice. The behavior exhibited by asking may open up the floodgates for more frequent and effective knowledge transfer.

References and Resources

David Weinberger's Disclosure Statement
http://www.hyperorg.com/Blogger/misc/disclosure.html

Tom Reynold's comprehensive blog policy post:
"How to Blog and Not Lose Your Job"
http://randomreality.Blogware.com/Blog/_archives/
2005/3/17/443453.html

List of blog policies collected by Lisa Williams
http://del.icio.us/lisatmh/Blog_policies

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[13] Kapp, "Tools and Techniques for Transferring Know-How from Boomers to Gamers," Wiley InterScience (www.interscience.wiley.com) *Global Business and Organizational Excellence*, DOI: 10.1002/joe.20162, July/August 2007.

3 Communities of Practice

Purpose

Communities of practice (CoPs) are one of the most effective organizational forms for sharing and transferring knowledge between people with a common profession, practice area, or domain.

Description

A CoP is a voluntary group of peers, practitioners, and other individuals whose members regularly engage in sharing and learning to improve their performance as individuals, teams, and organizations.

The leader and members establish a charter and collectively decide which procedures work best in a given situation. They are the guardians of competence in that practice within a company and often codify their collective know-how in a form that can be reused and adapted by other practitioners. They help each other develop that competence, individually and collectively.

Generational Aspects of Communities

By their nature, CoPs cut across multiple generations. Many encourage membership of practitioners past, present, and future, which means the age of the members can vary widely. CoPs are likely to include novices and experts who get to know each other more quickly than is typical of a group within an organization. As a result, they provide a safe environment for younger employees to ask for help and seek out mentors. Thus it's a good idea to to include mentoring in the charter of a CoP.

Comparing CoPs and Teams

Comparing CoPs and teams often helps to build understanding of the basic aspects of communities:

Goals: A CoP's goals emerge from the community; a team's goals are completely aligned with an organization's operational and strategic objectives.

Membership: A CoP's membership is voluntary but subject to social pressure; a team's membership is defined at formation, but may change based on project requirements.

Motivation: A CoP member's motivation is social as well as to improve his practice or profession; a team member's is primarily based on organizational rewards.

Structure: A CoP's structure is fluid; a team's, hierarchical.

How to Establish a Community of Practice

There are five basic phases to establishing a successful community: **engage**, **plan**, **form**, **launch**, and **sustain**. The goals, key tasks, and deliverables for each of the phases are listed in this section. This can be used as a checklist to guide your efforts.

Roles and participation in CoPs

Two of the most important but misunderstood elements in a CoP are deciding who does what and managing expectations of participants. Every community needs to have a leader, members, and a facilitator. If the CoP decides to create and manage content to promote knowledge transfer, then members also need someone who can help capture and publish this in a digital form on a CoP website.

The facilitator role may be performed by the leader if he or she is trained in CoP facilitation. Often, however, the facilitator is a person who is not a practitioner in the CoP subject area but is experienced as a CoP facilitator with competency in knowledge management practices. The diagram below (see Figure 6) shows the relationships between the core roles in a typical CoP.

Early on in the life of a CoP it is important to manage the expectations of the members. Figure 6 shows participants how much to expect different types of members to participate. The bottom line: you get out of a community what you put into it.

Figure 6
CoP Participation*
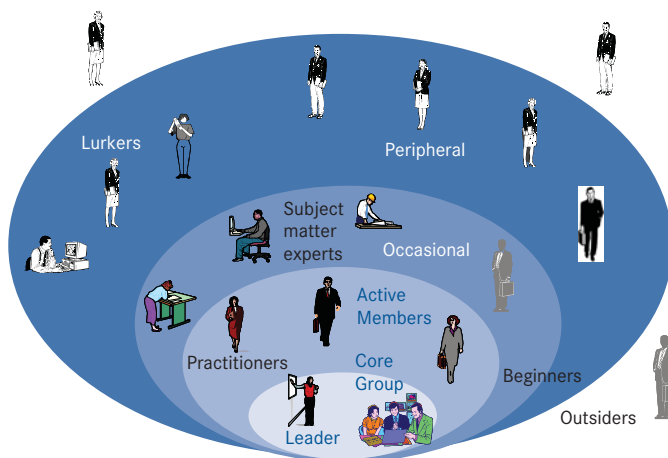
* From the work of Etienne Wenger

Basic operations of CoP

The following are minimum operating requirements of a CoP:

1. Meet virtually or face-to-face at a frequency that keeps members connected

2. Maintain an easy-to-use website, accessible and highly visible, that contains:
   - A list of members, their areas of expertise, and how to contact them
   - An online discussion forum where members can raise issues, make requests for information, or ask for help in problem-solving
   - A repository for documents and other artifacts for re-use by members, and to prompt and provoke conversation

All thriving CoPs exhibit the following success factors:

1. They are highly intentional groups dedicated to sharing knowledge among practitioners.

2. The knowledge shared is highly relevant to the members.

3. They operate through trust, reciprocity, and recognition.

4. The leader(s) are respected, passionate, and trained.

5. The CoP is facilitated by someone trained and experienced in CoPs.

6. There is an easy-to-use virtual connection site on the web.

7. The members meet face-to-face once in a while.

Table 3

Phase	Engage	Plan	Form	Launch	Sustain
Goal	Ensure viability of selected CoPs	Agree expectations and tailor approach	Develop core group and focus for each CoP	Formal start-up of CoPs and delivery of quick wins	Ensure continuity and grow value
Key Tasks & Deliverables	Identify and engage key stakeholders, potential CoP sponsors and core group members Clarify business imperatives Identify enablers and barriers, including technology tools	Tailor CoP to fit culture, business strategy and processes Finalize sponsors and core group members for each CoP Identify potential CoP members Work with IT and vendors to define and develop CoP tools Develop tracking and measurement processes	Train and coach core group for each CoP Hold CoP pre-launch workshops Identify quick wins Validate focus areas with core groups and sponsors Engage potential CoP members Test and implement CoP technology enablers Finalize CoP measures	Launch each CoP Agree on knowledge/ best practice transfer priorities Implement quick wins Facilitate learning sessions to accelerate performance Initiate tracking and measurement	Coach core group to support and grow member participation Hold monthly CoP exchanges via teleconference Grow transfer of better practices Track and communicate progress and value Facilitate quarterly learning and performance reviews

Lifecycle of a community of practice

CoPs do not live forever. However, if they form around a sustainable need, there's no reason for them not to last as long as there are members who want to learn and support each other. The chart below maps the lifecycle of a successful community. Understanding the effort involved helps set expectations among the members and shows them how to renew the CoP's energy and effectiveness.

Note: Nancy Dixon (www.commonknowledge.org) also contributed to this material.

References

Nancy Dixon, Nate Allen, Tony Burgess, et al, *Company Command: Unleashing the Power of the Army Profession,* The Center for the Advancement of Leader Development and Organizational Learning, 2005.

Carol Gorelick, Kurt April, and Nick Milton, *Performance through Learning: Knowledge Management in Practice* (Butterworth-Heinemann, 2004).

Chris Collison and Geoff Parcell, *Learning to Fly: Practical Knowledge Management from Leading and Learning Organizations* (Capstone Publishing Ltd., 2004).

Figure 7
Lifecycle of a Community/Network
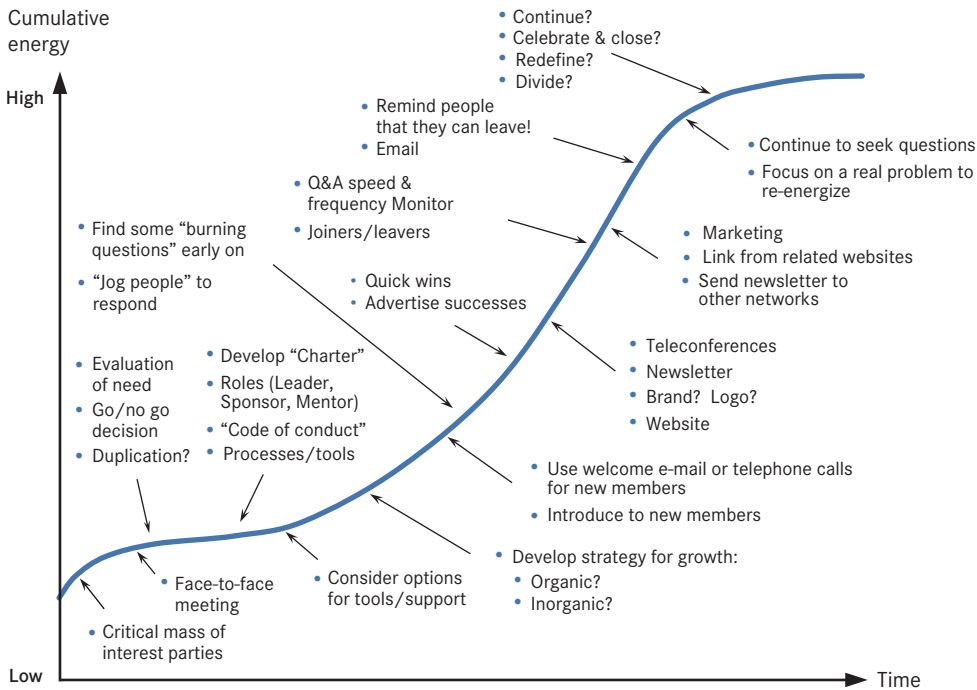
4 Instant Messaging

Purpose

Instant messaging (IM) enables people to transfer specific knowledge instantly by sending text messages to each other in real time.

Description

IM is a form of real-time communication between two or more people based on typed text. The text is conveyed via computers connected over a network such as the internet. People often refer to this as "chatting online" since a typical session involves people sending each other very short, sharp messages in dialog form. Because it allows participants to see who is connected or online in their network at any moment, an instant message can be a powerful enabler for one-on-one informal learning at the moment it's needed.

With IM, you can keep a list of people with whom you interact. You can IM with anyone on your "buddy list" or "contact list" as long as he or she is online. You type messages to each other into a small window that shows up on both of your screens.

Most IM programs provide these features:

- Instant messages—Send notes back and forth with a co-worker or friend who is online

- Chat—Create a chat room with friends or co-workers

- Web links—Share links to your favorite web sites

- Video—Send and view videos, and chat face-to-face with co-workers

- Images—Look at an image stored on a colleague's computer

- File—Share files by sending them directly to your co-workers or friends

- Talk—Use the internet instead of a phone to talk with others

- Streaming content—Get real-time or near-real-time stock quotes and news

- Mobile capabilities—Send instant messages from your cell phone

Generational Considerations

"While many Boomers still prefer face-to-face communication, most gamers consistently choose IM over email in a wide array of contexts," writes Karl Kapp. "In fact, gamers in a focus group defined e-mail as 'something you use to talk to "old people,'" institutions, or to send complex instructions to large groups. According to research by the Pew Internet & American Life Project, 75 percent of online teens—or about two-thirds of all teenagers—use instant messaging, compared with 42 percent of online adults. Of the teens that use IM, 48 percent say they exchange IMs at least once every day. Even a new lexicon has grown up around IM, with stroke-saving shorthand notations such as lol (laugh out loud) and ttyl (talk to you later)."[14]

However, not everyone is comfortable with instant availability and online visibility. Boomers may need a "safe" environment to become comfortable with IM as a routine method of communication.

One suggestion for Boomers: get your feet wet by IMing your children or grandchildren.

---

14 Kapp, "Tools and Techniques for Transferring Know-How from Boomers to Gamers."

Applications

More and more organizations are discovering the benefits of IM. At Sprint, instant messaging is now viewed as a necessary and critical tool for internal communication and knowledge-sharing. When the information technology department wanted to block the method as a potential security problem, executives who had begun to rely on instant messaging intervened to save it.

