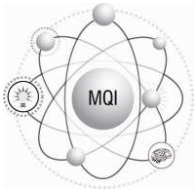

Knowledge Management, Learning and the Knowledge Worker

by David Bennet[1]

Main Topics: Overview; The Growth Path of Knowledge Sharing; Create a Shared Vision; Build the Business Case; Demonstrate Leadership Commitment; Facilitate a Common Understanding; Set Limits, Share New Ideas, Words, and Behaviors; Identify the Strategic Approach; Develop the Strategy; Measure and Incentivize; Provide Tools; Promote Learning; Envision an Even Greater Future.

This paper addresses the relationships among three topics of current interest that are often addressed separately: KM, learning, and the knowledge worker. When considered together, these three areas form a powerful force for improving organizational performance and accelerating the career growth of individuals who work primarily with knowledge.

There is considerable literature in each of these three areas. The recent attention given to KM has resulted in the recognition of the value of knowledge in improving organizational performance. Learning, both organizational and individual, has seen a resurgence in popularity, driven by the accelerating pace of market changes, the Internet, the opportunities offered by virtual learning, and books such as *The Fifth Discipline: The Art and Practice of the Learning Organization* (Senge, 1990). The knowledge worker is now recognized as a major part of the workforce; that is, those workers that use their experience, education, and mental capacity to deal with the problems and opportunities arising from complexity, uncertainty, and rapid change. Understanding complexity demands knowledge. Making decisions under conditions of uncertainty requires a KM approach to ensure organizational agility and knowledge sharing. Rapid change places high priority on learning and flexibility. Many companies living on the forefront of the emerging landscape have recognized the importance of these three factors. Each of these factors is interdependent with the other, and they are all consistent and synergistic with each other. In a culture that needs workforce competency and empowerment, the growth of KM provides a foundation to leverage and accelerate the improvement of both learning and knowledge worker performance.

Knowledge management is a systematic approach to getting an organization to make the best possible use of knowledge in implementing its mission. Learning, individual and organizational, serves to keep knowledge workers and their organization up to date with changes in the external environment while creating energy, enthusiasm, flexibility, and collaboration among knowledge workers. It is with the knowledge worker that both innovation and action occur. Working in a knowledge-centric and learning culture, knowledge workers, individually and in groups, can create, leverage, and apply knowledge to meet changing needs. Knowledge management provides the emphasis, the enabling information technology, the processes, and the

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attention to help knowledge workers learn, collaborate, and implement the four major processes—creativity, problem solving, decision making, and taking action. Conversely, knowledge workers can support the objectives of KM and actively increase their own performance by sharing their knowledge and facilitating organizational learning.

It is clear that each of these three aspects of the knowledge organization both supports and needs the other two. The challenge is to bring learning into the knowledge organization and—using the gains that KM and learning techniques can provide—assist those knowledge workers who recognize the need and payoff from managing their own knowledge. Since knowledge management is the foundation of this book, this chapter focuses on learning and the learning processes that help knowledge workers keep up with the fast changing world. It also provides stories of successes.

The Changing World

The past several decades have led to two major changes in the working world. The first is a significant increase in the number of people in the workforce that spend most of their time perceiving, creating, thinking, and acting on data, information, and knowledge. To distinguish them from laborers, Peter Drucker tagged these individuals as knowledge workers (Drucker, 1989). A second major trend is the nature of the environment in which both business and governance is conducted. The landscape may be described as one composed of an increasing rate of change, greater uncertainty in predicting future events, and massive complexity of our systems. Confusion, ambiguity, and anxiety are often direct consequences of this landscape. These trends are expected to continue, and place additional burdens on knowledge workers and organizations in the future.

These two trends, together with their consequences, are putting pressure on leading edge organizations to reflect on their structure and take action to undergo a transformation that will permit them to work more effectively within their environment. Examples of such actions are the recent popularity of total quality management, the transfer of best practices, the rapidly rising interest in KM and organizational learning, and the search for new leadership characteristics and models. The common themes underlying the current and future challenges can be understood as the need for the workforce to possess the *knowledge* to respond effectively and the critical role of *learning* to ensure that knowledge keeps up with the rapidly changing environment.

