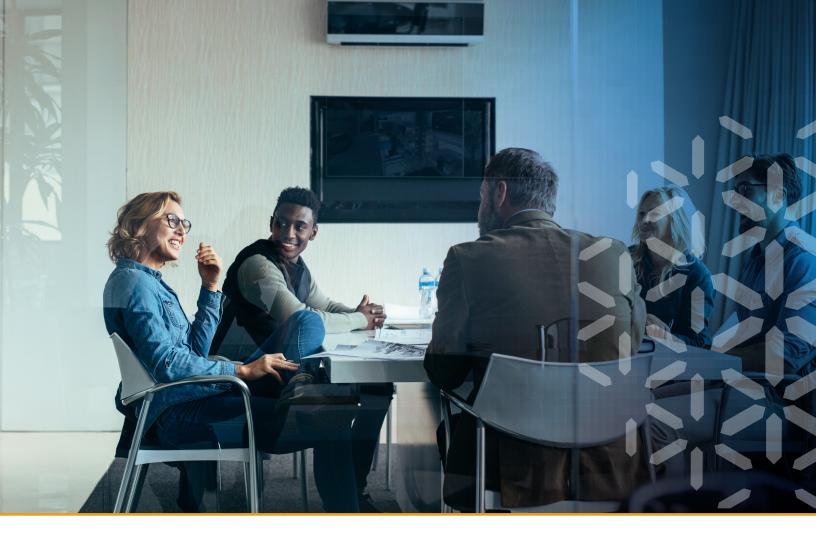**Ropella**360

A catalyst for connection

Managing and Retaining Your Company's Knowledge

One of the biggest, yet often overlooked, costs of turnover is knowledge loss
—the loss of expertise and experience that cannot be immediately rehired.

> Managing and Retaining
Your Company's Knowledge

Can retirement put your firm out of business? How about the exodus of the leaders in your R&D department? Without being overly dramatic, turnover in key personnel can have a significant impact on your organization. One of the biggest, yet often overlooked, costs of turnover is knowledge loss—the loss of expertise and experience that cannot be immediately rehired. Throughout the chemical, pharmaceutical, and life sciences industries, companies are grappling with the difficulties that arise when important team members retire or decide to leave for other opportunities. Because this industry is particularly knowledge intensive, any loss of information is acutely felt. Not only do you suffer the cost of reacquiring knowledge through hiring and training, your losses may be providing the competition with knowledge gain—including trade secrets— that put your firm at a competitive disadvantage.

Fortunately, there is a solution. Concern over retaining critical knowledge has given rise to a relatively new industry practice referred to as Knowledge Management (KM). If your business hasn't yet undertaken KM initiatives, it may be time to start. In their article, Stemming the Brain Drain, Dr. David De Long and Thomas O. Mann (researchers for the Accenture Institute for Strategic Change) assert that, "Whether it's in chemicals, aerospace, or government, knowledge loss is a systemic problem involving the entire employment lifecycle – [hiring], employee retention, and retirement." By understanding basic KM concepts, you can better understand how to keep what your employees know—even when you can't keep them.

What is **KM?**

Knowledge Management is the explicit and systematic management of vital knowledge—and its associated processes of creation, organization, diffusion, use, and exploitation. A successful program must be explicit so you can codify the knowledge in your organization. It must be systematic to ensure that you capture all critical knowledge. Because you don't have the resources to record all company knowledge, your process must focus on vital knowledge only. A KM program defines the processes to capture, store, and use knowledge. And if implemented on a wide scale, KM can not only aid in knowledge sharing and retention, but even expedite research and learning as well.

Types of Critical Knowledge

Companies with KM programs concentrate on identifying which employees in each department (including technicians, chemists, administrative personnel, and managers) possess critical knowledge. Then they categorize the types of critical knowledge each person holds such as:

Process Knowledge

This refers to knowledge about how products get produced and tasks get completed. All processes that are critical to company operations need to be documented – everything from R&D and production to marketing and management.

R&D Knowledge

Because of the rapidly changing, competitive environment of the chemical and pharmaceutical industries, KM in the Research and Development arena is crucial to improve productivity and reduce a product's development time. Since typical R&D staffs have to do more work faster and with less personnel, the need exists for new tools and strategies for documenting and sharing information.

Learn more about Dr. De Long's study:
Confronting the Chemical Industry Brain Drain

In April of 2002, Dr. David W. De Long published the results of his extensive survey and evaluation of the threats to company-wide critical knowledge in the chemical industry. It is meant as a guide to chemical industry executives on how to nurture the sharing and capturing of knowledge in their company.

The comprehensive evaluation has three objectives:

- "to describe how global chemical companies are responding to changes in their workforce demographics caused by downsizing, an aging workforce, and a shrinking talent pool;

- "to identify the organizational barriers to effectively capturing knowledge from its aging workforce; and

- "to present a framework for creating an effective long-term knowledge retention strategy.

The full report is available in PDF form at www.lostknowledge.com.

About **Dr. De Long**

Dr. De Long is the author of the well received book 'Lost Knowledge: Confronting the Threat of an Aging Workforce'. "He is President of David DeLong & Associates, a research and consulting firm that helps businesses solve performance and staff problems caused by an aging workforce, skills shortages, and increased mid-career turnover. He is also a research fellow at the MIT AgeLab and an adjunct professor at Babson College. He has spent more than a decade studying the impacts of changing workforce demographics and knowledge loss on organizational performance." **Visit Dr. De Long's website at: www.lostknowledge.com**

Technical/Manufacturing Knowledge

In his article, Knowledge Management in Pharmaceutical Manufacturing, Dr. Barry Hardy, expert in knowledge management and communications in the chemical and life sciences, tells us, "Transfer of technology between development and manufacturing is now a key success factor to achieve robust processes and minimize cost of goods." R&D and Technical Operations need to get on the same page, not just communications-wise, but also with standardization of equipment, materials, and processes.