Here are some other popular applications:

- IM helps more experienced people to facilitate real-time transfer of their knowledge within the organization, and particularly to younger employees. Just-in-time mentoring and coaching via IM are common in university and "high-tech" environments.

- IM facilitates one-on-one informal learning and knowledge sharing across organizational boundaries. Employees often use IM to connect with people outside their organization to gain instant information or specific knowledge.

- IM enables groups to exchange information and specific knowledge by quickly creating an online chat room where they can gather virtually to discuss a project or perform a virtual action review. A manager can reach out to a geographically dispersed team and have a conversation or work on a problem with ease and speed unmatched by other methods.

- An IM session can be recorded and codified during the conversation itself. Transcripts can be made available to be searched by others dealing with similar issues.

Getting Started

We recommend you read *The Inner Workings of IM*, which can be found on the internet at this link: communication.howstuffworks.com/instant-messaging2.html

Also, consider asking a Gen Xer or Yer to help you get started.

5 Knowledge Capture

Purpose

Knowledge capture codifies and documents specific and analytic knowledge so that others can reuse and adapt it for their particular use.

Description

Knowledge capture is a very common method of transferring knowledge. While it is often not the most effective method, it is the most visible and easiest to understand. Put in simplest terms, it's a book, a website, or an online knowledge asset.

Knowledge capture is a process that involves identification, elicitation, distillation, packaging, and publishing. (Note: the elicitation and distillation steps are fairly complex and are detailed on pages 38 and 40.) It is laborious and time-consuming. But, when done right, it enables knowledge to move from one to many regardless of time and space.

Generational Aspects of Knowledge Capture

Impatience with captured knowledge is characteristic of Gen Yers. If they don't find relevant content on the first page of results from a Google search, Gen Yers will stop looking or perform another search, rather than going on to the next page of search results. This does not bode well for their tolerance for seeking out knowledge from passive or obscure sources. Easy-to-find knowledge in the form of bite-sized chunks or "nuggets" has the best chance of being read or ingested by people of all generations.

Knowledge Capture Process

Below are the building blocks for harvesting or capturing knowledge for others to adapt and use:

1. **Identify a customer for the knowledge** Have a clear customer—current or future—in mind. Who will use the knowledge, what needs will it address, and how will people access it?

2. **Identify a community of practice** relating to this subject, whether one exists or not. Practitioners will be the source of the knowledge, the users of the knowledge, and the people who validate the captured knowledge. If the community doesn't currently exist, consider engaging people who are active in the knowledge field you intend to tap.

3. **Clarify what the captured knowledge is about** What is the scope? What is the specific area of business activity or subject/domain? Remember, boundaries provide focus.

4. **Collate existing material** upon which you can base your captured knowledge. Provide context to help receivers understand the purpose and relevance of the knowledge. Are there guidelines you can distill from this material?

5. **Elicit knowledge** from individuals, teams, and groups with relevant experience. This can be accomplished through retrospective interviews of individuals, or formal learning processes and meetings designed to glean insights from recent projects, activities, or events.

6. **Distill the knowledge** into concise and relevant "nuggets" that represent the key insights, lessons learned, and practices of the knowledge sources. If multiple sources of knowledge are harvested, identify common "nuggets" and highlight these accordingly.

7. **Organize and package the knowledge** with the customer in mind.

8. **Build a checklist** to tell the user what steps to take to use this knowledge. Illustrate it with examples, stories, pictures, models, quotations, or video and audio clips.

9. **Develop a process map or workflow** of the knowledge, and link the nuggets to the sub-processes, activities**,** and input and output elements.

10. **Develop reflective questions** from the knowledge and organize the distilled "nuggets" around them.

11. **Make connections.** Create a hyperlink to the knowledge sources whenever you mention them in the text. List everyone with a relationship to the content and/or a link to the relevant community of practice or other networks.

12. **Validate the guidelines** Circulate the guidelines among relevant practitioners and knowledge sources. Ask them, "Do the guidelines accurately reflect your knowledge and experience? What do you have to add?"

13. **Publish the knowledge** Store and manage the knowledge in a space where it can be easily searched, found, and accessed by its community or other users. Often this

will be the company intranet in the form of a digital knowledge asset. New social media that make it easy to publish knowledge on the web include wikis, blogs, and content management systems.

14. **Initiate a feedback and ownership process** Encourage feedback from users. Instill a sense of obligation that "if you use it, then you should add to it."

Capturing just enough

Often the effort required to capture knowledge gets in the way of its being captured. Imagine you have just completed a project and learned something new that you think your fellow practitioners might find useful. But you don't have the energy or motivation to document it all. In this case, a knowledge capture one-pager template (refer to knowledge self-capture on page 43) can capture just enough to prompt others to reach out to the source and find out more.

Technical considerations

The following questions are intended to help guide technical implementation:

- Will the knowledge asset (knowledge repository) be a turnkey, Word-hyperlinked document, or Excel baseline (knowledge breakdown structure) delivery?
- Who will host the knowledge asset?
- Where will the knowledge asset be hosted?
- What are the governance rules for hosting the knowledge asset?
- Who will have access and who, if anyone, will control access?
- Will you, as the developer, have access to a site that enables you to monitor, add, tweak, and change the asset as it evolves, or will you have to do this through someone else?
- How will access be accomplished?
- Who is responsible for making technical changes to the knowledge asset?

Figure 9
Knowledge Capture Process
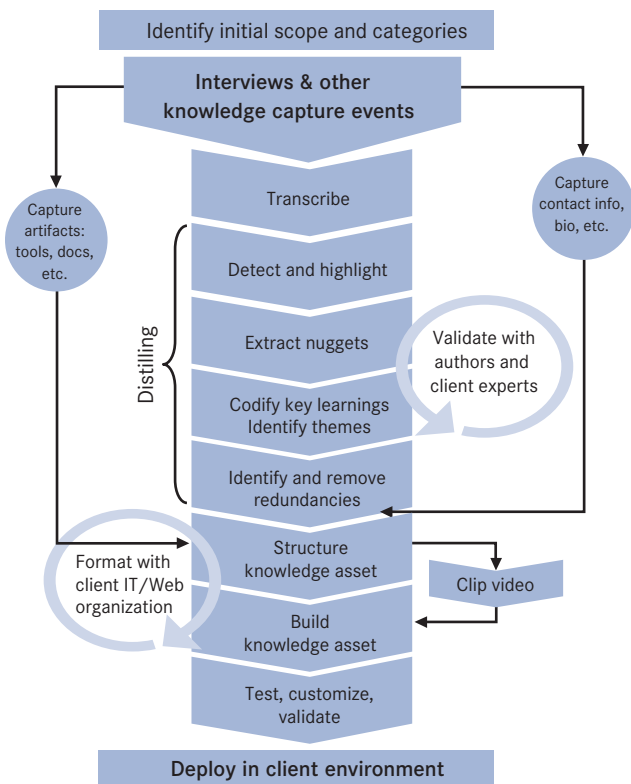
Common pitfalls

The following barriers and problems in the implementation of knowledge capture have been observed across many organizations:

1. **Trying to capture too much**—Knowledge capture efforts should focus on what customers need, not everything that is known about a topic. The basics of how to do something, or foundational knowledge, are probably already documented. Emphasis should be on what isn't widely known, new learning, and other knowledge that isn't typically documented in the usual manner.

2. **Underestimating time and effort**—It's a laborious process to harvest knowledge and present it in a manner that people can reuse and adapt. For example, it may take eight hours to distill a handful of powerful nuggets or insights from a one-hour interview with an expert.

3. **Capturing knowledge that isn't used**—Unless you have identified what potential customers for the knowledge are interested in, there's a good chance you won't capture it.

4. **Assuming one size fits all**—Not everyone likes to receive knowledge the same way. Some like reading text. Others learn more by listening to an audio of the knowledge or by viewing a video of someone speaking or performing an activity.

References

John Seely Brown and Paul Duguid, "Balancing Act: How to Capture Knowledge Without Killing It," *Harvard Business Review*, May–June 2000.

Chris Collison and Geoff Parcell, *Learning to Fly: Practical Knowledge Management from Leading and Learning Organizations*, (Capstone Publishing Ltd., 2004).

6 Knowledge Elicitation

Purpose

Knowledge elicitation gathers knowledge from individuals in a manner that others will find useful.

Description

Knowledge elicitation is primarily accomplished through interviews, which for this purpose are conversations between people with relevant knowledge to share and a person responsible for eliciting this knowledge. Elicitation is typically followed by distillation to extract key lessons and insights in concise form suitable for packaging and publishing.

Part I. Preparation

Provide the interviewee a few sample questions as part of an interview confirmation letter you send 2-3 days in advance, so he has a chance to start thinking about the topic. Mention that you would like to record the session (so you can concentrate on what is being said) for future reference. Allay any fears about this by assuring the interviewee that he/she can review and edit what you capture before it is published.

If you have witnessed the project or event, or had informal conversations with managers or other users of the knowledge you are gathering, you may know which issues others would like to hear about. Print out a list of those issues along with the more general questions suggested in the following sections. Rather than forcing the interviewee to follow your list, use it as a checklist at mid-interview and again near the end. You will usually find that most issues have been covered, and you can ask about any missing ones.

Try and make this session more of an open conversation than an interview by a journalist. Remember, this is not about what you want to hear, but what the interviewee thinks is important for others to know.

- Ask open-ended questions rather than ones with "yes" or "no" answers.

- Maintain the interviewee's energy and train of thought.

- Follow the energy and interests of the interviewee, not what you thought was important before you started.

- Watch body language and listen to voice inflections. This will tell you where the interviewee's areas of interest or concern are.

- Respect the interviewee's line of thought, and help develop it by asking follow-up questions if you perceive there is more the interviewee would like to say or that more precision is needed.

- Refrain from telling your own stories, or from drawing conclusions from what the interviewee says. Even reaffirming the interviewee's point will distract him from his own train of thought.

- Once a line of thought is completed, introduce another topic and ask a question in a new direction to keep the interview moving forward.

Part II. Elicitation Questions: Background and Context

The information gathered from these questions provides a context for the rest of the interview.

Name/Title and Current Position/Company

What was your role in _____,
or in which function(s) did you participate in the
_____ effort?

Robert Ward of Hess has performed several knowledge elicitation interviews and has the following advice:

> I sometimes use a questionnaire to elicit the administrative data from people, like their contact details, where they keep their files, in what format, etc. This needs to be captured as well as the knowledge stuff. I also find it helps to get useful knowledge by looking forward using the five-year business plan. This gets the interviewee thinking about what will be happening and acts as both a prompt and makes the whole thing more relevant to those following behind.

Part III. Elicitation Questions: Knowledge Specific to Role and Project

These questions pertain to the role and functions identified in Questions 1 and 2. Start with the first few questions and then select from the rest as the conversation dictates:

- Did the outcome meet your expectations?

- For the functions that you've participated in, what are some factors that led to success?

- What surprised you most? Frustrated you most?

- What "aha" insights did you gain during the process?

- If you were starting again tomorrow, what would you do differently?

- Describe the steps you'd go through to accomplish X, Y, and Z.

- Who are other critical participants in the process and why?

As you hear an answer, ask yourself whether the implicit advice has been communicated as specific actionable recommendations that a future team could follow. If needed, ask for relevant clarifications. For instance:

- "Take enough time"—How much time you would say would be appropriate?

- "Everybody should participate"—What organizations would you say should be involved?

- "This project went really well"—How does this compare with other projects you have been involved in? What was different this time?