Some Baseline Definitions

We understand *knowledge* to be the human capacity (potential and actual) to take effective action in varied and uncertain situations. Knowledge is tied to action because it is only through action that changes can occur and results be obtained. Tying knowledge to action recognizes the importance of tacit and implicit capabilities to take actions. Knowledge also consists of facts, concepts, principles, laws, causal relationships, insights, judgments, intuition, and feelings. It produces understanding and meaning to a situation, often considered as know-how and know-why.

Learning is considered to be the creation and acquisition of knowledge, both potential and actual. Thus, learning and knowledge are closely related but not identical. Learning is a process that creates new meaning from experience and new capabilities for action. Knowledge may be a process (taking action) or an asset (capacity) residing in the minds of knowledge

workers. Often, we do not know what we know until we say or do something. Knowledge, like memory, is often created and brought forth from the unconscious mind when we need it.

A *knowledge-centric organization* is one in which knowledge is recognized as a key success factor and is systematically managed through KM best practices. When maximum synergy exists between individuals in the workforce and KM, the organization amplifies its resource effectiveness, thereby providing sustainable competitive advantage and performance excellence. For this to occur, the organization must be able to sustain a dynamic balance wherein the individual and the KM system continuously adapt to each other through cultural expectations, flexibility, and empathy. By *culture*, it is meant the set of beliefs of employees about how the work should be done and what behavior is expected. There are things that the worker can learn, know, and do that will significantly impact organizational learning and performance. At the same time, there are many things the organization can do to support and help their knowledge workers perform more effectively. Both parties will benefit from continuous collaboration and support. As the environment becomes turbulent, nonlinear, and complex this relationship between knowledge workers and their organization takes on even more importance. Over the past decade, KM has grown up and is now a significant part of many knowledge organizations. The partnership of KM, learning, and the knowledge worker is coming into its own, as we will demonstrate in several examples.

Using these concepts to build a common framework for understanding, there are a number of ways that individuals can learn and some areas that are vital to the success of organizations at the forefront of this new world. We will explore the mutual interdependence between learning and the knowledge worker through a discussion of e-learning, action learning, and accelerated learning. In addition to the specific references that follow, the reader interested in learning and adult performance should consider the following: Druckman and Bjork, 1994; Merriam and Caffarella, 1999.

Knowledge Workers

Knowledge workers do not always work in organizations that recognize the value of knowledge and have processes and technology that support and leverage the creation and application of it. Often, organizations need to be made aware that their performance is determined by the day-to-day actions of all employees. If a clear line of sight from these actions to the mission and purpose of the firm can be made visible, the value and contribution of knowledge workers can be understood. This line of sight is best seen as the interplay between KM, learning, and knowledge workers. Knowledge workers take action because someone makes a decision to do so. That decision, in turn, is the result of some existing situation that needs to be changed. For nontrivial situations, problem solving can become challenging and generate alternative options often as the result of creative thinking and innovative ways of viewing a situation. Knowledge management provides the environment, learning keeps the knowledge up to date, and the knowledge worker both creates and acts on that knowledge.

There are four major processes used in knowledge organizations: creating ideas, solving problems, making decisions, and taking effective actions. Each of these processes can be implemented by an individual knowledge worker or by a team of workers. Each process presents an opportunity for knowledge workers to learn and increase both their knowledge and experience. Teams are particularly effective as learning experiences because many ideas and viewpoints are presented, and dialogue and discussion can help clarify questions and

misunderstandings that participants may have, often leading to "a-ha experiences." To get the maximum learning from team meetings, the knowledge worker can take a number of actions. These actions include: keeping an open mind, not taking sides quickly, and always remembering that knowledge is never absolute. The efficacy of knowledge depends on its situational context and the future flow of events. The former is never completely known and the latter is often contingent upon many unpredictable interactions.

The knowledge worker who actively listens and reflects on multiple views will not only achieve understanding and insights that leverage and modulate his/her own knowledge but also develop an objective, systems-oriented perspective that significantly contributes to problem solving and cognitive growth. If the team is interdisciplinary, the awareness and appreciation of other modes of thinking and fields of learning will significantly enhance the knowledge worker's ability to integrate information and balance priorities, thereby preventing the hardening of sides and viewpoints during team discussions. The ability to remain objective and be part of a discussion is a mark of leadership that helps both the knowledge worker and the organization.

