UNIT-8 Knowledge Management

Learning Outcomes

By the end of this unit the learner will be able to:

- ✓ Define knowledge and knowledge management.
- ✓ Explain the difference between explicit and tacit knowledge.
- ✓ Identify various knowledge management theoretical models.
- ✓ Explain how a properly implemented knowledge management program can improve efficiency.
- ✓ Describe the steps for employing a new knowledge management program in an organization.
- ✓ Identify the required components for implementing a knowledge management framework within an organization.

Unit 8

Definitions

What is Knowledge?

Defining Knowledge

Knowledge can be defined as the understanding of a particular topic. This understanding can be acquired through formal education, informal education, and experience. We can have knowledge on many different topics and, given the right tools and environment, we have the capacity to learn new knowledge on any topic of our choosing.

When building knowledge, we usually use bits of data and information to assemble an understanding of a topic. What's important in our knowledge assembly is that our data and information fit within a certain context. Think of putting together a puzzle. The picture on the box forms the context. We see the larger idea (context) and use the pieces (data and information) to put the picture together. Without the proper context, we cannot build the puzzle to see the larger picture.

In isolation, data and information has no value. With context, however, it can be used to lead to action. Let's look at an example. You are a teacher grading a test that your students have submitted. You could potentially grade this test using your judgment, or you could use a tool for assessment, such as a prepared rubric. With your judgment alone, it is hard to get an in-depth knowledge of your students' academic standing. Without a rubric to help guide you and give context, the bits of data and information you collect have little meaning. With a rubric, however, you have a clear, concise picture of where your students stand and you have the ability to communicate this knowledge to them. Based on this knowledge, you and your students can decide what action needs to be taken.

Tacit Versus Explicit Knowledge

Explicit knowledge can be defined as knowledge that can be easily transferred. It can be written down or told to you. This knowledge is easily captured and easily extracted. For example, if you would like to make banana bread and have the right tools, you can simply find a recipe and get to it.

Tacit knowledge is much more difficult to pinpoint. This knowledge is silent. It includes the knowledge that comes from experience, know-how, personal conclusions, and insights. This knowledge is hard to express or put into words.

For example, the act of riding a bicycle is a form of tacit knowledge. With time and practice, this act becomes second nature. However, if you had to teach someone else to ride a bike, you may find this process difficult to put into words. You may emphasize that they need to keep their balance, but this will not teach them to ride the bike. They need to develop their own tacit knowledge for this skill so that the skill becomes an automatic action. Unlike the recipe for the banana bread, tacit knowledge is difficult to communicate in a systematic manner.

Provide an example of tacit knowledge.

Provide an example of explicit knowledge.

Communicating Explicit and Tacit Knowledge

Explain the following concepts.

Explicit knowledge: How to tie your shoe.

Tacit knowledge: How to walk.

What is Knowledge Management?

Defining Knowledge Management

Knowledge management can be defined as an organization's systematic approach concerning the retrieval, storage, creation, and sharing of knowledge. Through a variety of processes and procedures, businesses use knowledge management to bridge organizational gaps by extracting tacit and explicit knowledge from their employees.

Some of these processes include:

- IT development to help connect people
- IT development to aid in the storage and retrieval of information, forming communities of practice
- Creating new roles within the organization to support knowledge transfer

Knowledge management also focuses on how an organization can leverage this knowledge.

Case Studies

The implementation of a great knowledge management program can alleviate many challenges within a business. Let's use some examples to illustrate.

- You have an angry client calling about a product that has been sold to them. The client was promised delivery of the product a month ago. However, the only person who can do this job is on sick leave for three weeks!
- You have three senior employees that have stores of vital knowledge that has not been transferred to the rest of the department. They are all retiring from the company within six months. You know your department and the company will suffer from their departure.
- You have been given a new, complex project to work on. You spend weeks on this project and generate solutions only to find out that a person in another department had knowledge that could have decreased your work time by half.
- You have been working on solving an organizational problem and have developed some solutions you think are fantastic. After hours of labor, you find out that a team in another department has solved the problem months ago and their solution is better than the solution you planned to propose.
- You are managing a department and now have four new employees. You wonder how you can bring them up to speed on their new role within the organization.
- You know that Peggy in HR has the information you need to complete a task. However, she is out of the office that day and you have no idea who else to ask for this information.
- You do a search for information on the company website and thousands of results come back. You do not have the time to search through them all and you have no idea which results would give you the information you need.

These workplace scenarios are quite common and they can have drastic effects on our individual productivity and the productivity of the overall company. Knowledge management is a system that advocates sharing or disposing knowledge through a variety of processes in the effort to increase our productivity. It encourages organizations to harness and take full advantage of their intellectual capital. Intellectual capital is an intangible, invaluable asset that includes an organization's ideas, innovations, and different kinds of knowledge.

Lessons Learned

Many organizations do not have a system in place for handling their knowledge. Many people are unsure how to implement such a program and they may assume that knowledge will be transferred naturally. (In other words, the employees of the organization will figure out a way to connect with each other so they can find out what they need to know.) Additionally, the practice of knowledge management is relatively new to the business world.

History of Knowledge Management

The field of knowledge management was born from a handful of forward thinkers. These people and organizations began to view business and, most importantly, the assets of a business, differently. That is, the focus shifted from considering only **tangible** items (like computers, desks, and chairs) as assets. These thinkers believed that the assets of an organization reached much further and deeper than only the physical objects you could touch or see.

This shift in perspective called for a new way of thinking and a new line of questioning. These forward thinkers urged people to consider the **intangible** assets of their organization, like the collective knowledge an organization has or the networks business create and draw support from.

Karl-Erik Svelby of Sweden was one such forward thinker. In 1979, Svelby moved from a job with a huge conglomerate to a small business. The inevitable reduction in staff saw Svelby taking on more roles, one of which was company accountant. What troubled Svelby when he examined the company's books was that the assets he felt were most important, the intangible assets, were not accounted for. He was perturbed that the assets that would most assuredly bring future prosperity were nowhere to be found. He found that he could manage the tangible assets but had no way to maximize or quantify the intangible assets.

Svelby began talking to other business leaders and found they that they agreed with his way of thinking. They also believed that intangible assets were very real, extremely valuable, and needed to be managed with even greater care than tangible assets. Essentially, they believed that proper management of the intangible assets was the most important thing to manage for business success.

What resulted from Svelby's conversations with other business owners was a new network that focused on spreading the word about the importance of intangible asset management. This group adopted the name Konrad and released their work in the book *The Invisible Balance Sheet*.

This mindset was not limited to Sweden. In the United States, management guru Peter Drucker and Fortune magazine staff writer Tom Stewart were beginning to ask the same questions. This way of thinking was becoming a global movement.

With the heightened interest in the topic, conferences began to take place. These events allowed a space for forward thinkers to come together and share ideas. As these conferences grew in size, business communities formed and the discipline we know as knowledge management was born.

(This brief history comes from *The Complete Idiot's Guide to Knowledge Management* by Dr. Melissie Clemmons Rumizen.)

The Business Case for Knowledge Management

Reducing Costs and Growing Sales with Knowledge Management

Before we make any organizational change, we need to evaluate how this change will impact our bottom line, since any change within an organization has the potential to be extremely expensive. Let's explore the benefits of implementing a knowledge management program with some evidence of how it can improve your organization's bottom line.

How Knowledge Management Can Help Reduce Costs

By connecting people to people and by providing employees with a systematic means to retrieve and store data, knowledge management **increases efficiency**. By providing the opportunity and means to connect individuals, knowledge management allows workers to share thoughts, ideas, and expertise. This can save time and money on projects. People don't have to reinvent the wheel or find solutions to problems that have already been resolved.

By setting up a proper IT platform to store and retrieve information, organizations can dramatically **decrease their response time**. For example, let's say that a client calls with an inquiry about a service they are receiving. Knowing where and how to access this information can have many results, including less time used to locate information, less confusion on the part of the employee attempting to retrieve the information, and happier customers.