- "This is a difficult problem"—What makes it difficult?

- "We couldn't do better"—What will other teams need to do in the future, in order to assure they do better?

An iterative questioning process—open question, then clarifications as needed, then another open question, and so on—is often a very fruitful and respectful approach to follow.

Part IV. Elicitation Questions: Knowledge as Member of Project Team

These questions seek knowledge that relates to participation on the project team rather than being function-specific.

1. What two or three things would you want to know prior to starting a new effort?

2. What is the key piece of advice that you would give to a future project team?

Part V. Wrap-up/Summary

Often, the session creates new knowledge for the interviewee, which builds during the course of your time together. He/she may have different things to share at the end of the session than at the beginning. Thus summary questions often turn out to be the most useful. (In an emergency, skip right to these!)

Examples:
To summarize, what would you say are the three most important pieces of information or knowledge that anyone beginning work on a similar project should know?

Is there anything you expected me to ask you, or anything not covered that you think might be important?

What's one thing no one has ever asked you about _____ that you think is important to share?

Part VI. Completion

After the interview is finished, cover the following items:

- If you haven't done so already, ask if the interviewee is willing to share materials referred to in the interview. Arrange for receipt of these.

- Confirm the next steps—in particular, the fact that you will be sending the interviewee your extracts of the conversation for approval.

- Provide the interviewee with your contact information so that if he thinks of anything else to share, he can reach you.

Transcription

In most cases and with the agreement of the interviewee, you will record the session with a professional transcription service (e.g., a digital audio recorder. We highly recommend www.escriptionist.com).

7 Knowledge Distillation

Purpose and Description

Knowledge distillation is the extraction of meaningful knowledge from recorded conversations, interviews, or informational events. It is a step in the process of knowledge capture, detailed starting on page 35.

Getting Started

For each knowledge elicitation interview (refer to knowledge elicitation interview guidelines, starting on page 38) or learning "event," document the name of the person or event and provide context to help others put the distilled content in perspective.

Part 1. Highlight relevant content.

Go through the transcription or notes of the event and highlight content that caught your attention during the interview or event itself. Highlight these passages so they will "pop" when you revisit your notes. A tip: an interviewee will often signal "important" knowledge by body language and tone of voice (or, obviously, when he says something such as, "This is really important…") These key thoughts and potential lessons will be the nuggets of relevant knowledge.

Part 2. Review each highlighted passage.

Taking the point of view of the customer, review each highlighted passage. Does it seem insightful, important, or represent new knowledge? If so, copy it "as is" into a distillation spreadsheet, referring to it as "Transcript Content or Passage." Use the Basic Distillation Table (page 41) to capture and gather this information. Refer to the Knowledge Distillation and Extraction Template Sample (page 42) to see this table in practice.

Create a knowledge nugget from each highlighted passage. Nuggets are often expressed in the form of a story with a message. This is typically 30 to 90 seconds of speech, which may result in several paragraphs of text. The message is often conveyed through an example.

This editing requires thoughtful consideration on the part of the knowledge harvester and is one of the most laborious steps in the knowledge elicitation process. However, it is also the step that adds the most value to knowledge reuse and adaptation by others.

Craft a tagline. When we distill a key thought in nugget form, we also try to extract the broader principle behind it and convey it as succinctly as possible. We refer to this as a tagline. The tagline should catch the reader's attention and simultaneously communicate a broader thought.

For example, this tagline emerged from an interview with a mergers and acquisitions expert: "Time kills all deals." This is the nugget associated with it: "We began discussing the potential deal with the company we wanted to acquire nine months ago. It took my management eight months to decide if the acquisition really fit our growth strategy. When they finally agreed it did, the target we were going after had decided to go with one of our competitors."

In summary, for each distilled knowledge nugget, a knowledge harvester should produce and capture the following elements in a table or spreadsheet:

- Specific context—The context may be adjacent to the passage or elsewhere in the transcript. Either way, capture and write the context for each nugget.

- Transcript of passage—Extract the relevant and specific text or words spoken by the knowledge source in its raw form.

- Categorization theme—Identify the theme or subject of the nugget. This will be used to help merge, sort, and present the knowledge in several ways, as well as make it easy to find. It may also be helpful to identify subthemes for the extracted knowledge, depending on the complexity of the subject area. The rule: if it helps and makes sense, identify an additional layer of information to which the nugget relates.

- Tagline—Create a tagline for each nugget. The tagline will typically be the broader principle or point that is being made by the knowledge source, conveyed as directly and succinctly as possible in a one-liner or catchy phrase.

- Keywords—It is often helpful to extract or identify some keywords that can be used to find the nugget when searching, or link the nugget to other relevant documented knowledge.

Basic distillation table

Table 4

Name of interviewee or event: _____

Context of interviewee or event: _____

Date of interview or event:_____

Interviewed or collected by:_____

Nugget	Context	Tagline	Transcript Passage	Keywords	Theme	Sub-Theme

You may want to capture other elements, depending on the sophistication of your process and the medium you are using. In almost all cases, you will want to assign a unique identifier for each nugget to enable tracking and content management.

If you used video and/or audio to record the interview or event, you will need spreadsheet columns that note the video and audio clip timings of the nugget so that it can be easily identified in the media source and extracted to accompany the text. See Table 5 (page 42) for an example of a detailed, working template used for knowledge elicitation distillation.

Share this with the technical support staff who will help you with this activity—they will probably have ideas and suggestions for tailoring it to best meet their capabilities.

Last, collect the distillation tables in a common place for use during the knowledge packaging step. It will be helpful to be able to look across and compare nuggets from different sources (interviews and events) when you are dealing with multiple sources of knowledge for similar topics.

Knowledge Distillation and Extraction Template Sample

Table 5		
Unique number	###	###
Theme name	Delivering business	Deployment preparations
Sub-theme name	Operational challenges	Mental preparation
Name of source	Smith	Jones
Nugget: key thought or lesson	Carry something with you at all times to keep you occupied	Know your job–others won't
Tagline	Patience is a virtue–be prepared to do a lot of waiting	. . . especially those young military kids; they're looking at the civilians for guidance
Transcript content or passage	Always carry a book to read or something to keep you occupied during "wait" time. There are lots of books available for trading or that others have left behind. If you have a hobby you can carry with you, that would be a good idea.	We've got a contract. Let's get people over there and get them to work. You really need to make sure the individual knows his job before he gets over there because the military, especially those young military kids; they're looking at the civilians for guidance . . . They're 18, 19, 20-year-old kids. A lot of them are reservists who've never gone through this before.
Context	Gettting ready to deploy to Iraq for first assignment	Getting ready to deploy to Iraq for first assignment
Location of video clip	00:41:0	3:02 to 00:41:40:09
Relevant question	4.4f	3.2b

Note: For practical use, this template should be reproduced in a spreadsheet application.

8 Knowledge Self-Capture

Purpose

Knowledge self-capture helps individuals capture and document personal knowledge, lessons learned, and insights: in effect, to learn what they know.

How to Use this Guide

Individuals may choose between two methods to self-document knowledge:

The inquiry method is used when a person wants to capture his/her broad-based learning from a project or team experience, but may not have a clear idea about what is important to document. For example, a person leaving a job may want to document the insights he has gained. This method helps him to draw out this knowledge as he answers the questions provided.

The template method is recommended for documenting a specific practice or lesson that a person knows he/she wants to capture. For example, someone may have just piloted a new approach to phased retirement and learned a lesson worthy of capture. The knowledge self-documentation template provides a simple one-page form for documenting such knowledge.

Knowledge Self-Documentation Inquiry Method

Complete each part of the following guide in order, following the instructions provided.

Part 1. Preparation

Personal reflection is key to capturing meaningful knowledge. It takes time and effort, and getting started is often the hardest part. Here are a few simple steps to start your reflection process.

List the major objectives, initiatives, projects, or programs in which you have been directly involved during your most recent job or career. If you want to capture what you've learned from a particular experience, list the major milestones and accomplishments from that experience.

Ask yourself, "What stands out for me from these experiences? Why?"

Create an environment where you will have minimal distractions for an hour or so to start the actual documentation process.

Part 2. Documentation

Use the categories that follow as the major headings in your document.

Title – should reflect the content of the document you are about to create.

Name/title and current position/company:

Contact information – phone and email:

Team, project, or initiative:

Description of team, project, or initiative:

Purpose and objectives of the effort:

Approach used to plan and perform the work:

Environment in which the work was performed:

Role:

Knowledge specific to role and project:

Answer the questions that are relevant to the experience you are documenting:

- How did the outcome meet your expectations? How did it fail? What key factors led to success?

- What surprised you most? Frustrated you most?

- Describe the process you went through to accomplish the work.

- Who are other critical participants in the effort and why?

- If you were starting again tomorrow, what would you do differently and why? What would not change?

- If you only had five minutes, what would you say to someone about to begin a similar effort?

As you answer these questions, make sure your response is specific enough to enable others to act on it. For instance:

- "Take enough time" – How much time is enough?

- "Everybody should participate" – What organizations should be involved?

- "This project went really well" – How did it compare with other projects you have been involved in? What was different this time?

- "We couldn't do better" – How can future teams do better?

Customer knowledge needs

A proven practice in documenting knowledge is to ask potential customers of your knowledge what they would like to learn from you and in what form they prefer to get that information. Fellow practitioners, experts, and novices are good sources. Including their questions and your responses in the documentation will add value.

Summary

Summarize your knowledge by answering the following question: "What are the two or three most important pieces of information or knowledge that anyone beginning work on a similar project should know?"

Publish and disseminate

Gather and attach any work materials that you refer to and believe that others may be able to use. This supporting content may be in the form of texts, spreadsheets, or presentations.

Make the document searchable and available online in your company intranet and/or through relevant blogs or wikis. Create awareness of the document's existence. Think of people, teams, and groups that may find this knowledge useful and let them know it is available.

Knowledge Self-Documentation One-Page Template

Complete the following template.

Title
Create a short, descriptive title that describes how you and others would refer to this knowledge, practice, or lesson.

Guidelines/Instructions:
Each of the following five sections should be completed in a single paragraph. The length of the complete document should not exceed one page. Most people will read a page, but will not take the time to read more. (A hint: before you write anything, take five minutes and reflect on the knowledge you want to share.)

Business Context Describe what was going on in the environment (internal and external business drivers, organization/culture, and local conditions) when the knowledge was created. Think of what someone else would need to know to make sense of what you did, and tell him/her.

What Was Done Describe the knowledge and how it was applied. Explain the actual business implementation – the steps you took, the core processes you worked through. Be as specific and concise as possible. Attach relevant artifacts or support documents that others may find useful.

What Resulted Describe the business result from the application of this knowledge and why it made a difference. Where possible, share the experience through the words of those who felt the impact of the knowledge – a quote or paraphrase can go a long way toward making knowledge come to life.

Key Lessons and Advice Describe what you learned. What's the one thing you want to remember the next time you apply this knowledge? What would you advise someone who may apply this knowledge in the future?

Contact Information Your name, date of this documentation, and how best to contact you.

9 Leadership Transition Workshop

Purpose

This simple and effective workshop helps a team accelerate the process of transition and knowledge transfer following a change in leadership.

Description

Whenever there is a leadership change, a team goes through a period of establishing new norms and relationships, and understanding values and priorities. The new leader is seeking an understanding of critical business drivers and the skills and abilities of the team, while team members are seeking to understand the new leader's "hot buttons," values, and communication process. During this period, the team's effectiveness can be greatly diminished, but there is also an opportunity for the departing leader to share and transfer critical knowledge and insights.