Teams have proven their ability to improve decision making and enhance learning. (Katzenbach and Smith, 1993). Knowledge workers can improve their learning during team problem solving and decision making by withholding their own beliefs and opinions until late in the dialogue process. A position stated quickly becomes a position defended. When this occurs, the conversation moves from open inquiry to a debate or face-saving challenge. Much learning is lost when debate replaces inquiry. Although debates can certainly be learning experiences, they are much more useful at deeper levels of thought, such as assumptions, context, patterns, relationships, and expectations of the future rather than the higher levels of beliefs, events, and opinions. Beliefs, events, and opinions are surface phenomena that usually represent information, not knowledge. Keeping group discussions at deeper levels requires an open and supportive organizational culture (KM) and continuous team-member attention to learning (Bennet, 1997).

Physical environment, culture, and interpersonal relationships must be taken into account for a team to achieve learning and high performance. The use of groupware, such as whiteboards and computer systems that allow input from every team member and real-time integration and display of ideas, can be very helpful. The physical layout of working spaces also influences the way knowledge workers think and feel during meetings. Good facilitation is essential for productive and open communication among diverse knowledge workers. Individual empowerment of team members gives them confidence and strength of resources. Many of the KM objectives, such as knowledge sharing, knowledge repositories, knowledge systems, storytelling, knowledge flow channels, and communities of practice provide strong support for team performance and individual learning.

Classical research in adult learning has two primary foundations: Malcolm Knowles (1998) research in adult learning and David Kolb's (1984) research in experiential learning. Knowles identifies the conditions in which adults learn best and the human characteristics that drive those conditions. For example, adults are usually driven by real-world problems and learn best from solving problems that are directly related to their current work. They are self-directed and each individual, usually without conscious awareness, has developed a way of learning that is unique and maximizes his/her ability to take in information and create understanding. Although there are many individual learning "styles," a given worker will usually have one particular style that is most effective and most personally satisfying. A knowledge worker who takes time to "learn how to learn" will be able to learn via several styles. Since much learning takes place in situations that are not within the learner's control, being able to learn through

images, lectures, reading, dialogue, debate, computers, and so forth will be very helpful over the long term.

Often team or group learning can be very effective if it is planned and run by an experienced leader or facilitator. Learning does not automatically occur among team members simply because they are talking to each other. Simulations can be very effective learning tools for individuals and for teams. Even though their initial development may be expensive, once developed, simulations are very economical for large numbers of learners. Systems Dynamic modeling is one example of coupling groups of managers and computer modeling to clarify issues and help knowledge workers make sense of their organization's behavior and take any necessary corrective actions. (Vennix,1996)

Another challenge for the learning knowledge worker is the increasing number of situations in which learning can take place. As the Internet grows, there will be more learning through browsers, chat rooms, and communities of practice. Normal classroom education will still count, as will conferences, retreats, and other off-site experiences. An often neglected, yet most important source of learning, is the casual conversation that occurs around the coffee pot. An informal question-and-answer exchange concerning issues at work between two colleagues of differing experiences can lead to significant growth in the knowledge of both workers. Organizations that are aware of these gains make special efforts to design their facilities and the knowledge workers' spaces so that they may take advantage of these natural cross-fertilizing opportunities. They also should provide the information technology that supports learning and knowledge sharing. For a good review of IT in support of collaboration see Coleman (1997). While no one can "order" a knowledge worker to learn or share knowledge, the smart organizations nurture and create environments within which learning and sharing occur naturally. We will now look at several of the main trends and methods of learning, particularly those appropriate for the knowledge worker.

e-Learning

According to Rosenberg, e-learning refers to the use of Internet technologies to provide many types of solutions to enhance knowledge and performance (Rosenberg, 2001). Note that this definition focuses on the Internet but allows a wide variety of possibilities for learning, creating, and changing knowledge. The advantages of e-learning include reduced cost and time of both instructors and students. Once an e-learning course has been developed, it can be given to a large number of people with minimum expenses. The material can be updated at one time and all students can quickly be notified. Changes and new ideas can be easily inserted into the material. Discussion groups operating in conjunction with e-learning courses allow students and instructors to dialogue and expand upon the material as needed. The main thing missing is the interpersonal interactions that allow in-depth exchange of ideas and insights through facial and other nonverbal communications. While e-learning may not work for learning deep knowledge about complex subjects, it is well structured for many knowledge worker needs.