Knowledge of People and Relationships

Not all knowledge relates to products and processes. Some of your most vital knowledge is the expertise you have developed about your clients, vendors, competitors, and even the people inside your organization. Understanding where knowledge resides and the dynamics of internal relationships can have a big impact on the success of future initiatives.

Organizational Memory

This is the information that results from the lessons of your organization's past. When a problem arises, it needs to be traced to the source and noted so that lessons can be learned and future errors can be avoided.

Knowledge About the Market, Your Customers, and Products/Services

Documenting and updating current knowledge of market trends and industry standards can keep your company ahead of the competition. Also, monitoring customer-provided information can help you better understand your company's value and uncovers areas in which you need improvement. Lastly, the tracking of products/services information allows you to develop smarter solutions for your customers' needs.

Intellectual Property (IP) and Patent Knowledge

Patent management is crucial for pharmaceutical companies and businesses developing exclusive key product lines. Industry patent ownership, patent licensing, and other IP trends need to be tracked and managed. Potential patent infringement should also be monitored.

Future Knowledge

This refers to information that results from capturing staff ideas for future products, services, and business strategies.

Methods and Tools for Gathering and Storing Knowledge

To establish a successful KM program, you must determine how to capture key knowledge. The following are some of the methods available:

Creating and Discovering Knowledge:

- Creative brainstorming techniques
- Concept mapping
- Data mining
- Text mining (See the Resources section for a great article on text mining from Chemical Week entitled Knowledge Management: Mining for Gold in the Lab.)
- Business simulation
- Content analysis
- Social network analysis

Sharing Knowledge:

- Learning networks / e-learning
- Sharing best practices
- After-action reviews
- Structured dialogue
- Share fairs
- Cross functional teams
- Decision diaries
- Mentoring
- Knowledge bases

Organizing and Managing Knowledge:

- Knowledge centers
- Infrastructure tools such as groupware, intranets, KM suites
- Expertise profiling
- Knowledge mapping
- Data warehouses
- Document management systems/software

KM and Your Workforce

Successful KM programs start and end with the hiring process. Employees must understand from the beginning that gathering and sharing critical knowledge is an integral part of their jobs. When they decide to leave, you must employ systems and tools to retain as much of their knowledge as possible.

Create a KM Culture

According to De Long and Mann, the key to making knowledge management work is to develop a "shared sense of mission, trust, and commitment to the individual. Employees are much more likely to want to share their knowledge if they feel emotionally committed to the organization's long-term mission." As an executive, your role is to hire the right people— those who have a knowledge sharing mentality. Provide the right tools and foster a culture that encourages collaboration, shared learning, and a commitment to common goals.

Hire Knowledge Naturals

Filling your organization with people who desire to collect and share knowledge doesn't happen by accident. Making the following functions part of the hiring process can help ensure the individuals you hire are "knowledge naturals".

Job Descriptions

Make KM a formal and measurable part of all job descriptions. When you perform evaluations, make sure that you review each employee's record of capturing and sharing knowledge. By holding employees accountable, there's a greater chance that they will participate in the KM program.

Behavioral Assessment

Hiring people based on skills and experience is not sufficient to ensure a good hire. The people you hire must also thrive in a corporate culture that values KM. Too often in the chemical industry, potential employees believe that success (or at least security) comes with hoarding knowledge. These candidates will never advance the cause of KM in your company. Behavioral assessment is a process that can help you evaluate cultural fit. It combines structured interviewing with analytical assessments to gauge the personality traits of a potential candidate. Your objective is to discover if each candidate's personality style is the right fit for a knowledge-based organization.

Orientation Programs

Newly hired personnel typically wish to follow company norms, so use your orientation program to focus on the importance of KM. Define critical knowledge and review the tools used to store and retrieve that knowledge. Because company culture is not determined solely by the formal orientation process, develop learning methods that extend into ongoing management practices. For example, you may create a mentoring system, matching your most sincere proponents of KM with incoming employees.

Mitigate Knowledge-Loss Risk

When feasible, critical knowledge and responsibilities should be shared by at least two people. At Shell (the energy and petrochemical group), they have created a technical skills management process to identify their long-term human capital needs and to help develop the skills required to bring new plants online. Global skill-resource managers make sure that Shell has people ready if vacancies occur in critical positions. Shell strives to have three people prepared with the necessary skill and knowledge at any given time to step into any critical position that might open up even at a moment's notice.

Knowledge-Based Exit Interviews

When people do leave your organization, make sure you or your managers give exit interviews that gather critical job related knowledge. Make sure to record detailed information about the processes and techniques that each departing employee used. Then ask general questions like, "What were your greatest challenges? How did you overcome them?" Be sure to document the data completely during the review. When done correctly, knowledge interviews can provide information to help you fill the job opening, improve your organization, and aid incumbents and new employees. These candidates will never advance the cause of KM in your company.

Putting the Power of Knwledge to Work

Developing a company that truly values KM is not easy. It takes strong leadership, commitment to a culture that values learning, and open lines of communication. But a successfully executed KM program is an excellent way to maintain your competitive advantage. And in today's knowledge economy, it's an avenue you can't afford to ignore. These candidates will never advance the cause of KM in your company.