How It Works

The workshop is a facilitated half- to one-day session to help the leader and team "let go" of the departing leader and begin building new relationships. The process contains four phases, with the outgoing team leader participating in only the first.

Phase One The outgoing leader shares with the team his/her perceptions of the team's successes, disappointments, and those activities/initiatives that are important to continue. He or she also shares insights, lessons, and other relevant knowledge (key relationships with internal and external stakeholders, clients, partners, and suppliers). The team and incoming leader ask clarifying questions where necessary, and the outgoing leader departs.

Phase Two The team members and incoming leader introduce themselves, and team members share what they have heard about the incoming leader.

Phase Three The team members generate and prioritize ideas about critical things for the incoming team leader to be aware of and give attention to during the next six months. The team then shares these with the incoming team leader, making sure to explain why they feel these items are priorities.

Phase Four The incoming leader shares with the team his/her beliefs/values and "hot buttons" (behaviors he will not tolerate).

Leadership Transition Workshop Outline:

Attendees:

Outgoing team leader (beginning only)

Incoming team leader

Team members

Facilitator

Agenda:

1. Facilitator (10 minutes)
   Brief overview of meeting and reasons for holding it

2. Outgoing team leader (45–60 minutes)
   Summarize:

   > Successes during tenure
   >
   > Things to continue
   >
   > Personal knowledge and insights gained during tenure
   >
   > Outgoing team leader leaves meeting

3. Introductions and goals for remainder of meeting
   (About five minutes per person)

   Participants introduce themselves, stating personal strengths, weaknesses, and concerns, and sharing what they have heard about the incoming leader

   Facilitator asks the group, "Is there anything we need specifically to focus on or avoid?" Facilitator captures all ideas on flip charts

   Incoming team leader leaves meeting for Item 4

4. Facilitator leads group to capture main issues
   (one to two hours)

   These include:

   What the new leader needs to be aware of, focusing on things critical to next six months:

   > What stands out from the personal knowledge shared by the departing leader

   > Of these prime issues, which are the highest priority

   > Which issues the incoming leader needs merely to be aware of, and which require his active participation (Facilitator captures all ideas on flip charts)

   > New leader returns

5. Team briefs leader on issues (one hour)

   > Discussion

   > New leader asks questions to clarify as necessary

   > Team identifies actions

6. New leader shares his/her values and hot buttons
   (20 minutes)

7. Team reviews action items and closes meeting

10 Mentoring

Purpose

Mentoring facilitates the transfer of a wide range of knowledge between people from different but related backgrounds, generations, or departments.

Description

Mentorship is a dynamic, reciprocal relationship in a work environment between an advanced career incumbent (mentor) and a novice (mentee) aimed at promoting the career development of both. Mentoring encourages a mentee to manage his own career growth, maximize his potential, develop his skills, and improve his performance.

Generational Aspects of Mentoring

"Mentoring is a process that is compatible with Baby Boomers' values and work style. Mentoring involves being collegial, talking, sharing (not telling), and developing solutions together," write Judith Lindenberger and Marian Stoltz-Loike in *Mentoring and Baby Boomers*. "It is also optimistic, which is typical of most Boomers' outlook on the world. When generations work together in strategic, business-related activities such as mentoring, everyone benefits. The mentee builds new business knowledge, and the mentor often gets reenergized and reengaged in business opportunities. We find unique satisfaction in nurturing these synergistic relationships."

"The business knowledge of 20-year-olds and that of 50-year-olds is profoundly different. The technology facility and ability to multi-task among 20-somethings is unparalleled and impressive. But the knowledge, experience, creativity, and business acumen of 50-somethings is also unparalleled and equally impressive in a very different way. Cross-generational mentoring provides one of the most significant ways for integrating these diverse abilities."

Types of Mentoring

In recent years, the typical approach of having a single senior mentor teach a single younger mentee has given way to a variety of additional methods for development. These include:

Managerial mentoring A mentor serves as both teacher and learner to help the mentee meet organizational objectives that require understanding about the unwritten "rules of the game" and how things get accomplished in the company.

Peer mentoring Peers mentor each other, typically in a technical subject area.

Group mentoring A group of individuals engages in a mentoring relationship to achieve specific learning goals. There are many ways to approach group mentoring. Three of the most popular are facilitated group mentoring, peer-group mentoring, and team mentoring.

Facilitated group mentoring A group of individuals shares a mentor or mentors. The facilitator asks questions to ensure a meaningful conversation, shares personal experiences, provides feedback, and serves as a sounding board.

Peer-group mentoring Peers with similar learning needs are brought together. The group is self-directed and self-managed, and sets its own learning agenda so that everyone benefits from the others' knowledge, expertise, and experience.

Team mentoring Together, the individuals on a team articulate common goals and work with one or more mentors, who guide them through a deliberate process to facilitate their learning.

Reverse mentoring In this new and rapidly evolving type of mentoring, a senior person is mentored by a junior person. The mentee becomes the mentor, bringing an element of reciprocity into the relationship.

Things a Boomer may learn from a Gen Xer or Yer include new technology; insights on specific products, services, and customer offers; and perspectives on the company culture and ways of working.

Beyond expertise, one thing a Gen Xer or Yer may learn from a Boomer is connectivity in the company, i.e., who do you need to know to get something done?

General Approach

Mentors and mentees should develop goals jointly to provide focus and performance measures. Through a series of conversations, augmented by face-to-face meetings as appropriate, the mentor will listen, question, coach, and advise the mentee as both work toward meeting established goals.

Tasks for setting up mentorships:

- Identify people with critical knowledge and/or critical mentoring needs.

- Train potential mentors in mentoring techniques.

- Establish opportunities for younger people to interact and meet potential mentors.

- Make sure that mentor and mentee agree on goals, key milestones, frequency of interactions, and "code of conduct."

Leveraging learning styles Not everyone learns the same way, so all mentors shouldn't teach the same way. A discussion between mentor and mentee should be held early on to identify preferred learning styles and to help the mentor recognize which style best fits the mentee.

Managing communication Gen Xers and Yers work many tasks at the same time and can shift quickly from task to task. Many will expect to be mentored while they are doing other things online. Boomer mentors should be open to using tools such as instant messaging if they want to meet a young mentee on his own terms.

Where do we start? Often a mentor's vast knowledge overwhelms the mentee. A preliminary discussion can help both figure out where to begin, what doesn't need to be said, and how to organize needed information into manageable chunks. The last is especially useful when designing mentoring with Gen Yers, who prefer to get their information and knowledge concisely, without a lot of context or history.

Ground rules

- Engage in scheduled and ad-hoc conversations to meet agreed specific goals.

- Hold retrospective learning session at key milestones and at the end of mentorship.

- Managers of the mentor and mentee should encourage growth of both participants.

Good practices

The following mentoring practices have been shared and put into practice by many organizations:

- Manage broader organizational expectations of cost and commitment.

- Agree to performance measures and targets for both the mentor and mentee.

- Make coaching and mentoring a regular part of day-to-day activity throughout the company.

- Encourage and facilitate mentoring relationships (e.g., lunches, mentee assignments, professional networks, and communities of practice).

- Give every high performer a mentor.

- Identify the development of others as a key skill for a successful manager.

- Recognize and reward managers and individual contributors for their skill and commitment to coaching and mentoring.

Common pitfalls

The following barriers and problems in the implementation of mentoring have been observed across many organizations:

- Expectations are not managed, especially around the time commitment required by both the mentor and mentee, and participants are not given license to spend the time required to be successful.

- Mentors are not trained in how to mentor.

- There is an assumption that "one size fits all" when it comes to learning styles.

- There is no application of what is learned.

New ideas

Use social networking tools to un-bundle mentoring (i.e., get answers to 10 questions from 10 different experts).

Companies often teach theory and then send their novices out to practice. Try sending the novices out to do and practice before teaching the theory.

Expand mentoring to those not separated by many levels of hierarchy.

References

Kathy Kram's seminal book, *Mentoring at Work* (Glenville, IL; Scott, Foresman, 1985), is one of the most comprehensive accounts of the dynamics of mentoring relationships.

Useful references can also be found in the following articles and publications:

Paul Harris, "Beware of the Boomer Brain Drain," *Training & Development*, January 2006.

William Seidman, Michael McCauley, "Saving Retiring Knowledge Workers' Secret Sauce," *Performance Improvement,* September 2005.

Lynda Aiman-Smith, Paul Bergey, April R. Cantwell, Mark Doran, "The Coming Knowledge and Capability Shortage," *Research Technology Management,* July-August 2006.

Judith Lindenberger and Marian Stoltz-Loike, *Mentoring and Baby Boomers*, 2005. (http://www.lindenbergergroup.com/art_mentor_babyboomer.html)

11 **Peer Assist**

Description

A peer assist is a facilitated meeting or workshop where peers from different teams share their experiences, insights, and knowledge with a team that has requested help in meeting an upcoming challenge or problem.

Purpose

A peer assist:

- Targets a specific technical, mission, or business challenge

- Acquires assistance and insight from people outside your team and identifies possible approaches and new lines of inquiry

- Promotes sharing of learning and develops strong, and often new, connections among staff

Why it Works

People are more open to knowledge and insights from their peers before they undertake a project or challenge. The key to a successful peer assist is to convene the session after a team has exhausted its internal knowledge, created its plan, and before the start of actual implementation.

Who can help you learn before doing?

- Tap your personal network to find who might have experience in the subject and the particular challenges you are facing.

- Search your company intranet for people with the skills and relevant experience.

- Contact people in relevant communities of practice or professional forums and ask for their help or contacts.

- Consider announcing your intent to do a peer assist by posting the subject on your company's intranet or electronic news facility.

When is a peer assist appropriate?

- When the cost of gathering help leverages significant potential benefits

- When a business unit is facing a challenge about which others may have experience and insight

- When diverse external views can broaden the group's range of options

How to organize a peer assist

- Define the problem or opportunity that you are facing, and decide whether a peer assist is the most appropriate process.

- Write and disseminate a brief description of your need to peers, giving them the chance to self-select for participation.

- Look for diversity, i.e., people who will help your team confront the problem from different perspectives (those with little direct experience can often offer a great deal).

- As soon as possible, identify people who can participate on your selected dates—fitting into their schedules is critical.

- Identify an experienced facilitator who understands the learning process.

- Design the event to ensure plenty of time to reflect.

- Allow the peer assist team members time as a group during the session to analyze their findings.

- Ensure the key lessons and good practices shared during the session are captured. This may require some follow-up work to gather sufficient detail for those who did not participate.

- Agree to a set of actions.

- Make your findings accessible to others outside the group.

A peer assist should be carried out in an atmosphere of help and support. Sometimes a host team already knows what it needs to do and is looking for validation. In these cases, its members still profit from the exercise, but only if the facilitator inspires them to consider new possibilities with open minds.

Generational Considerations

It is unlikely that all peers will be part of the same generation. Thus it is important to consider the knowledge-sharing preferences of everyone involved in a peer assist. A facilitator who understands these preferences will help minimize barriers to knowledge flow between participants, and maximize understanding.

Some things to consider:

- Younger peers are more likely to ask for help before taking on a task that they know will be challenging, whereas Boomers typically require prompting to ask for help.

- Younger peers aren't keen on hearing long stories that provide rich context and background to a lesson or event, but Boomers are used to telling such stories. Gen Yers will want to know two or three things the Boomers think are important. If they want more, they will ask. The importance of distinguishing between sharing (good) and telling (bad) cannot be overstated.

- The venue in which you conduct the peer assist matters:

  Face to face If the assist takes place face-to-face, the facilitator must set rules. Can you multitask or not and why? Traditional guidelines have been "no computer, no cell phone, and no blackberries." Boomers and even Gen Xers may perceive multitasking younger employees as "disrespectful," yet attention to multigenerational differences may convince them that the texting Millenial means no harm.