Once knowledge management processes are in place, the occurrences of **repeated mistakes will inevitably decrease**. Having a systematic, organization-wide approach to sharing knowledge helps to ensure that everyone is on the same page and knows what they need to know. When knowledge is shared and easily accessible, it can create a **higher degree of employee accountability**. Making the same mistakes when processes and procedures are documented is much less excusable.

Taking stock of your company's knowledge can **decrease costs** because we often are unaware of the stores of knowledge our people have. Through their years of experience or educational backgrounds, we may have in-house experts without even knowing it. By looking into our internal expertise, we can save money by decreasing how much external expertise we bring in.

For example, let's say that Jay in IT has just completed a computer course that taught him about upgrades to a program our company uses. Wouldn't it make sense and be more cost-effective to have Jay teach other employees how to navigate the new program? Not only is this more cost effective, but it can also be a confidence booster.

In this way, knowledge management can help us recognize the brain power of our organization and the individuals behind that brain power.

Investing in and implementing IT solutions that connect people in real time can also **increase efficiency and productivity**. Offering people the option of connecting through instant messaging and other social media programs can help people get the solutions they need faster.

How Knowledge Management Can Help Grow Sales

Connecting people can have some powerful consequences. When we allow colleagues to connect, we allow them to engage in dialog and to **learn**. This learning can help inspire creative thinking and problem solving by allowing unexpected connections to occur. This creativity can help with **innovation** and the creation of new products and services. It can also help us enhance the existing products and services that our organization offers.

The proper sharing of knowledge can also help us to better **know** our clients, colleagues, the market in which we operate, and the needs of any of our other stakeholders. This can help us to improve and better understand the relationships we have with each of these stakeholders. In turn, this will help us with needs analysis and to create new services or offer better services.

Sharing knowledge can also help **grow sales**. Since everyone will now be on the same page, when you are dealing with clients, one person should be able to pick up where the last person left off. **Increasing customer satisfaction** and making their experience with your company a great one is a vital part of making a sale and ensuring continued business.

By knowing how and where to get the knowledge you need, knowledge management also **shortens the sales cycle**. Obviously, looking for documents or information can add to your customer response time. Having the information you need helps speed up the delivery of products and services to your clients.

Personal Work Performance and Bottom Line Benefits

Give five examples of how knowledge sharing could help increase your organization's bottom line.

Make a list of five ways that knowledge sharing would impact the work that you do.

Business Case Basics

Knowledge management is not to be viewed as a warm, fuzzy approach for connecting people. It is all about helping improve the performance of individuals, teams, and the organization. However, some people in your organization may need a little convincing.

If you see the need for a knowledge management program and are getting resistance, it is time to brush up on your lawyerly skills and make a solid argument to show a business need for knowledge management. You have to justify what you want and why.

When building your arguments, remember that people are normally resistant to change. They believe it will bring more work, more headaches, and more stress for minimal results. You have to frame your argument to show people what is in it for them. Once you get buy-in and have solid research to back up your claims, the process of implementation will become easier and much more likely to succeed.

When building your case, you need to remember to frame your arguments in language fitting for your organization. Additionally, you need to keep your audience in mind. A presentation to your colleagues may be framed somewhat differently than a presentation given to senior management or shareholders.

What to Include in Your Business Case

When you write a business case, you want to concisely present the benefits of the initiative. Your business case is not complete without a complete cost/benefit analysis to assess the financial impacts of the change.

Set up your business case by including:

- Executive summary/business case summary: Although this is found at the beginning of your business case, it is a summary of all that has been brought forward in the business case, and as such, should be written last.
- An introduction to the proposed change
- Appropriate background information
- A mission statement for the proposed change, if desired
- Benefits accrued from the change
- Conclusions from your research
- Why the organization should consider the idea
- Principles to guide development
- Recommended scope of change
- Projected cost/benefit analysis
- Cost of recommended program or change
- Measurement, outcomes, and evaluation
- Anticipated overall results

Appendix information should include:

- Glossary of frequently used terms
- FAQs
- Endorsements

Sample Knowledge Management Business Case

Background

Miriam works at Acme Inc., a global company that specializes in the production, distribution, and sales of forestry products. Miriam is a senior manager in the training and development division of the company, with 20 years of experience. Miriam has identified ways in which the company can improve its operations and profitability on a global scale. The challenges Miriam feels needs to be addressed have to do with the sharing of knowledge. From the research she has completed, she feels that a knowledge management program would alleviate many of the challenges in her organization. Miriam has mentioned her ideas to her superiors and they want her to present a business case outlining her strategy. Miriam's business case is presented below.

Introduction to the Proposed Change

Acme Inc. has been a leader in the forestry industry for years. However, as our business began to expand globally, we focused more on sales than internal development. This has brought in money and increased our market share. However, the time has come for our internal customers (employees) to have a system put in place to maximize their organizational contributions. We have made great use of our tangible assets; it is now time to fully utilize the stores of knowledge our employees have to bring our business to the next level.

Appropriate Background Information

Over the past year, I have been doing research with other companies within the forestry industry that have a solid knowledge management program in place. My research has indicated that these programs have created a culture of learning in these organizations. This has resulted in higher employee satisfaction, increased productivity, increased sales, increased efficiency, and reduced overall costs. It is my belief that a properly introduced custom knowledge management system will have the same results within our organization.

Benefits Accrued from the Change

The benefits accrued from the implementation of a knowledge management program would include:

- Increased innovation with the sharing of ideas
- Drawing on internal expertise from all branches of our organization
- Improved communication and relationships
- Reduction in repeated mistakes
- Higher company morale by recognizing what our employees bring to the table
- Processes and procedures put in place to facilitate knowledge sharing
- Decreased sales cycle as employees would know where to locate the information needed to facilitate a sale
- Increased customer satisfaction due to a higher level of competency

Conclusions from Research

The conclusions from my research have shown that companies with a knowledge management program have flourished in a competitive global market. The collateral effect of properly sharing, creating, storing, retrieving, maintaining, and updating knowledge has benefitted these organizations and resulted in increased profitability.

Why We Should Consider the Idea

Here are some examples of increased profitability percentiles from other forestry-related companies.

- Brick Forestry increased sales by 2.5% in six months since the implementation of their knowledge management program.
- Dinette Inc. has decreased overall costs by 0.8% in three months with their knowledge management program.
- Onward Forestry has entered a new market as a result of their knowledge management program. Their knowledge sharing has led to the creation of new products and improvements to existing products and given them the opportunity to expand.
- FYI Industries recovered from the brink of bankruptcy by implementing a knowledge management program.

We at Acme Inc. know these organizations well. We realize these businesses are similar to ours. It would be a logical conclusion that if a knowledge management program helped bring these businesses prosperity, it would do the same for our business if properly implemented.

Principles to Guide the Development

The principles we will use to guide the development of our knowledge management program are:

- We are a learning organization dedicated to improving our company through thoughts and innovation.
- We believe that our employees possess a vast amount of untapped knowledge resources.
- We believe that accessing our collective company knowledge and utilizing this knowledge in an appropriate manner will impact our profitability.
- We believe that the knowledge of the company should be accessible to everyone within the organization.
- We believe that people want to share their knowledge. We need to provide the appropriate infrastructures for them to make this happen.
- We encourage cooperation and collaborative innovation in the attempt to help our organization become the world leader in forestry technology.

Recommended Scope of Change

If we consider employing a knowledge management program, it is recommended that we start with a pilot project. Keeping our implementation small will allow us to measure the results and fine-tune the accompanying processes and procedures. This will also enable us to learn from our mistakes and successes before taking it company-wide. Starting small will also give us a better indication of the scope and cost of this undertaking.

Once we are satisfied with the pilot project and have feedback, we will take this initiative company-wide.

Projected Cost-Benefit Analysis

Currently our company has sales in excess of $400 million annually. Based on research, we project that a solid knowledge management system will bolster our sales by 2% and decrease costs by 3%. This would increase our profits by an estimated $8 million within the first year and decrease our costs by an estimated $12 million. This would create profits of approximately $20 million for the first fiscal year of implementation.