A good example of e-learning comes from the Department of the Navy. Early in their implementation of KM, the Department of the Navy realized it could not become a knowledge-centric organization without being a learning organization. They also realized that when they coupled the fast pace of change with a geographically dispersed, rotating workforce, e-learning had to become a necessary part of their strategy. The deputy chief of Naval Operations established a high-level taskforce to provide the tools and opportunities that would enable people

to learn, grow, and develop into successful leaders who could make a difference in the Navy. In a hierarchal, military structure, direction from senior leadership is the impetus for success. This enterprise-wide effort led to a partnership between the education and information technology leaders to develop a virtual toolkit to operationalize e-learning. The toolkit provides resources and connections that form the network of education and learning in the department. In the spring of 2002, the Department of the Navy was named a "Most Admired Knowledge Enterprise," the only public-sector organization to receive this honor. Alongside such organizations as Microsoft and IBM, the Navy was specifically noted for its emphasis on organizational learning.

Action Learning

Another form of learning, known as action learning, uses a team or group to solve real, practical problems while deliberately emphasizing learning as they do. The action-learning group takes a systems approach to solutions since their actions are designed to affect all parts of the organization necessary to ensure long-term problem resolution. Thus, action learning enhances individual and group learning, facilitates organizational change, and solves real-world problems.

Action learning is a special form of team learning, problem solving, and implementation. The group has a facilitator, and learns through questioning and reflecting clarified via group dialogue. True to the concept of knowledge, an action-learning group is committed to taking action but only after considerable time is spent in understanding the problem, the situation, and the ramifications of potential actions. In effect, an action-learning group becomes a knowledge creating (learning) team. This process not only improves decision making, it also achieves buy-in by team participants and creates a learning environment within which team individuals and their organization can learn and share their own knowledge. This learning occurs when the group is open to new ideas, questions past and current assumptions, and works collaboratively toward a common interpretation of the problem based on their collective understanding and experience. The organization's role, through KM, is to provide: work spaces that are conducive to open conversation and honest inquiry, effective information technology support and information repositories, and a culture that rewards knowledge sharing

Although the concept originated many years ago, action learning has now come to the forefront as an effective way to meet the demands of the new world (Marquardt, 1999). There are recognized successes throughout the current literature. Several years ago, a large government program in the Defense Department requested the author to lead a team to identify and evaluate the management risks that could impact program success. The program included of seven organizations that had to work together; a complex parts supply chain; two refurbishment and rebuild depots; several ordering and stocking facilities; and private industry participation. Although each organization was competent and dedicated, there was inadequate coordination among the organizations and the knowledge workers had little time for learning. Also, the "not invented here" syndrome made communication difficult.

An action-learning approach was taken and nine carefully selected, highly competent team-members were chosen. The members represented all of the organizations as well as the professional experience needed to assess the problem and identify solutions. During start up, it became clear that, although the team was working well together, they were not aware of what each other's organizational problems, constraints and true objectives were. Most important, knowledge workers in all of the organizations were not aware of the impact of their own decisions on the other organizations as the consequences of their work flowed through the

enterprise. Everyone was too busy to be concerned with each other's work, resulting in each organization doing high-quality work that often created problems for the rest of the enterprise. It was a classic situation of the need to understand risk and become aware of the impact of every part of the complex flow of work on the other parts of the system—a good opportunity for an action-learning group. After reviewing and refining the team's mission, a charter was prepared, submitted to a higher authority, and quickly approved. A series of briefings allowed team members to understand the full scope of the program and the nature of the participating organizations. During this time, the members got to know each other, created their own common language, and addressed a number of basic values.

Many learning sessions on organizational structure were conducted on subjects such as: the nature of enterprises, systems theory, risk management and communication. All were closely related to the problems at hand. This enabled team members to broaden their understanding of all organizations within the enterprise and to appreciate their own organization's role. As the various processes and procedures were evaluated, many suggestions and ideas were offered by members who were not participants in these processes but saw them from a new and often insightful perspective. Real learning, that is being surprised and experiencing a leap of understanding, began after the third day. Formality drifted away and real questioning, response, and counter questioning began when the team developed their own meaning of risk and how it should be defined for their task. There were many discussions on what approach should be used to identify and map out the various risks throughout the enterprise and how to gather the desired information. These interactions were more a learning process than result producing. No one was pressured into accepting someone else's conclusions. Instead, there were many deep dives into what assumptions were behind those beliefs and conclusions. Although heated debates and strong feelings emerged, the team was able to do their own double-loop learning, without being force-fed or lectured.