  Virtual environments How can you build trust in a peer assist when the event takes place virtually? One way to do this is to have the participants share a common, visceral experience at the start of the session and talk about it in a way that informs others of their personal preferences. This provides context, increasing understanding. For instance, each participant might read the same scenario, observe the same video clip, or perform the same brief exercise.

How to hold an effective peer assist

1. Plan early, so the help you receive can actually help you. People are more inclined to use the knowledge they gain from others if they get it before they have committed to a specific plan of action.

2. Share the intent and design of your team/project learning event with those who may have similar needs.

3. Clearly articulate the business problem or challenge for which you need help and the objective of the assist. (Be prepared for these to be reframed in the course of the assist.) Use briefing material to give the team context.

4. Assemble a diverse group with skills and experience tailored to the objectives of the assist—people who will both challenge your mental models and offer options and new lines of inquiry. (Consider inviting people from other disciplines, businesses, and companies.)

5. When participating as a peer in a peer assist, your role is to offer help, knowledge, and experience, and to reduce the workload. Your role is not to criticize or add to the workload.

6. Design the event with enough time to build the peer assist team—experience indicates two days are required to build the relationships necessary for an effective team to address a significant problem or challenge. Contention will raise the level of dialogue, but contention will not occur if the group is being polite or has not socialized enough to create the open environment needed to share their hard-earned personal knowledge. However, not all problems or challenges require deep socialization to elicit meaningful knowledge and advice from peers. If the need is very specific and technical, a successful peer assist can be completed in a few hours, provided the people involved have highly relevant expertise.

7. Be specific. Recommend what the host team should stop doing, start doing, or change in its current plan and approach, and offer options, alternatives, and suggestions on what else they could do based on the collective expertise of their peers.

8. Prepare an action list at the end of the meeting. Ask the host team to keep participants informed of progress as it is made on the items listed.

9. Have each participant consider what he/she has learned from the peer assist and how it will be applied.

10. Explore the desire of participants to stay connected after the meeting—peer assists often kick-start the establishment of new expertise networks and communities of practice.

11. Consider who else might benefit from the lessons learned and share them. Provide contact names for follow-up discussions.

12 **Podcasts**

Purpose

Podcasts are a way to communicate, share, and transfer knowledge to a broad audience through an audio medium.

Description

A podcast is a digital recording of an audio program, such as a radio broadcast, which is then downloadable from the internet to personal audio players. The concept became so popular that the business-information company NOAD declared "podcast" the "word of the year" in 2005.

Though "podcast" is a combination of "iPod" and "broadcast," you do not need an Apple iPod to listen or subscribe to podcasts. Any device that can play MP3 files, from cell phones to portable MP3 players to a computer, can be used for downloading and listening to podcasts. They are no different from MP3 song files.

Benefits of Podcasts

The main benefits of podcasts are accessibility and bandwidth. Podcasts are also second nature to Gen Yers who came of age with MP3 players, and as such are an attractive tool for transferring knowledge to younger workers. Because they are downloaded to personal devices, podcasts can be adjusted to the needs and schedules of their listeners. PodWorx (www.podworx.com), a business podcast consulting provider, explains this in a powerful manner on its website: "With the listen-when-I- want-to capability of podcasting, your customers (and prospects) expect content on their terms, not yours. If you choose not to give voice to your business™, your competitors will."

Audio communication, such as podcasts, can potentially convey more to a receiver than plain text. Some of this richer information contains cues about the source, such as tone of voice, which help to build a social relationship between source and receiver. This provides context, essential for effective knowledge sharing and transfer.

Common Business Applications

Current podcast applications include:

- Business leaders bringing attention to timely issues, such as business goals

- Sharing a recent experience, lesson, or insight that could affect people who may be unreachable through other avenues

- Highlighting new competitor pressure or threats

- Reinforcing key messages

- Training

Business podcasts from Disney, BMW, This Week in Tech, and IBM demonstrate how these organizations are using this method to create opportunities for their businesses.

More examples of business applications can be found in the Reference section on page 53.

Good Practices

Keep a podcast fairly brief (15 minutes or less) or partition it in segments that allow the receiver to listen in "bite-sized" chunks. It's hard enough to get someone to listen to your message, let alone if it takes an hour to "get'" it.

Stories are powerful ways to attract and hold a listener's attention, and they help people remember what you want to tell them. Refer to the storytelling guide on page 57 to learn more about that knowledge transfer method.

Getting Started

To create your own podcast, all you need is a decent microphone, a computer, and a story to share. You can record and edit your podcast using Audacity (audacity.sourceforge.net/), an open-source sound recording software. Interviewing someone in another city or country for your podcast can easily be accomplished with Skype, a voice-over downloadable software program that can also record your conversations in digital format through free plug-ins.

Once your podcast (MP3 file) is ready for sharing, you will need to post your file on a web space from which subscribers can download it to hard drives or portable MP3 players.

Rather than reinvent what others have already created, we recommend *Getting Started With Podcasts*, which can be found at the following website: www.podcastingnews.com/articles/ Getting_Started_With_Podc.html

References

John C. Havens, "Top Ten Business Podcast Applications," About.com, October 1, 2006.

What is a Podcast? From Podcast Alley: www.podcastalley.com/what_is_a_podcast.php

13 **Retrospect**

Purpose

A retrospect is a simple tool for capturing a team's new knowledge after completion of a piece of work.

Description

A retrospect is a team meeting held after an event, activity, or major milestone in a project or program.

Benefits:

- Identification of valuable lessons
- Enhanced team openness and cooperation
- Achievement of closure at project's end

How to hold an effective retrospect

1. Plan the meeting.

   - Don't try to conduct a retrospect by email; it needs to be a face-to-face roundtable or video conference.

   - Hold the meeting as soon as possible after the project ends, ideally within a couple of weeks. Memories fade. If you wait too long, events become post-rationalized.

   - The time set aside for the retrospect will depend on the number of people involved and the duration and complexity of the project. A small project (three to four people, two to four months) can be covered in 60 minutes. A 10-person, six-month project may need four or more hours. A complex alliance between several companies may need two days.

   - Consider recording the event. Although this will take extra effort, it will be a valuable source of knowledge for the future and will help provide details for later documentation. Video can capture knowledge "nuggets" as personal insights. But don't attempt videotaping unless you are prepared to do it right, with expert help. And make sure videotaping doesn't hamper open exchange or disrupt the process.

2. Invite the right people.

   - The project leader should attend, as should the project customer and key members of the team. Potential customers of the knowledge, e.g., people starting similar projects, can be useful if you manage their involvement to ensure their presence doesn't thwart the open flow of knowledge from the team that did the work.

   - Ask the project leader to schedule the meeting. He or she has the most ownership, knows who needs to attend, and may retain influence with the project team.

   - Let attendees know the purpose of the meeting is to make future projects run more smoothly by identifying the lessons of this recently completed project.

3. Appoint a facilitator.

   - You will need a facilitator who was not closely involved in the project; otherwise, the meeting will concentrate on "what we did" rather than "what the next team should do in similar circumstances." If the facilitator is remote from the project, she or he may need to do some homework (such as being prepped by key players).

   - The facilitator should reiterate that the purpose of the meeting is to make future projects run more smoothly. The purpose is not to assign blame or praise.

   - The facilitator should encourage an atmosphere that allows participants to express critical opinions freely. If necessary, introduce "rules of the game." Carefully prepare the project team leader in advance, so that his/her participation doesn't intimidate the team.

4. Revisit the project's objectives, deliverables, and measures.

   • This is the point at which you ask: "What did we set out to do?" and "What did we really achieve?"

   • The facilitator may ask the customer, "Did you get what you wanted?"

   • A helpful team leader may list the objectives in advance and post them on a flip chart to prompt input. When this approach is used, be sure to encourage the team to modify and add objectives as they understood them for the project.

5. Revisit the project plan, process and/or timeline.

   Construct with the team a flow chart of what happened, identifying tasks, deliverables, and decision points. This way you can identify delays, early completions, efficiencies and inefficiencies, and points of confusion about what actually happened. You can then draw an idealized process: how it should have worked.

   Alternatively, construct a timeline that identifies key milestones, deliverables, and events. This helps refresh the memory of the team and may point to areas for further discussion in the following sections. Have the team leader build this in advance on flip chart paper and post it for people to review and discuss. Leave space for people to add items that stood out for them.

6. Ask, "In the context of reaching the objective, what went well?"

   Always start on a positive note. Building on best practices is as important as avoiding repeat mistakes.

   Go around the table, asking each individual what his/her success factors were.

7. Find out why aspects of the project went well and express lessons learned as advice for the future.

   You are getting to the meat of the meeting now. Identify the success factors so they can be repeated in the future.

   Ask such questions as:

   "What repeatable, successful processes did we use?"

   "How can we ensure future projects go just as well or even better?"

   "Based on your success with this project, what would your advice be to future project teams?"

8. Ask, "What could have gone better?"

   There are bound to be areas where pitfalls were identified too late, and where process was less than optimal. Go around the table again with this question. Start with the team leader. If he/she admits that things could have gone better, it sets a precedent for others to speak openly.

9. Find out what the difficulties were.

   The facilitator should ensure that this section of the process does not become a witch-hunt or a finger-pointing exercise. If necessary, remind the participants that the purpose of the meeting is not to assign blame.

   Identify stumbling blocks and pitfalls. The following questions are useful:

   "Given the information and knowledge we had at the time, what could we have done better?"

   "Given the information and knowledge we have now, what are we going to do differently in similar situations in the future to ensure success?"

   "Based on your experiences with this project, what would your advice be to future project teams?"

10. Make sure the participants have their feelings acknowledged.

   To help you access residual feelings of dissatisfaction, begin by asking people for a numerical rating of the project. Ask, "On a scale of one to 10, how satisfied are you with this project?" Then ask, "What would have made it a 10 for you?"

   This will often bring new information into the room from team members who didn't express their views previously. This may be a source of follow-up and further discussion.

11. Summarize the lessons from the project in terms of lessons for teams running similar projects in the future.

   Express the lessons as advice. Express them as clearly and measurably as possible. Ask yourself, "If I were the next project leader, would these lessons be of any use to me?"

   Circulate the lessons, together with other outcomes of the meeting. Ask participants to comment. Make sure no one is misquoted and that the facilitator's wording of the lessons reflects the views of the team.

12. Make a plan for action (optional).

   Some teams will use the retrospect findings to do action planning to:

   • Address lessons that are highly relevant to their team's ongoing performance

   • Pursue things they now want to do differently

   • Further explore and analyze areas that were identified but not thoroughly discussed due to time constraints

   • Capture key actions in a simple table format on a flip chart: What, Who, and By When.

13. Record and publicize the lessons.

   Put the lessons on the organization's intranet or portal and make them searchable. Make sure the context is explained and include links to the people who can explain the lessons and help others adapt them.

Generational Considerations

Make sure the facilitator is adept at soliciting information equally from all team members regardless of age or tenure. Younger workers may feel uncomfortable differing with a senior manager or more experienced team member and may need more prodding. The facilitator needs to create an atmosphere of trust where all perspectives are accepted respectfully.

14 Storytelling

Purpose

Storytelling is used to transfer expertise, typically between people with different contexts.

Description

Storytelling is an ancient way of passing on complex, multi-dimensional information, experience, and ideas through narrative. Stories have many purposes and styles. Knowledge-sharing stories convey the essential details of an experience that stood out for the storyteller—information and emotion, explicit and tacit, core and peripheral context. Well-designed, well-told stories can help others learn from past situations to respond more effectively in future ones. Such stories come in different forms and with a variety of labels, e.g., cases, anecdotes, examples, histories, or simply "experiences."