Aside from monetary impact, our knowledge management system's greatest value will be in its ability to connect our people. This will preserve and enhance our greatest asset: the collective knowledge of our organization.

Cost of Recommended Program or Change

The following is a list of costs associated with implementing a company-wide knowledge management program.

- Cost of IT solutions needed: $1,000,000
- Cost of Chief Knowledge Officer Position: $150,000 (salary for first year) plus $15,000 (recruitment)
- Cost of training and development: $500,000
- Miscellaneous or unexpected costs: $200,000
- Total: $1,865,000

The following is a list of costs associated with implementing a pilot knowledge management program.

- Cost of IT solutions needed: $100,000
- Cost of Chief Knowledge Officer position: $150,000 (salary for first year) plus $15,000 (recruitment)
- Cost of training and development: $20,000
- Miscellaneous or unexpected costs: $10,000
- Total: $295,000

These costs have been researched, but situations can arise that no amount of research can guard against. The budget may need to be adjusted to account for these unexpected circumstances. Management, accounting, the CEO, and CFO will be advised of any changes. Budgetary changes will be made at their discretion. The CEO and CFO will need to discuss any necessary changes with the Board of Directors.

Measurement, Outcomes, and Evaluation

We will measure the effectiveness of the knowledge management program through employee feedback. We will also measure its effectiveness by examining the program's influence on productivity, efficiency, and costs. To measure the effects on the previous three criteria, we will establish a goal as a means to benchmark any change. The desired outcome of this program is that implementation will bring about profitable change in the execution of our business practices. The evaluation of this program will be ongoing and span across all sectors of our organization. It will endeavor to show causality; for example, that an event like reduction in costs is directly attributable to our new knowledge management program.

Anticipated Overall Results

We anticipate increased profitability, knowledge sharing, innovation, and sales. We expect decreased costs and frustrations, and better problem solving, on the part of our organization.

Executive Summary

Write an executive summary for this business case.

The Knowledge Management Mix

People

Introduction

Three components are vital to knowledge management: people, technology, and process. The people are the driving power behind the knowledge management mix. After all, what is technology without use and a process without participation?

A successful knowledge management program links people and helps to make their jobs easier while simultaneously benefitting the organization. Without the buy-in of the people, the best system will fall flat and become a tool that falls into disuse. An organization needs to find and implement ways that easily connect people and promote knowledge sharing. Additionally, an organization needs to find ways to recognize people for their idea sharing and promote the concept throughout the company.

Below, we have listed some knowledge management techniques that can be used to connect people.

Company Directory

Creating a company directory or “yellow pages” can help connect people. This can be achieved manually or with a computer program that allows users to upload data about themselves. Ideally, each user will have their own page that provides basic contact information, their areas of expertise, a work history, their interests, key internal and external contacts, and a picture. This approach has an added bonus: helping to identify people with common needs and abilities. This information can be very helpful when establishing communities of practice, which we will talk about shortly.

If you decide to set up a company directory, make sure you are familiar with your country’s privacy laws. In many countries, this type of information is sensitive and may only be used with the employee’s permission. Additionally, your company may want to think about drafting a legal policy on the terms of use of the directory.

As well, the directory needs to be maintained since phone numbers and contact information can change frequently. One way to do this is to link the directory with HR databases.

Establish a Best Practice Database

A best practice is a solution that has been tried in one place and might be effective in another. These are ideas worth replicating. Allowing people to share their best practices not only connects people; it can also save the organization time and money.

Communities of Practice

Communities of practice are learning communities formed when people voluntarily come together to share information about a common topic or profession. Communities can be formed based on common interests, to solve a problem, or to reach a goal. The function of these communities is to connect people in the effort to build and share knowledge. These forums offer members the chance to grow both personally and professionally as they are able to learn from the experiences of others.

The members of these communities do not necessarily have to meet face to face for the community to exist. They can exist online as a discussion board or a website. However, most communities of practice have members meet face to face at least once a year. This gives the community a more personal, physical feel and gives members the opportunity to connect on a different level.

The most important member within a community of practice is the **Community Coordinator**. Their job is to help the community develop its practice and to help the community develop. The coordinator identifies gaps in the community’s knowledge, suggests ways to keep the community’s knowledge current on new issues, and acquires tools and resources the community may need to function.

To develop the community, the coordinator performs a variety of tasks. They develop an onboarding process for new members, which will teach newcomers the basics of the community. They also schedule community events that enable community members to congregate. Coordinators also monitor the activity level of a community, paying attention to lulls and rekindling interest. Coordinators can also act as online moderators, ensuring that questions get answered and watching for any inappropriate posts.

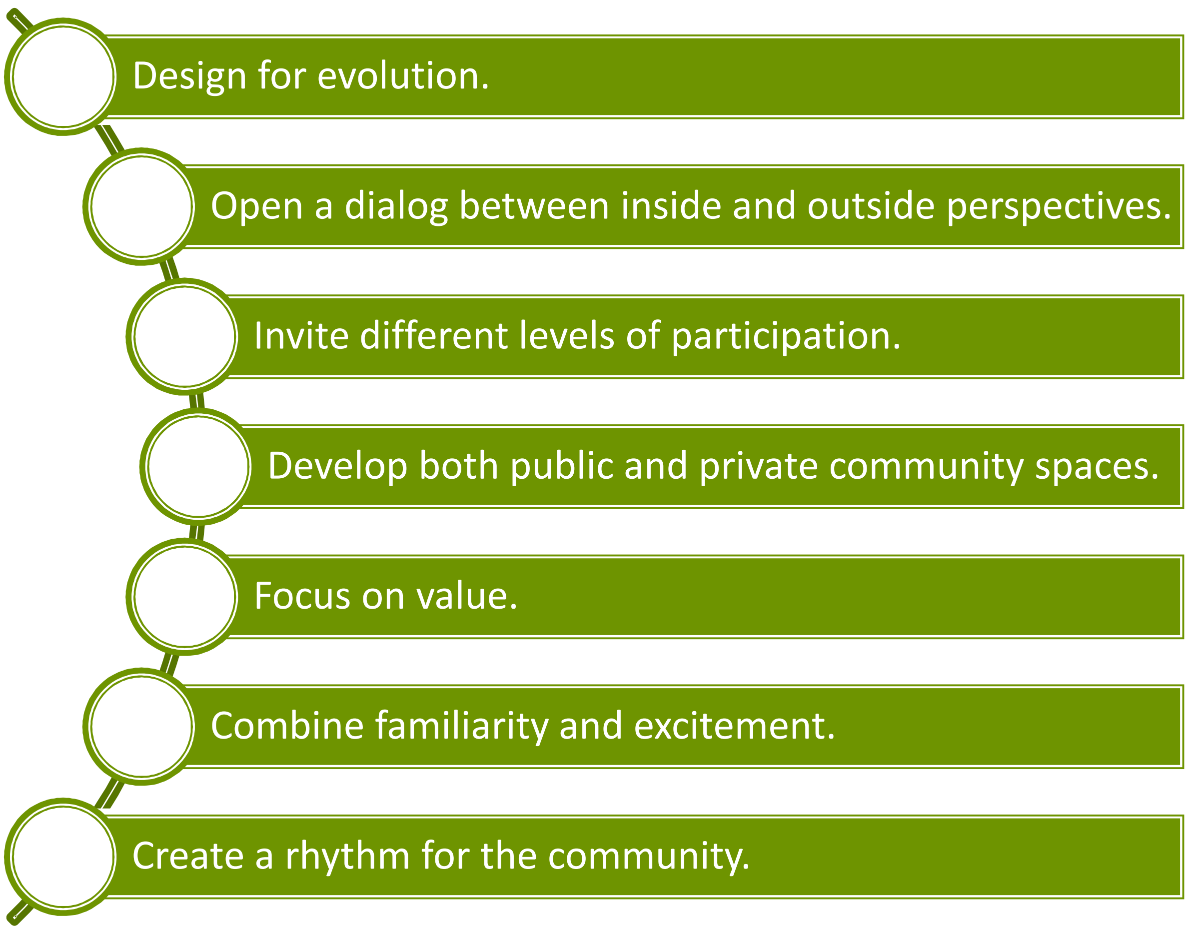
The most important role for the coordinator in building the community is to encourage networking. Thus, when thinking of who to appoint to this role, a community should consider the personal network of all candidates: the bigger their network, the better. The coordinator should also have great networking skills. The coordinator's ability to connect people is vital since most of the knowledge sharing within a community happens on an individual basis. The better the coordinator's networking skills, the more information will be shared.