The outcome of the 35 days that the team spent together was a detailed identification of the specific risk areas and the expected levels of risk, along with ideas on how these risks could be reduced and maintained in the future. A risk-interaction matrix was developed to indicate the likely impact of a negative event in one part of the enterprise on all other dependent work efforts. Such a matrix demonstrated to everyone how important it was to communicate and collaborate with other individuals and organizations that were part of the enterprise. One surprising result was the possibility of turning risk-management practices into opportunity-management practices, with the only difference being that a risk results from a potentially negative event and an opportunity results from a potentially positive event. Another benefit from the action-learning effort was the personal and professional growth that occurred within the team members. The ability to be more receptive to other viewpoints, and to discern differences and discriminate their value is a measure of personal growth. Also, the capability to reintegrate those differences, ideas, or interpretations into a cohesive, meaningful whole is a competency not often found.

Such personal development can occur when a team learns to work together, dissect, and understand major facets of the organization and then bring them back together into a complex system that produces a desired product**.** Put another way, their domain of action and sources of knowledge expanded as a result of solving a real world problem that was of high interest and importance to them. Not only had they made useful contacts and learned from them, they also saw the enterprise in a new light and understood their own problems in a broader context. While KM was largely unknown to the enterprise at that time, the attitudes of the senior executives and the organization's culture permitted, and even encouraged, such learning. Information

technology was used to maintain a team Web site, an intranet was available throughout the enterprise, and a meeting space was found that offered the needed groupware support. However, in the end, it comes down to the human-to-human interactions and the trust and ability to listen and share understanding with each other that spurs learning and creates knowledge.

Accelerated Learning

Accelerated learning is a systematic process designed to take advantage of our brain's full capabilities through the use of findings in recent research in neuroscience. Recognizing that our brains are highly complex—with five types of memory; right and left hemispheres that specialize in different capabilities; three major parts (a brainstem, limbic, and neocortex) each with different functions; and eight intelligences (language, logic, visual-spatial, musical, kinesthetic, social, interpersonal, and naturalistic) (Gardner, 1993)—accelerated learning is an approach designed to take advantage of the whole brain's capability to learn. Briefly, the process consists of six phases: motivation, getting information, finding meaning or sense making, committing to memory, practicing what you have learned, and reflecting on how you have learned. The techniques used in each of these phases could best be considered as meta-learning since their purpose is to help one learn how to learn. Each of Gardner's eight intelligences is inherent in everyone to varying degrees, and they all can be improved through learning and practice.

While individuals can personally make good use of the ideas and practices of accelerated learning, the best learning often occurs in a low-stress, small-group environment that is positively reinforcing, with some enthusiasm and humor (Rose and Nicholl, 1997) In addition, the knowledge worker must want to learn, that is, the material must be relevant, needed, and applicable. It helps to deliberately involve as many senses as possible. Studying and exploring a problem from each of the eight intelligence areas provides viewpoints, insights, and solutions that may not otherwise surface. Another useful technique is to search for good metaphors and analogies that provide windows to better understand the problem.

The following is an example of how a small professional services firm changed itself through collaborative learning. The company, Dynamic Systems, was in the highly competitive engineering and professional services field, predominately working for the U.S. government. Dynamic Systems grew to about 120 professionals over its ten-year history but was lagging behind its competitors in the application of IT, in the ability to leverage knowledge within the company, and in applying that knowledge to provide fast, high-quality customer support. In other words, it could not use the knowledge it had to create the desired competitive edge. There was also no clear direction for company growth. This was not unusual in this industry since growth was primarily achieved by winning competitive contracts from a wide range of clients.

The company's growth had slowed and senior management recognized that technology was significantly changing the competitive landscape. It also became apparent that there were a number of much larger companies that had been able to achieve what was popularly known as "world-class" status. It was concluded that the organization needed to change within the next few years or the company could easily fall far behind its best competitors. Being a professional services firm, it was recognized that about 90 percent of its value was in the minds and behavior of its employees. Increasing that value had to come from the knowledge workers themselves. Since the employees were motivated and competent professionals, the strategy selected was to make the workforce aware of these concerns and empower them to participate and find solutions.