In the past, information that could be classified, categorized, calculated, and analyzed often was most highly valued in organizations. But much important organizational knowledge, wisdom, and insight cannot be abstracted into categories and calculations. Organizations wanting to retain and share this essential but less structured information find that stories can be invaluable.

Common Types of Stories

- Stories can convey organizational norms and values across generations by emphasizing unique aspects of an organization's past and placing them in context for the future.

- Practice-based stories about past work experiences can help share the embedded, highly contextual knowledge necessary to solve difficult real-world problems unaccounted for by formal organizational procedures.

- Stories of complaint or commendation about people, management, or the organization itself can reveal the competence, commitment, and trustworthiness of those parties.

- Personal stories can convey one's own trustworthiness, as well as signal one's trust in others.

- Rational arguments rely on a common frame of reference or mental model. Stories can help us replace inadequate or outdated mental models by appealing to us at an emotional or intuitive level.

- Stories that highlight unexpected occasions can prompt emotional and immediate responses; they expose our lack of control over our lives but also offer a way to understand and respond to our futures.

In recognizing the power of convincing stories, we should not overlook their "dark side"—these very properties also allow stories to be used as tools of deception and manipulation. For example, stories can be used to perpetuate biased or dated perspectives, or to lull their listeners into comfort, apathy, or resignation rather than action.

Examples

Following are two stories from Kent Greenes' experience about the role of stories in organizations. They illustrate how stories can be a vivid force in organizational life.

"Go Slow to Go Fast"

At British Petroleum, our retail business wanted to enter the Japan market. We had never been in that market, so the international team responsible for creating the business in Japan hosted a peer assist to learn from other retailers in BP before implementing the plan to enter this new market. Peers came from all over the world to share and transfer their experience and offer new options to start up retail gas stations in a new market. The home team didn't want to spend much time on it but we convinced the leader that the session should take two days. On the first day, the home team showed the peers their proposed station sites, visited the competitor sites, and shared their building plans and challenges. When they asked for the peers' input, the quality and amount of input from the visiting peers was very low. However, in conversations on the side and in private, they all were saying it was too mature a retail market for our typical new entry approach, plus there was a "gas war" going on in that region—but nobody dared say they thought the Japan team was making some serious mistakes in their approach to entering the

market. That night after dinner we went to karaoke bars then to a Japanese bath . . . We all had to get naked, as is the tradition in Japan. The next morning, the amount of feedback, storytelling and sharing was phenomenally different from the day before. The peers honestly and openly shared their skepticism and their own tough experiences. As a result, the Japan team modified its plan in a matter of days and went on to an accelerated, successful entry to the market. I tell this story because you'll remember it . . . getting naked in Japan. It's about the importance of socializing and making the time to build relationships and trust, so that you can share your knowledge truthfully. Sometimes you have to go slow to go fast.

"Handovers: An Individual Matter"

At BP, you'd think we'd have refined shift handovers, but it wasn't so. Handovers at one oil rig were correlated with plants shutting down unexpectedly, which wasn't good at all. We asked the people with hands-on experience what they'd discovered about the handover process. After hearing several process technicians' stories and sharing those across the organization, the operators modified their procedures in a way that fundamentally changed the way shift handovers were handled. In some cases the new procedure was more costly, but it radically reduced plant shutdowns so it was cheaper in the long run. Each technician's story gave us a unique perspective on the handover process. Capturing an insight or experience that someone offers in a story can help you think about things differently—but listeners still need to use their own brains!

"Rats and Parachutes"

(from a software company executive)

When I found everyone very uncommunicative and uninvolved during an off-site retreat, I requested anyone to tell us a story. No one spoke up, nothing. So I told one about how I went to China and adopted my little girl. After that, one man told a story about his pet rat escaping while on a plane to Paris and causing chaos. Then another man told of his skydiving activities. That amazed them. For two hours, people told stories that had nothing to do with work. They continued talking through the coffee break. They had finally made connections through their storytelling. Now stories from this off-site experience have become embedded in the culture of the IS organization and unify the divisions.

Using Stories Effectively

Sharing and transferring knowledge effectively through stories requires attention to the design of the story (story-crafting), the delivery of the story (storytelling), and the response of the audience (story-listening).

Story-crafting

Effective knowledge-transfer stories are intentionally crafted for the prospective audience. A good knowledge transfer story should be simple and accessible. Like a fable, the story is stripped of excess detail and designed to make specific points. This is especially important when engaging Gen Yers, who generally want to get to the point quickly.

The intended audience should help the storyteller determine the appropriate level of detail and technicality. Simplicity makes a story easy to remember and easy to introduce in different circumstances. For the best impact, the story situation also should be accessible and highly relevant, involving a situation that the listener could possibly experience himself.

Good knowledge-sharing stories are open-ended rather than closed. Closed stories signal the finality of the knowledge or insight. Open stories allow for alternative interpretations, encouraging listeners to apply the lessons in their own contexts.

Storytelling

The impact of a story will depend who tells it and whether it is shared in oral or written form. But storytelling must also account for the size and heterogeneity of the potential audience.

First-person stories are often experienced by audiences as passionate and authentic. However, made-up first-person stories are often recognized as inauthentic. They sound like lies. Rather than claim a false experience, tell the story in third person but focus it on a single clear protagonist.

Stories that are written down can reach a larger audience, but they can suffer problems in their disconnection from the teller, and they can get old. Written stories should be regularly revisited and updated or rephrased to reconnect them with the language and issues of the present.

The use of more than one medium can be valuable in helping a story to stay vivid and reach a larger audience. The incorporation of video clips of stories can capture unspoken nuances, making the speakers' knowledge more real to listeners.

Some people are natural and effective story tellers. Linda Coffman, former manager for learning management in Procter and Gamble's human resources department, has researched storytelling as a knowledge transfer method. In her words:

"It seems logical that we can't expect all our knowledge experts to be good storytellers. Four storytelling or crafting approaches that I know are:

- a guided interview with a near-360 degree view;

- a story told using a lessons-learned format;

- a Q&A session between the knowledge expert and a knowledgeable co-worker; and

- a factual story told using a common story model.

"The guided 360 interview includes a top leader of the subject area who describes the key value the expertise brings to the business, including why the knowledge is kept in-house. Peers of the knowledge expert are interviewed about how the knowledge expert helps them do their job and meet their commitments. Finally, the knowledge expert is interviewed about some of the key knowledge he/she possesses, how he's used it and how he came to acquire it. These interviews are structured and the interview guide can be sent out in advance.

"The lessons-learned story is a recounting of a past experience when the results were less than satisfactory. In this case you want to look for some balance of completeness. Not too much detail so you don't get lost, yet enough detail to cover the problems encountered. . . .

"A factual story using a common story model requires the storyteller to introduce the protagonist, or main character, and then quickly introduce the challenge. Following this opening, the challenge will erupt into a definite problem. As the protagonist works through the problem, we learn about the insight uncovered to resolve the problem and then we end with an affirmation of the resolution and the learning which led to the resolution."

Generational Considerations

Gen Yers make it clear they aren't interested in listening to long and colorful stories told by Boomers, but this doesn't mean they won't find value in stories. There's something about how a story is offered and shared, as well as when and where it is shared that makes a critical difference in its effectiveness as a knowledge transfer method. Further research needs to be done in this area.

Current status: What are companies doing?

Storytelling as a leadership behavior is recognized and accepted, with many published works and recognized experts available to company leaders as consultants. However, storytelling as a knowledge management technique is still emerging. Obvious challenges are the story-crafting process and the methodology for cataloging the story to facilitate search and retrieval of specific knowledge. Some potential approaches can be found in the examples below:

NASA has an internal publication called ASK, or *Academy Sharing Knowledge*, that publishes stories every two to three months. Experts at NASA "believe that stories recounting the real-life experiences of practitioners communicate important practical wisdom," according to ASK managing editor Don Cohen. On the NASA website, archived documents for large knowledge management storytelling meetings are available with PowerPoint slides.

Michelin uses a storytelling methodology combined with an innovative technology called IPOV (Interactive Point of View). The IPOV technology provides a video recording of the story being told with a rolling text of the story as it is relayed. The text form of the story can be accessed by a full-text search. This approach can effectively solve the capture and retrieval challenge to make stories accessible and visible.

Procter & Gamble has a designated corporate storyteller who has collected or written 100 stories in the past decade. The stories are in text form, but the company is experimenting with digital and artist-developed formats for communicating them.

A Common Story-Form Format

Meet the main character, who lives in a clearly described time and place. The main character usually has something to learn. The narrator may be the main character.

The main character may have flaws of judgment or flawed information. He goes through a crisis, through which he either gets help or learns something new that helps him survive the crisis. This help or knowledge could never have been acquired without the critical event.

Once the new insight has been acquired by the main character, life changes. The end of the story may incorporate a recurrence of the crisis, coped with successfully this time, or a "forever after" affirmation.

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Figure 10
A Common Story-Form Format
(from *Telling Your Own Stories*, Donald Davis, 1993. August House Publishers)
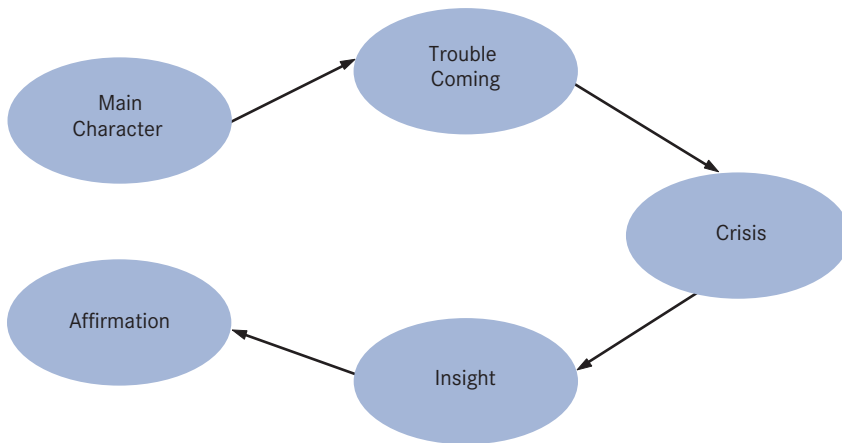
15 Wikis

Purpose

Wikis facilitate fast creation, sharing, and transfer of collaborative knowledge content in a highly accessible and visible manner.

Description

Wiki is short for "wiki wiki web," from the Hawaiian expression "wiki wiki" meaning fast or quick. It is a website where anybody can create and edit a web page. The structure is not predetermined; it is invented and evolved by the community that contributes to it.

Wikis make it easy to author content anytime and from anyplace. While they are particularly suited to teams for sharing good practices, lessons, and projects, visitors to the site can add, edit, or delete content. This means a team or organization can benefit from people other than the "usual suspects," that is, people who have relevant knowledge to share on a specific topic but who wouldn't normally be tapped for their contribution in the course of a piece of work. In practice, all input to the site is usually filtered by an individual or group responsible to ensure that inappropriate contributions do not appear on the site.

Perhaps the most widely known wiki is Wikipedia (www.Wikipedia.org), an online encyclopedia written collaboratively and edited, corrected, and updated by its readers. To view a Wikipedia on wikis, click on this URL: en.Wikipedia.org/Wiki/Wiki. Internet search results for many basic topics often have a relevant Wikipedia site listed near the top of the result stack.