An important point to note is communities of practice are different from an assigned team or group. The members of a community are there on a voluntary basis. Additionally, there are no set times for how long the community can last. Some may be in existence indefinitely while others may exist simply to solve a problem or reach a goal. The longevity of the community really depends on the members' attitude toward the relevance of the community and whether or not the Community Coordinator is effective at their job.

Communities of practice are a vital component to a knowledge management system. However, they are meant to be voluntary. In order to build a community of practice within an organization, management should allow the community to develop as naturally as possible.

Tips for Developing a Community of Practice within an Organization

Here are some tips on how to develop a community of practice.



This model comes from the book *Cultivating Communities of Practice: A Guide to Managing Knowledge,* by Etienne Wenger, Richard McDermott, and William Snyder. Let's look at each step.

Design for Evolution

It is important to view the community as a fluid environment. Members will come and go and the priorities of the group will change over time. For a community to succeed within an organization, management needs to be aware of the nature of the community and provide the resources that the community needs to grow.

Open a Dialog

The knowledge inside the community is paramount. However, members must be encouraged to look outside the community for new information or information that will help bridge gaps in community knowledge.

Invite Different Levels of Participation

Organizations must understand that different members will have different levels of participation. Some people will want to be heavily involved and lead in the community while others may want to learn through observing.

Develop Both Public and Private Community Spaces

Organizations need to support the fact that networking and knowledge transference occurs in a variety of ways. Thus, communities should have the ability to interact in both a public and private fashion. Examples of public interaction could be the community discussion board or a presentation open to all members of the community. Private community spaces would focus on one on one interaction, such as e-mail, phone calls, and informal conversations.

Focus on Value

A great way for an organization to jumpstart their communities of practice is to emphasize the value of membership. However, organizations need to be patient and understand that value is a matter of each member's perspective. Value also takes time to build. Eventually, when knowledge is built and systematized, it is easy for members to see the value in belonging to the organization. To build value initially, the community needs to focus on the problems it is trying to address and on meeting the needs of its members. Through events like presentations, the community creates value by designing social spaces within which knowledge can be accessed.

Combine Familiarity and Excitement

Management should encourage their communities to combine familiarity and excitement for two purposes: to establish norms for processes and procedures and to encourage fresh thinking. Establishing norms in a community is important so that members know what to expect and have the ability to establish connections. Creating excitement is important to keep ideas fresh and to prevent stagnant thinking.

Create a Rhythm for the Community

Once a community is established, it is important for it to maintain a good rhythm. Too many events can leave members feeling fatigued; too few can leave members feeling lethargic. Establishing a good rhythm keeps the community relevant and current without fatiguing and exhausting members.

Summary

Communities of practice are a not-so-secret method for knowledge management. Any organization wishing to implement a knowledge management program must encourage these communities. They are vital for linking people within the organization and they are an organized space to promote how we naturally learn.

Recognition within the Knowledge Management Mix

Create ways that an organization might recognize people for knowledge creation and sharing.

Technology

Technology has two roles within the knowledge management mix: to connect people and to provide a shared space where organizational knowledge can be easily stored and retrieved. When implementing new technology or improving existing technology, organizations need to consider some key points.

What are we trying to achieve with this technology? What is its function?

Before looking at any available technologies, you first need to decide what the function is for the program. Is its function to connect people or to store data? Is it supposed to be a place for people to share best practices or ideas worth replicating? Answering these questions will help you decide which programs to investigate further.

What forms of knowledge management technologies are out there? How have these technologies been working for businesses like ours?

Do your research to ensure you have a thorough understanding of what is available to meet your organization's needs.

How much will this technology cost to implement?

Make sure to include the cost of the initial purchase, hardware and software requirements, training, maintenance, future upgrades, support, and yearly renewal fees.

Do we have the existing components required to launch a new knowledge management technology?

Once you have selected a technology, make sure your existing company IT can support the new technology you want to implement. If it does not, take the necessary steps to upgrade.

Will this technology be easy to use and navigate?

Ease of use should be a design criterion.

How much training will be needed to ensure people know how to use the program?

Make sure you have the tools to offer the support to the end user. Without proper training, your investment will fall flat.

Do we have the internal expertise to train people or will we have to bring in consultants to help with implementation?

Find out whom in or outside your organization can deliver the training and what the costs will be for each option.

Do we want to pilot the program first or do a full organizational launch?

Even when we think we have chosen the best program, we may like to see how this upgrade will function in our organization before doing a system-wide change. Decide whether you would like to do a small pilot of the program or get everyone on the same page at once. Both approaches have their pros and cons. It is up to you to decide based on the parameters you are working with.

How long will it take to get the programs we need up and running?

This question should be addressed to give yourself and any invested parties a better idea of the time you will need to deliver. Make sure you have given yourself a reasonable amount of time to deliver. Allot extra time for unforeseen roadblocks.

Summary

Thorough answers to these questions will better enable your company to choose the technology it needs to best support the knowledge system it would like to implement. These answers are also contextual; the technology that works for one business may not be the best choice for yours. When choosing your knowledge management technologies, you have to consider what your company is trying to achieve with your knowledge management program.

Process

Earlier in the course, we talked about explicit and tacit knowledge. **Explicit knowledge** was defined as knowledge that can be written down. **Tacit knowledge** was defined as knowledge that comes from experience, know-how, personal conclusions, and insights. The biggest difference between the two is the ease of knowledge transfer; explicit knowledge is easier to transfer than tacit knowledge.

Within a knowledge management system, the transfer, sharing, retrieval, creation, and storage of both types of knowledge is paramount. Processes need to be put in place to facilitate this approach. Let’s look at how this is accomplished.

Explicit Knowledge Processes

Within an organization, explicit knowledge exists in written documents. These documents can be about anything the organization deems important enough to write down and share, from sexual harassment policies to the strategic goals of the organization. The great thing about this information is that it is easy to write down and share with others. The challenge is the **volume** of information an organization produces. Think about how many documents go through your hands at work on any given day, week, or year.

In order for this information to be effective, organizations need to develop processes to manage this content. They need to create a system that supports the storage and retrieval of this information. Additionally, they need to make sure that the content is managed by assigning people to monitor the information and make sure the content is updated, important, and presented in the correct way.

To manage this volume of information, organizations can use a Content Management System (CMS) with a document management system. A CMS is a tool that helps users input a variety of content (such as recordings, sound bites, documents, pictures, and videos) while adhering to parameters set up in the system to ensure quality documentation.

Within the CMS, there needs to be a document management system. The document management system is used to:

- Capture data: Users scan or input information into the system.
- Classify data: Users and content managers use keywords, dates, and authors to identify data for easy retrieval.
- Search and retrieve information: Users find data using search terms and other tools.
- Version data: Allows users to return to earlier versions of a document and view the progress of documents.
- Limit access: Certain documents can be sensitive. Limiting access gives only authorized users the opportunity to view certain documents.
- Save and back up documents: The system must be able to protect your information.

There are many content management systems to choose from. When selecting your organization’s CMS, you need to look at the explicit knowledge goals of your company. What does your company hope to do with this stored knowledge?

Additionally, you need to look at the CMS's ease of use. How easy is it for people to input knowledge into the CMS?