Whatever the solution looked like, it would require employees and senior managers to change their daily actions, in other words, to learn. The tenets of both action and accelerated learning were found to work nicely with the goals of the organization.

They began by analyzing the current and anticipated environment, and identifying those world-class organizations that were demonstrating successful practices in markets similar to Dynamic Systems. Five teams were formed from volunteers throughout the company. The teams dealt with the vision, the use of technology, customer service, the bid-and-proposal process, and the employee management process. Employees from all levels of experience were encouraged to participate, as well as representatives from all departments. This ensured the diversity of thinking and encouraged cross-department communication and systems thinking. All teams were briefed and encouraged to ask questions and add ideas. Using only volunteers and keeping an open dialogue led to highly motivated teams. Charters gave the teams both freedom and empowerment. Funds were allocated and the teams were given six months to research their tasks, develop programs for achieving their objectives, brief senior management, and prepare and present a half-day learning session to every employee in the company. All team members participated in presenting the learning sessions.

As the vision team developed its ideas, they briefed the other teams in order to get feedback and receive direction in terms of the company's long-term objectives. This provided a reference point for the other teams to making sense of their research and focus their efforts. At the briefings and learning sessions, all team members participated in answering questions and generating ideas. During these discussions, care was taken to reflect on the work and its potential effect on both individual and organizational performance. This ensured understanding and buy-in for the implementation of the recommended actions. The results were later used to provide an up-to-date orientation for new employees.

Since about 35 percent of the employees had participated in the learning process, there was enough critical mass to bring the entire company into alignment. Several changes included increased training in technology, much greater use of teams and knowledge sharing, an improved process for customer support, and better customer feedback. A second round of teams were started after 18 months that included a strong effort in KM to formalize the company's internal ability to share knowledge and use technology in order to add value to customer products.

Within three years, the company growth rate went from five to 25 percent per year. There was a significant increase in profitability, a higher rate of employee satisfaction, and a significant increase of the company's market value. As in all organizations, there is never a single cause and effect between planned change and results. Many complex interdependencies are involved. However, by bringing the employees into the challenge and creating an environment in which they learned quickly and practiced what they had learned, the entire organization could work cohesively and move together. Although larger organizations would be more difficult to move, the principles of collaboration, participation, and learning are still fundamental and highly effective.

Learning Beyond the Professional Area

As the world moves into the age of complexity and events become more difficult to predict, there are certain areas of knowledge that are becoming essential for career success and for maintaining organizational performance. Because technology and the pace of change will almost surely continue accelerating, successful knowledge workers must be able to learn rapidly,

continuously, and flexibly to fulfill their work responsibilities and maintain employability, as well as employment. This means that they must learn how to learn in a variety of situations and in many different ways. Rarely, if ever, do we reflect on how we learn and consciously try to expand the ways we learn. Living in the world of the future, where professionals often deal with five to 10 subject areas in the course of an hour, requires the ability to communicate and share understanding with professionals from other disciplines, and make decisions and solve problems that entail multiple subjects.

Essential areas for most knowledge workers include: learning how to learn, having knowledge about knowledge, systems thinking, complexity thinking, risk management, networks, networking and relationship management, questioning, facilitation, flow, information literacy, judgment and intuition, knowing, sense making, and peripheral discipline awareness. This assumes that the knowledge worker knows his/her professional field and continuously learns to keep up with that field.

The best knowledge workers will be able to learn and apply their knowledge in collaboration with others, while simultaneously recognizing the breadth of information and knowledge needed to comprehend and resolve complex problems and situations. To be successful, they must also be able to manage knowledge in the sense of recognizing, creating, finding, and moving knowledge that is valid, useful, and applicable to the issue at hand. Beyond this, knowledge workers must have the foresight to sense their future knowledge needs and acquire that knowledge to handle challenging problems well before the problems arise. Even though they may not know the specific problems that will be faced, they should be aware of the *types* of issues and challenges that may occur. In the best case, knowledge workers should direct their learning and manage their knowledge so they are well prepared for both present and future challenges. This will be the payoff from learning how and when to learn and from treating their knowledge as a manageable asset that greatly influences career success. Since their competency is the source of the organization's performance, KM and learning become everyone's responsibility and everyone's gain. The trio is thus intertwined, and loss of any one will significantly impact the others.

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