Unfortunately, the flexibility and openness of this method of knowledge transfer raises concern about the nature and validity of the content. However, all entries are tracked and all changes to content are recorded. As a result, people tend to make legitimate and accurate contributions and modifications. In practice, inaccuracies or inappropriate content are quickly addressed because of the volume of visitors and ease of changing what has been added.

Generational Considerations

Wikis are second nature to Gen Yers, and are gradually emerging as a knowledge transfer method. "Gamers have embraced the technology of wikis as a way to quickly exchange information, and the speed and ease of updating wikis has accelerated their adoption within several organizations as a mechanism for collaborative knowledge sharing and transfer," writes Karl Kapp in his paper, "Techniques and Tools for Transferring Know-How from Boomers to Gamers." Kapp points out that the anonymity of contributions in a wiki can minimize the age and gender bias that is sometimes present in diverse teams or groups.

Information that Boomers can post quickly for use by younger workers includes:

- frequently asked questions from young people in the organization;

- links to information Boomers find useful to make things happen in their job and company; and

- critical information or specific knowledge for re-no-use and adaptation.

Common Wiki Applications

- Enable teams and groups to form and work from the bottom up, and multiple groups to develop and transfer collective knowledge from a broad range of contributors, stitching together a highly visible and transparent fabric of shared knowledge and experience.

- Remove barriers to groups of interested people coming together, "lighting up" collaborative environments.

- Make it easy for digital immigrants to discover and link to sources of knowledge, share and transfer knowledge, and develop and publish knowledge.

- Enhance project knowledge management: project tracking, brainstorming, coordination of ideas, project notes repositories, knowledge bases, and staff directories.

- Enhance personal knowledge management, serving as a sketchpad to collect ideas, addresses, dates, tasks, and bookmarks.

- Enhance software development: collaborative documentation, tracking "bugs," and coordination for open-source projects.

Kapp provides an illustration of a successful wiki application:

> One example is the Leukemia & Lymphoma Society, the world's largest voluntary health organization dedicated to funding blood cancer research, education, and patient service. With 66 chapters spread across the United States and Canada, the Society faces unique challenges around capturing and disseminating best practices—challenges compounded by staff turnover, varying levels of computer expertise among staff, and the need to disseminate information in a manner compatible with existing computer systems. In an initiative spearheaded by the society's eMarketing team, the organization has implemented a wiki to share best practices among chapters. The single online location and easy-to-use interface enable staff from all chapters to instantly post, review, and update best practices or training information, building a knowledge base available 24/7 to anyone in the organization.

Getting started

Instead of re-inventing what many people have already created, we recommend *MediaWiki for Dummies - Everyone's talking about Wikis; here's how you can get involved without being a techie* by Demir Barlas, Line56.com

Good practices

Ask a Gen Yer to help you get started. Don't underestimate the level of effort and resource required to monitor a wiki that is accessible beyond your normal span of control or readership. Since anyone with access can add content, contributions can take place 24/7. This means that someone should be monitoring the inputs at all times if the openness of a specific wiki is a concern.

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Company Examples

The following knowledge transfer issues and actions by research working group members illustrate that knowledge transfer initiatives can begin at many points along a continuum, from getting started to actively planning, to execution of specific projects to solve a business vulnerability.

I. Black and Veatch

This company faced a serious potential knowledge drain in the senior leader and technical expert ranks. During participation in the Research Working Group, the member received buy-in from the executive team to move forward and develop parameters for a formalized late-stage career transition program for key leadership and technical talent. She began by looking at knowledge transfer and ended by designing a phased retirement program to retain senior leaders and technical experts longer, and incorporated a formal knowledge transfer element into the phased retirement program. Program facets include:

- Identification of potential participants via succession planning process and career development discussions

- Development and implementation of a transition plan specific to individuals

- Development and implementation of a detailed knowledge transfer plan for each impending critical transition

- Assessment of compensation impact on benefits and determination of appropriate action

Examples of alternative assignments a phased retiring employee might undertake include:

- Knowledge masters talent bank broker

- Training instructor or guest subject matter expert

- Client relationship management

- Targeted business development

- Proposal pursuit

- Portion of pre-transition job

Black and Veatch has identified several benefits of the program to the business, including: time to rationalize succession planning, lower hiring and retention costs, preservation of values, a more stable workforce, and a supplement to a shrinking younger talent pipeline.[15]

II. Dade Behring
(now known as Siemens Healthcare Diagnostics)

While participating in the Research Working Group, the member from Dade Behring (now Siemens Healthcare Diagnostics) worked closely with the progam co-directors to pilot the knowledge capture with a senior employee (a director in research and development) who planned to retire shortly. The effort focused on applying the knowledge elicitation method as part of a broader knowledge capture process.

An outcome survey done after the program began indicated that all involved received value from the process. On that basis, the company's human resources department has recommended future use of this approach to key individuals at or nearing retirement eligibility. Some responses from those surveyed give a flavor of the feedback:

> *"In addition to using the process for positions where the roles and responsibilities are less 'defined,' I would recommend using it for other positions as well. It would be a good way to identify specifically what makes a successful leader succeed and what makes an unsuccessful leader fail."*

> *"I think it could help any group manage a similar situation. Gathering multiple perspectives on the position seems particularly valuable when the person currently holding the position is retiring or will otherwise not be available to help mentor the new person."*

---

15 Based on a presentation on "Late Stage Career Transition" by Janet Schonwetter, vice president of talent management, Black and Veatch.

"I think the process has the potential for ensuring a consistent, thorough transition and an evaluation of job value."

"Good impression. It was nice to be able to provide input to the functional organization that would help her replacement identify expectations of other functions."

The following lessons emerged from the pilot project:

- Scheduling and performing elicitation interviews requires significant time and effort. And that doesn't include the time to distill the transcripts into concise "nuggets" of insight.

- Elicitation interviews (that take a 360 degree approach involving managers, peers, and other sources) are a good way to assist in the retirement transition process. The benefit to the retiring incumbent and those being interviewed is the morale boost that comes from someone caring enough to ask their opinions and valuing what they have to say.

- Senior level support facilitates acceptance by the functional group.

- Elicitation interviews work well for carefully selected positions that require comprehensive knowledge harvesting, and are not useful for positions that require hands-on mentoring or shadowing.

- This technique provides an opportunity for senior leaders to capture situations where judgment and business intuition play a role in success.

- Harvesting and placing final distillations on a website is the most useful way to broadly and efficiently share the information.

- Providing all questions in advance helps to prepare participants.

- It is challenging, to say the least, for one person to serve as interviewer, harvester, and distiller.

- There is a high level of emotionalism associated with this process.

- There is energy at all levels to participate in the interviews, once the interviewees start talking.

- Intangible benefits to the incumbent (who is retiring) and the recipient (successor to the incumbent's role); provides a standard structure for collecting and sharing information.

- There are benefits to the person(s) being interviewed. Many find it a real morale booster that someone cared enough to ask their opinions.

American Express Company (Amex)

While participating in the Research Working Group, the Amex member worked closely with the co-directors to develop a program for knowledge transfer for people close to retirement. This will allow individuals to remain with the firm for a longer period as they un-bundle responsibilities and transition from their current roles.

Coaching and teaching are some of the ways that employees can leave legacies as they move to full-time retirement.

A key challenge to ensuring the success of knowledge transfer is support of line and senior management. To meet this challenge, the Research Working Group co-directors collaborated with American Express to develop a self-documentation method of knowledge elicitation that would reduce the hurdle to knowledge capture and transfer as employees phase to retirement.

Figure 11
Example of how job redesign facilitates the phased retirement period

The employee gradually reduces his work hours by transitioning activities
while increasing his focus and goals on knowledge transfer.

Role is re-designed and unbundled to facilitate reduced work schedule and provide time for knowledge transfer

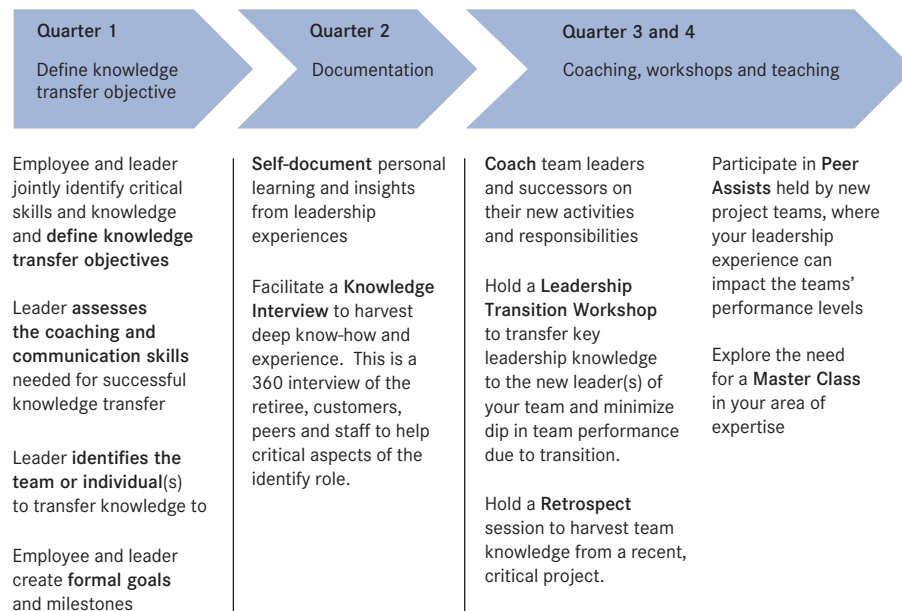| Q1	Q2	Q3	Q4

Non-core activities reduced

People leadership transitioned

Project work delegated

Master Classes - Teaching

Unique SME roles

Mentoring and Coaching

Retrospects and workshops

Documenting

Role enhanced and expanded to facilitate knowledge transfer to next generation

Time

Proprietary courtesy of American Express

Figure 12
Example of knowledge transfer activities during phased retirement

Quarter 1

Define knowledge transfer objective

Quarter 2

Documentation

Quarter 3 and 4

Coaching, workshops and teaching

Employee and leader jointly identify critical skills and knowledge and **define knowledge transfer objectives**

Leader **assesses the coaching and communication skills** needed for successful knowledge transfer

Leader **identifies the team or individual**(s) to transfer knowledge to

Employee and leader create **formal goals** and milestones

Self-document personal learning and insights from leadership experiences

Facilitate a **Knowledge Interview** to harvest deep know-how and experience. This is a 360 interview of the retiree, customers, peers and staff to help critical aspects of the identify role.

Coach team leaders and successors on their new activities and responsibilities

Hold a **Leadership Transition Workshop** to transfer key leadership knowledge to the new leader(s) of your team and minimize dip in team performance due to transition.

Hold a **Retrospect** session to harvest team knowledge from a recent, critical project.

Participate in **Peer Assists** held by new project teams, where your leadership experience can impact the teams' performance levels

Explore the need for a **Master Class** in your area of expertise

Proprietary courtesy of American Express

Procter and Gamble (P&G)

P&G discovered its knowledge transfer program in a marketing function. "Memory Insights" focused almost exclusively on the information technology aspect of gathering and archiving documents.

An early lesson from participation in the Research Working Group: it's the steps before and after developing a knowledge content repository (knowledge harvesting and transfer/application) that are most important. Armed with this knowledge, Procter & Gamble's knowledge management staff piloted the knowledge elicitation method, identifying relevant questions to ask their marketing specialists and potential customers. From this experience, P&G learned that the knowledge elicitation and distillation process requires a significant expenditure of effort and the involvement of knowledge harvesters who understand the subject and its context.