You should also look at your budget, training needs, and your company's existing resources. How much will this CMS cost? Consider if you will need training on the system, or if your organization will need to upgrade existing computer systems to support the CMS.

Finally, do your research. Compare various systems to find the right solution for your organization.

In a digital world, your organization's explicit knowledge processes are vital. Properly managing information will give employees the knowledge they need in a systematic way and enable your organization to focus on what is important: growing your business.

Tacit Knowledge Processes

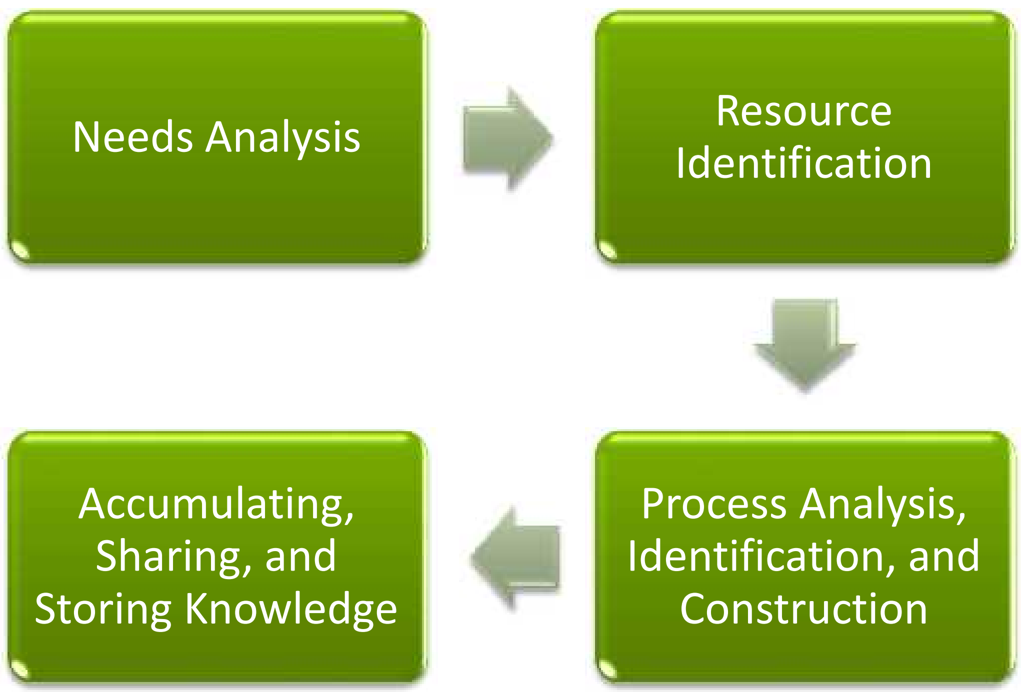
As we know, tacit knowledge is much harder to capture and share than explicit knowledge. We also know that tacit knowledge is information gained through personal experience and observations. This knowledge comes to us like the pieces of a puzzle; it's often fragmented. This means that tacit information is stored in bits and pieces in our brains, not as a whole picture. Therefore, this knowledge cannot be communicated and recorded in a methodical way. The best processes for accessing tacit knowledge are through conversation and socialization.

Create a list of how organizations can encourage the sharing of tacit knowledge.

The Knowledge Management Framework

Introduction

For the remainder of the afternoon, we are going to learn about the steps to building your knowledge management framework. The steps in this process are:



Each phase has specific steps and requirements, which we will explore throughout the afternoon.

Needs Analysis

The needs analysis phase is a vital first step in the knowledge management framework. During this phase, you collect as much data and information as possible in the effort to implement the right solution for your organization. This data enables you to put together a comprehensive picture of the issues facing your organization. This needs analysis will provide context for the development of your knowledge management strategy.

During this stage of the knowledge management framework, you need to ask yourself some carefully crafted questions to help provide focus for what actions need to be taken. The following questions can be used to guide your thinking.

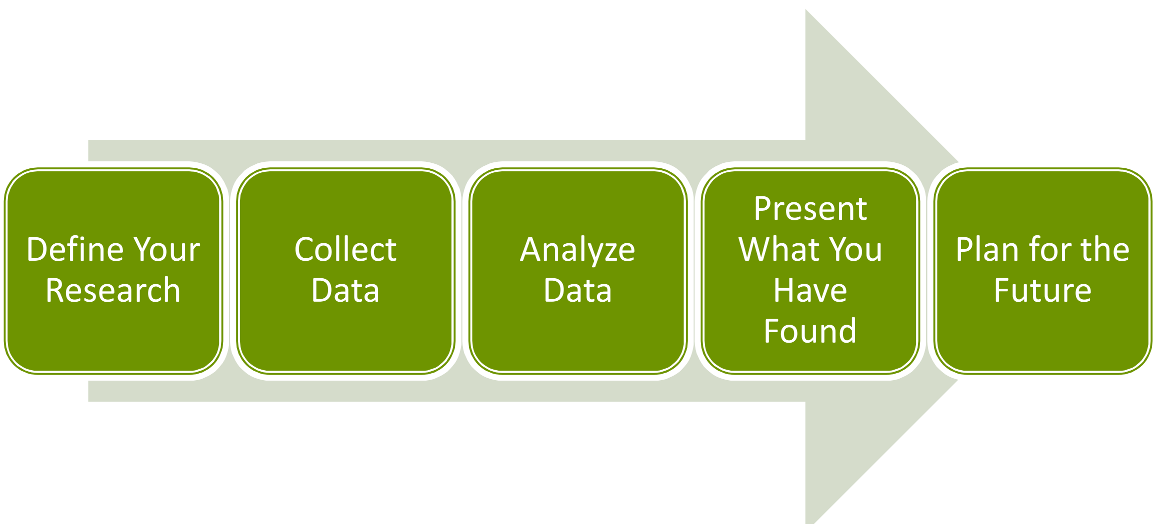
- What is the purpose of knowledge management?
- Why does my organization need a knowledge management program?
- What does the research say about the effect of knowledge management programs in organizations like ours?

- What organizational gaps will be filled by sharing knowledge? How will this program make us better?
- What obstacles might exist with this program?
- How might a knowledge management system improve existing processes and procedures?
- Is this program in line with our strategic goals?
- Will this program better enable us to reach our organizational goals?

Thorough answers to these questions will help direct your thinking. Most importantly, the answers you provide will enable you to determine what course of action to take when implementing your knowledge management program. Remember, a knowledge management program needs to be tailored to your organization's needs. Answering the above questions will help give you some insight on how you can customize this program for your organization.

How Do I Conduct A Needs Analysis?

There are five essential steps to conducting a needs analysis:



In the **Define Your Research** stage, you need to examine what's out there. How have other organizations like yours implemented knowledge management? How has the system impacted these businesses? You also need to do some thorough inside research by collecting data from internal customers (employees, management, customers etc.).

The **Collect Data** stage is all about getting the information you need to make the argument for a knowledge management program. This information can be acquired through a variety of methods, such as:

- Interviews
- Surveys
- Focus Groups
- Discussions

The **Analyze Data** stage helps you figure out how to implement your knowledge management program. For example, after analyzing the data, you can see that you need to focus your program on more IT-based solutions. This data might even indicate what kind of IT solution to implement. (For example, maybe you need an IT solution that allows for collaborative work within a document, rather than a social networking platform.)

The **Present What You Have Found** stage allows you to put what you have found into a cohesive package for the purposes of sharing and presenting your recommendations to others within the organization. This stage simplifies and explains your research in the effort to gain support for your initiative.

The **Plan for the Future** stage is a call for action. You can now make an informed decision of where to go from here.

Resource Identification

You have completed a needs analysis. You know from factual data that a knowledge management program is necessary to help take your company to the next level. Now you must identify what resources you have and what resources you need to implement this change. Enter the Resource Identification stage. This stage of the knowledge management framework is designed to look at the resources you have and the resources you need to make the organizational change.

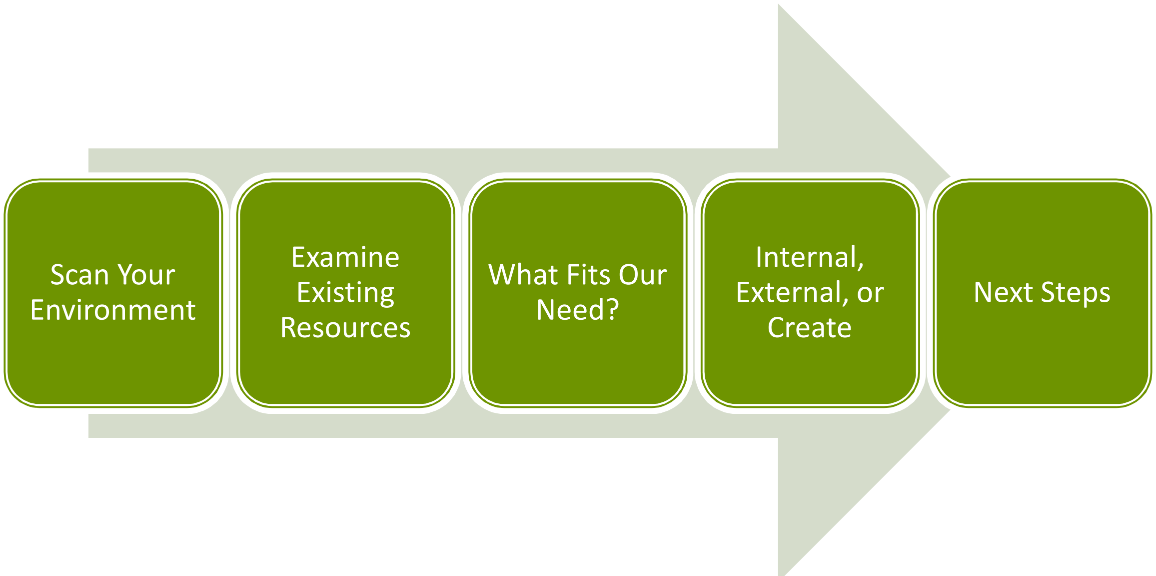
Here are some sample questions to guide you through this process:

- What is my budget? What are my budgetary constraints? Where would the money best be spent?
- How much time will be needed to implement this program? What are my time constraints?
- Who within the organization will I involve in this project?
- Do I need to seek help outside of the organization to accomplish my goals? If yes, who do I need to speak with?
- Is it necessary for us to upgrade any of our systems to implement this process? For example, if we plan on installing a new collaborative IT solution, are our existing hardware and software sufficient, or will we need to upgrade?
- Do we need training for the any of the proposed changes?

Answering these questions will better enable you to identify what resources you have and what you need. One important point to note is that resources are not always tangible. The list of questions provided above focus on time, money, and human assets, but not all resources are physical.

Steps for Resource Identification

When identifying resources, follow these five steps:



This will help pinpoint what you have (or need to have) and to give you focus on your next steps. Let's examine these phases and use an example to illustrate the process. Imagine you are trying to make changes to the way your business does its accounting.

Scan your Environment: This stage requires you to look at the existing accounting processes. What changes need to be made? Do you need more personnel or changes in software?

Examine Existing Resources: Once you have identified the problem, look at what resources currently exist that could offer a solution. In the accounting example, you have determined that a change in software is necessary.

What Fits Our Need: Now you need to decide which software program will fit your need. Outline what you are trying to accomplish. Then, list the resources available and list how each of them measures up against your needs.

Internal, External, or Create: You know you need to make changes to your software. After examining your current accounting resources, you can determine whether or not your need will be met by enhancing existing software or purchasing new software. At this stage, you should be able to determine if you need to enhance your existing internal software, acquire external software, or create new software to solve your problem.

Next Steps: You have identified your problem and assessed your resources. Now you need to implement an appropriate solution. For the purposes of our example, it has been determined that a new software program will need to be implemented. Now you need to sort out how this development will happen. Ask yourself:

- What program will you choose?
- What budget do you need?
- What training will you need to develop to support this new resource?

Process Analysis, Identification, and Construction

The next step within the knowledge management framework is Process Analysis, Identification, and Construction. This phase has two chief concerns:

- How do our current organizational processes help or hinder the implementation of a knowledge management system?
- What processes do we need to create in order to support our knowledge management system?

How do our current organizational processes help or hinder the implementation of a knowledge management program?

Every organization has existing structures and processes. The structure of your organization may include the building in which you work, the geographical layout of your organization, and the way the company is divided into departments. Additionally, the relationships and roles people play within a company also comprise its structure. Finally, the division of resources throughout the company plays a part in its physical structure. All of these existing processes play a part in how knowledge is shared within your organization.

The following questions will get you thinking about your company's existing processes and structure.

- Does your company currently have the right setup to facilitate knowledge sharing or can improvements be made to achieve this initiative?
- Does each employee have access to a computer?
- Is everyone in your organization in the same building, city, and country, or are the people that comprise your company distributed across a wide area?
- How is your office organized? Does it allow for discussion and collaboration or do people work in their own individual cubicles?
- Are managers present and accessible to employees? Do they provide a welcoming environment where employees can share their thoughts or voice concerns?
- Does your office have an informal space where employees can congregate and talk?
- How do different departments get along? Do they collaborate or feel the need to compete due to lack of resources? Does your company send the message that some departments are favored over others?
- Does your company's tiered structure (CEO down to employees) affect the way that knowledge is shared?
- How are your current processes and structures working for employees? Are these processes clear and easy to access? Do you encourage people to make alterations to processes when appropriate?
- Do people have time to reflect on the work they do and how they do it or are they simply strapped for time and more focused on producing results and meeting deadlines?

To better understand your company's current structure and process, your organization needs to get quality feedback from its employees. To get the most honest feedback, you may want to consider allowing participants to contribute anonymously.

Making Connections

Answer the following questions about your organization.

Does your company currently have the right setup to facilitate knowledge sharing or can improvements be made to achieve this initiative?

Does each employee have access to a computer?

Is everyone in your organization in the same building, city, and country, or are the people that comprise your company distributed across a wide area?

How is your office organized? Does it allow for discussion and collaboration or do people work in their own individual cubicles?

Are managers present and accessible to employees? Do they provide a welcoming environment where employees can share their thoughts or voice concerns?

Does your office have an informal space where employees can congregate and talk?

How do different departments get along? Do they collaborate or feel the need to compete due to lack of resources? Does your company send the message that some departments are favored over others?

Does your company's tiered structure (CEO down to employees) affect the way that knowledge is shared?

How are your current processes and structures working for employees? Are these processes clear and easy to access? Do you encourage people to make alterations to processes when appropriate?

Do people have time to reflect on the work they do and how they do it or are they simply strapped for time and more focused on producing results and meeting deadlines?

What processes do you need to create in order to support your knowledge management system?

To incorporate knowledge management into your organization, you will need to implement new processes to support the initiative and help with the retrieval, creation, sharing, and storing of knowledge.

Here are some tips for constructing new processes.

- Do a thorough needs analysis to identify any knowledge gaps within your organization.
- Give people time to connect with others. Encourage them to collaborate! Create spaces within your organization that promote informal employee gathering.
- Promote communities of practice and other approaches that encourage employee networking.
- Implement IT-based solutions that help connect people to each other, and with the information and data they need to do their jobs effectively.
- Celebrate knowledge sharing successes within your organization.
- Encourage people to reflect on the knowledge they acquire and share while at work. Help them understand that they are learners within a learning community.

Remember that the processes you choose need to be tailored to your organization and the goals you hope to achieve with your knowledge management program. There is no one right answer for which processes you should choose or leave out. Be patient with yourself and allow yourself time for trial and error. With proper planning and support, you will develop the right processes for your organization.

Accumulating, Sharing, and Storing Knowledge

In order to implement a successful knowledge management program, you need to know what you already have. In other words, you need to be able to take an inventory of the knowledge your organization possesses. As well, you need to be able to manage this inventory.