The company is now focused on Boomer exit impact on Gen Y and has just completed a social network study to identify people in the company who have the kind of knowledge needed (the study found that in 26 CoPs, the top 10 "connectors" handle 50 percent of requests). These are key people the company does not want to lose. P&G has begun to experiment with introducing new techniques such as wikis as a way to break down silos and facilitate knowledge sharing between senior leaders and other key employees, including younger talent.

Northeast Utilities

At the start, this RWG member was working on the best way to introduce the knowledge transfer concept to the business units as part of a 5-year business plan. Under the banner of workforce planning, the member created a business proposal and briefing, (see page 15) of this report which was accepted and put into action. The following set of accomplishments resulted at the corporate and operating company level:

- Built a 5-year plan (2008-2012) focused on corporate talent and leadership development, and how knowledge transfer supports this—the plan includes knowledge transfer workshops, provides start-up support for two

Figure 13

Source: Northeast Utilities
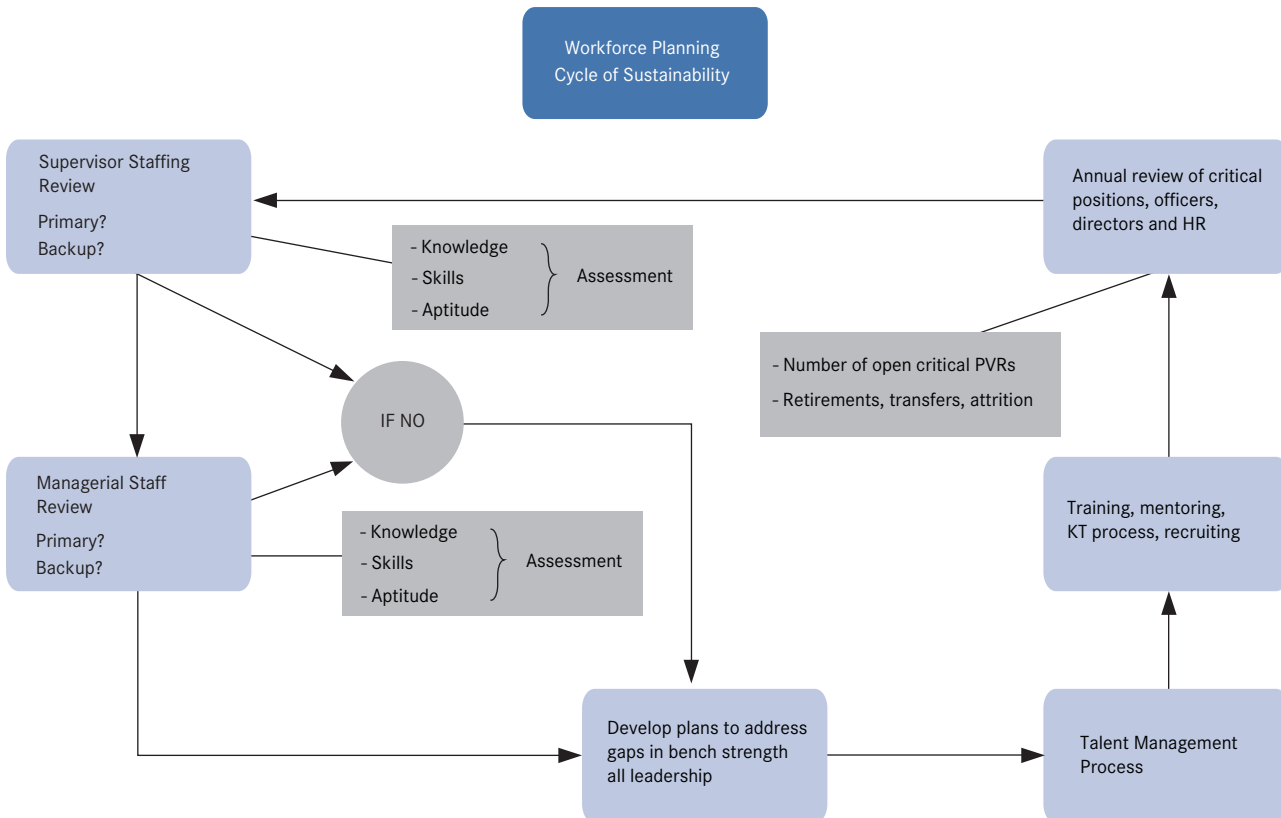
CoPs, and some technology infrastructure. The plan was accepted, built into the HR strategy, and funded.

- Transferred knowledge to two gas project engineers on four situation-based examples and 25 explicit tasks involving critical knowledge and decision making. Developed master list of knowledge requirements to perform job.

- Captured critical situational knowledge for the engineers and identified a storage area for it within Lotus Notes, a commonly used IBM software platform. Automatic annual review for accuracy and applicability to follow.

- Breathed new life into the mentoring concept by formalizing a knowledge transfer process for two positions.

- Transferred knowledge to one electrical maintenance supervisor on 10 critical knowledge aspects across three areas: substation, circuits, and work center knowledge. Captured and stored the 10 aspects in a database with automatic annual review for accuracy and applicability.

- Developed a generic process with documentation for knowledge capture and transfer applications, which can be utilized to duplicate the effort for other critical positions.

- Identified critical positions where knowledge loss could affect the organization.

- Completed an employee survey that indicates employees are also worried about loss of knowledge, and had recent inquiries from senior leadership about this as a concern and risk; however, employees are also saying they are going to be staying longer due to the recent concerns about the economy, which may reduce the organization's motivation to take action in the short- to medium-term.

- An important aspect of the NU approach was to integrate knowledge transfer into the workforce planning process, as depicted in the chart on page 66 (Figure 13).

The following learning emerged from the NU knowledge transfer initiative:

- There is no "magic bullet" to replicate this process quickly—a significant amount of time/effort is required to do this well.

- Knowledge transfer is only a small piece of an integrated workforce planning strategy.

- This is not a self-sustaining process—it will not be effective unless we make it a priority and find ways to maintain our energy level/commitment to formalized knowledge transfer/mentoring.

- The maintenance of information/knowledge is very important—it will quickly become "stale" and hold little value if not maintained. Thus it is essential to make sure people know critical knowledge repositories exist for their jobs and can easily locate them.

Hess Corporation

Hess used the Research Working Group as a learning tool to gather information to inform internal planning. Like many companies, Hess has hired many Gen Y employees and asked Boomers to mentor them. At the last meeting of the group (January 2008), the two members from Hess said they felt confident about going forward and creating an action plan for the company.

Hess expects to produce and present this plan to senior management over the next year.

Appendix 2

Glossary

Apprenticeships a system of training individuals who are new to a complex skill or craft; most of the training is done on the job with an employer who helps apprentices learn their trades. Refer to Wikipedia for a more detailed introduction to this knowledge transfer method: en.wikipedia.org/wiki/Apprenticeship

Baby Boomers people born 1946–1963 as part of the massive increase in the birth rate that began after World War II. They are competitive, confident in their ability to change things for the better, optimistic and idealistic, but realize that loyalty is "dead." They understand the history of the organization and are good team players who like to lead and to be recognized for their wisdom. "Late Boomers," those born between 1955–63, are beginning to be studied by social scientists and differentiated from older or "Early" Boomers.

Digital knowledge repository An online "container" of content used to convey what is known about a specific topic or practice. The most effective use various forms of media (audio, video, and simulations) in addition to documents to facilitate understanding and uptake of the content.

Gen Yers/Millenials people born 1983–present. They are tech-savvy, value diversity, and have a global perspective. They want lots of feedback, expect managers to help them develop, and don't expect to stay in one job or career for very long.

Gen Xers people born 1964–1982. They have seen much failure in public and personal institutions, and trust themselves rather than institutions. They tend to be skeptical, independent, and in search of work-life balance. They dislike rules, red tape, and corporate politics, and they embrace "business casual."

Learning history A detailed account, intended to transfer knowledge and insights in a manner that enables others to learn from the experience or set of experiences. It is often written in narrative form, using reflective interviews and storytelling to convey the facts and observations affecting the development of a person or group under study. For more information on this knowledge transfer method, refer to *Learning Histories: A New Tool For Turning Organizational Experience Into Action* by Art Kleiner and George Roth, ccs.mit.edu/lh/21CWP002.html

Serious games Computer games used to train professionals in a variety of workplace capabilities, including decision-making, project management, change management, and information analysis.

Wikipedia The biggest multilingual free-content encyclopedia on the internet. Authored collaboratively, it is often a good place to get basic information, albeit information that is not validated by formal methods.

About the Authors

Diane Piktialis, Ph.D. is a Research Working Group and program leader at The Conference Board, where her work focuses on multigenerational and aging workforce issues. She has more than 30 years of experience in program and product development. Piktialis was formerly work-life product director and an expert on mature workers at Ceridian Corporation. Prior to that, she was vice-president at work/family directions, where she created the first U.S. corporate elder care program. She is past director of policy and program development for Blue Cross and Blue Shield of Massachusetts, and past assistant secretary at the Massachusetts Executive Office of Elder Affairs. Piktialis has published widely in such journals as Business and Health, the Journal of Aging and Social Policy, Benefits and Compensation Solutions, Compensation and Benefits Review, and HR Executive, and is past chair of the business forum on aging of the American Society on Aging.

Kent A. Greenes, who serves as a program director for The Conference Board Learning and Knowledge Management Council, is an internationally recognized expert on knowledge management. His recent clients include Save the Children, the U.S. Army, NASA, Northrop Grumman, and the Defense Intelligence Agency. Prior to starting his own consulting firm, Greenes worked as chief knowledge officer at SAIC, whose clients included Unocal, Frito Lay, and NORTHCOM. Prior to that, he worked for 17 years at British Petroleum, where he started as a geophysicist and eventually became head of knowledge management. He initiated and directed BP's global Virtual Teamwork Program. Greenes is executive in residence at George Washington University, a faculty member at California State University at Northridge, and on the advisory board of several companies and organizations, among them Tomoye, KMPro, and the U.S. Army Battle Command Knowledge System.

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About This Report

Bridging the Gaps: How to Transfer Knowledge in Today's Multigenerational Workplace has been developed as part of The Conference Board Mature Workforce Initiative. This Initiative is committed to helping employers engage and develop mature employees within the rapidly changing multigenerational workplace. Our evolving work is validated by frequent interaction with our 2,000 member companies as we respond to their emerging business issues.

Funding for the Initiative was generously provided by The Atlantic Philanthropies.

The Atlantic Philanthropies are dedicated to bringing about lasting changes in the lives of disadvantaged and vulnerable people through grant-making. Atlantic focuses on critical social programs related to aging, disadvantaged children and youth, population health, and reconciliation and human rights.

We invite you to learn more about the Mature Workforce Initiative by contacting Katherine Solis at 212-339-0482, or by e-mailing her at katherine.solis@conference-board.org

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PUBLICATIONS

Grey Skies, Silver Linings: How Companies are Forecasting, Manging and Recruiting a Mature Workforce, Research Report 1409, 2007.

Your Brain at Work: Making the Science of Cognitive Fitness Work for You

Boomers Are Ready For Non-Profits But Are Nonprofits Ready for Them? Literature Review, 2007.

Age and Opportunity: Planning Strategically to Get the Most Out of a Maturing Workforce, Executive Action 187, April 2006.

Managing the Mature Workforce, Research Report 1369, 2005.

Phased Retirement after the Pension Protection Act Research Report 1402, 2007.

Putting Experience to Work: A Guide to Navigating Legal and Management Issues Relating to a Mature Workforce, 2007.

Strategic Workforce Planning: Forecasting Human Capital Needs to Execute Business Strategy, Research Report 1391, 2006.

We've Studied Older Workers to Death. How Come We Know So Little About Them? The Conference Board Review, Volume XLIV, No. 6.

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