A great technique for deciding how to manage your knowledge is to determine which knowledge you would like to focus on capturing: tacit or explicit. This decision should be based on the type of business your organization is involved in.

Let's use some examples to illustrate this process. If you work for a health insurance company and deal with large volumes of claims and other organizational data, you may want to focus on capturing explicit knowledge. The workers in this organization have connections with others, but they would mainly be required to carefully follow explicit policies. Therefore, the management and codification of explicit knowledge would be paramount for this type of industry.

Now imagine your business is within the oil and gas industry. You are a global firm with established processes and procedures, but your industry strives for innovation and creativity. In this type of company, a focus on capturing tacit knowledge would be best. While you need a comprehensive system for dealing with explicit knowledge, your industry will rely more on employee networking in the effort to share best practices and creatively problem solve.

If you examine the two examples above, it is apparent that the accumulation, sharing, and storing of knowledge does not have to be strictly explicit or tacit. A good program will encompass both worlds. For example, a knowledge management program focused on explicit knowledge will also provide ways to connect people. A program that is focused on tacit knowledge will have a system for managing explicit knowledge. However, a great knowledge management program will focus on capturing the type of knowledge they need to take their business to the next level.

ITandD's Conundrum

The pre-assignment consisted of a case study and a series of questions. This case study was designed to give you a sense of the importance of knowledge within a business and how vital it is to manage this asset. It was intended to have you reflect on the drastic impact of knowledge loss and the importance of knowledge retention within an organization.

Case Study

Mary is the Lead Program Manager at International Training and Development (ITandD). Her company is a multi-national, global business. Mary has been with the company for 40 years and has been heavily involved in securing some of the company's biggest sales. She has close relationships with many clients and knows what the clients are looking for. Although the company has policies and procedures in place, after 40 years of working with ITandD, Mary has developed her own approach and customers really seem to respond to her methods.

Mary will be retiring at the end of this year. While the company has known of Mary's impending retirement, they have been sidetracked by the day-to-day activities of the business. It is now four months until Mary's retirement and senior management is beginning to worry about the potential loss the company will face with Mary's absence. Her knowledge is highly valuable to the organization and if nothing is done to try to transfer this knowledge, it will literally walk out the door.

Questions

Why is Mary's knowledge important to the company? Can't they just get someone to replace her?

What may result if Mary's knowledge is not properly transferred back into the company?

How might the company try to capture Mary's knowledge before she leaves? What strategies might they employ?

Do you think Mary's knowledge will be easy to capture? Why or why not?

Has a situation like this ever happened in your workplace? Describe the effects that were felt from the person leaving and what was done (if anything) to capture the person's knowledge.

Knowledge Management Models

The KM Process Framework (Bukowitz and Williams)

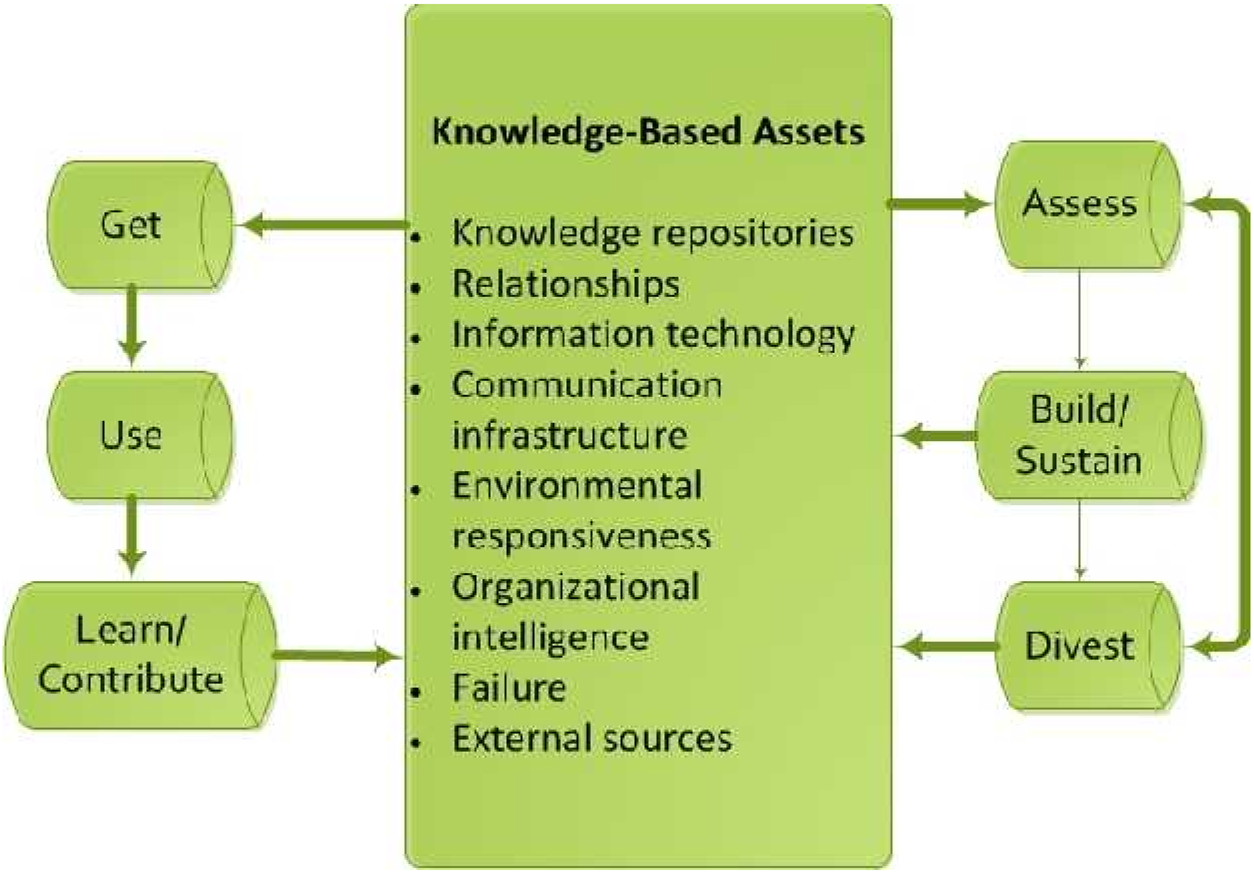
Introduction

The KM Process Framework model was proposed by Wendi Bukowitz and Ruth Williams in 1999. It focuses on how organizations create, preserve, extinguish, and employ a body of knowledge to create value within the business.

Knowledge-based assets consist of:

- Knowledge repositories
- Relationships
- Information technologies
- Communication infrastructure
- Environmental responsiveness
- Organizational intelligence
- Failure
- External sources

Model Overview



Breaking Down the Model

This model can be broken down into six stages that revolve around knowledge-based assets.

Let's start on the left side of the model, beginning with **get**. This stage of the model involves the acquisition of knowledge in order to make decisions, solve problems, or innovate. The challenge with this stage is sifting through huge amounts of information in order to find what you are looking for.

Think about doing an Internet search on a particular topic. How many results do you normally get? How many results do you have to sort through to get the information you need? In the get stage, you need to sort through the information to find valuable knowledge in the effort to manage this knowledge for you own ends.

The next stage is the **use** phase. This stage looks at the information you have acquired in the effort to use this knowledge to your organization's advantage. This stage encourages both individual and group creativity as a means to tailor knowledge for creative problem solving. In this stage, you decide how to act on the knowledge acquired in the first stage and implement this knowledge in an appropriate solution.

The last component on the left-hand side of the model is the **learn/contribute** stage. This stage is the formal process of learning from experiences and acquired knowledge. In this stage, the knowledge is taken from group or individual processes and transferred into the collective knowledge of the organization. This is done through careful reflection and recapping of the solutions implemented in the “use” stage. The end goal is to expand the organization’s collective knowledge with the creation and contribution of best practices (knowledge success stories) and lessons learned (knowledge failure stories).

This learning phase is vital. Creating best practices and lessons learned helps to ensure that the experiences do not get lost within the organization. For example, let’s say that your organization attempts to implement a new policy and this implementation is extremely unsuccessful. Is it best to simply remove the policy and move on, or is it best to figure out and document why the implementation was unsuccessful for future endeavors? The point of learning and sharing is to ensure that positive changes are made within our organization.

This learning and sharing must also be done in a public place. Your company’s knowledge experience must be visible and accessible to the entire organization. This helps to promote your organizational culture as being one of learning and it allows the successes of employees to be shared.

On the right-hand side of the model is the **assess** stage. This stage deals with examining the existing knowledge within the organization. This is the stage within which we take an inventory of the knowledge and intangible assets we already possess. We need to assess the competencies of our people, the relationships we have with clients, our existing processes and procedures, our company culture, the relationships we have with other businesses, etc.

Once we have assessed the knowledge within our organization, we need to address the issue of value. Is this knowledge contributing to the organization or has it been warehoused? Does this knowledge give us a competitive edge or is it outdated? Assessing knowledge for value leads into the last stages of the model: **build/sustain** or **divest**.

If we view select knowledge within our organization as being valuable, we need to figure out a means through which we can build on this knowledge and **sustain** this knowledge. We need to allocate resources to grow and maintain our knowledge. These resources should promote the creation of new knowledge and reinforce existing knowledge.

If we view select knowledge within our organization as being unimportant, we need to **divest** this knowledge. We need to make sure that our resources are being spent on things that hold value and have the ability to create value for our organization. Spending money, time, and human resources on assets (physical or intellectual) which have no value will result in lost opportunities. You need to assess new and existing forms of knowledge to make sure it still has relevance and strategically cut out knowledge that is unimportant.

This divesting component is what sets Bukowitz and Williams’ model apart from most knowledge management models, since most models focus on sharing, creating, and organizing knowledge. Most models do not mention that it is important to rid our organization of unwanted clutter, including unimportant knowledge.

Knowledge Management Matrix (Gamble and Blackwell)

Introduction

The knowledge management matrix is a theoretical model of the knowledge management process. Developed by Paul Gamble and John Blackwell in 2001, it focuses on the sharing of knowledge within an organization.

Model Overview

		Tacit	Explicit
Approaches	**Sense**	Observe	Gather
	Organize	Contextualize	Categorize
	Socialize	Share	Disseminate
	Internalize	Apply, Decide, Act	

Breaking Down the Model

This model can be broken down into four stages:

- **Sense**: In this stage, managerial level individuals or teams observe and gather sources of their organizational knowledge.
- **Organize**: This gathered knowledge then needs to be allocated based on organizational gaps and assessed for value and importance.
- **Socialize**: Once assessed for value and importance, the knowledge needs to be communicated to wherever and whoever needs it in the organization.
- **Internalize**: Through use, the knowledge becomes internalized within the organization.

Case Study

Let's use an example to illustrate this matrix. Your department is well known for its customer service, especially when dealing with challenging customers. Your company would like to examine how your department handles customer complaints to help other departments.

An individual or team would first observe and **gather** information about how employees in your department handle complaints. What do they do when dealing with customers?

Next, the knowledge management team would contextualize and **organize** the gathered information. They would assess how your department deals with complaints versus how the company deals with complaints. What is the difference? Which approach has more value? How can we bridge this organizational gap?

The knowledge of how your department deals with complaints would then be **transferred** to other departments. One strategy might be to have people in your department teach and observe people in other departments.

Over time and with the proper implementation and support, your department's way of dealing with customers will permeate the company. This knowledge will become internalized within the organization through use.

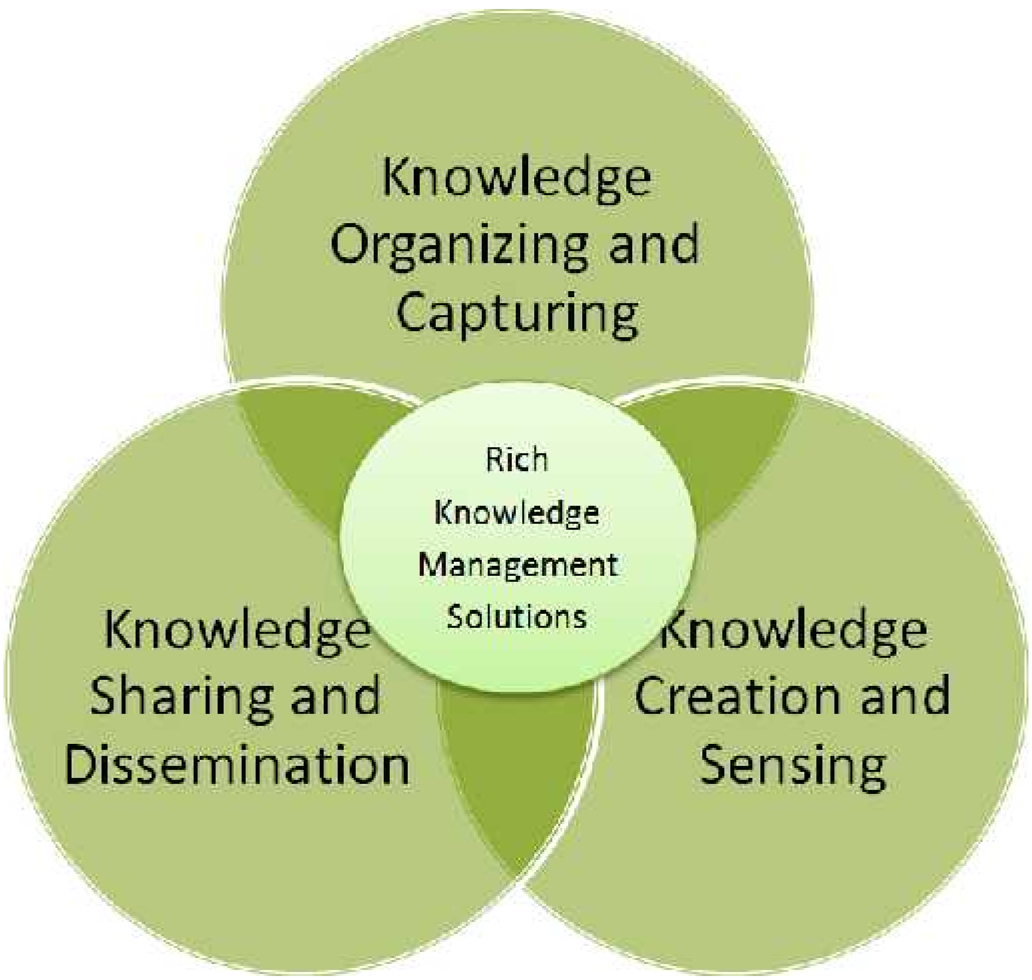
While this model encapsulates the process of sharing knowledge, it does not explain how we can divest, create, or acquire new knowledge. How might you improve this model?

Process Model (Botha)

Introduction

The knowledge management process model developed by Anthon Botha in 2008 examines the interdependent relationship between three knowledge processes. The model proposes that the successful interaction and overlap of these processes leads to rich knowledge management solutions. Like the Gamble and Blackwell model, this approach focuses on the role of management within the knowledge sharing process. Unlike Gamble and Blackwell's matrix, this model accounts for the creation of new knowledge.

Model Overview



Breaking Down the Model

The first stage of this model deals with the **organization** and **capture** of knowledge. This stage is a people-oriented process. That means people (managers) are actively involved in figuring out what knowledge exists within their organization and cataloguing this knowledge in order to make sense and better use of the collective information and data. Like the Gamble and Blackwell model, people organize this information to see how this data can help bridge organizational gaps.

Overlapping with the first stage of this model is the **creation** and **sensing** knowledge stage. This stage also has a people focus. That is, people within the organization are aware of the collective knowledge the business possesses and want to build on and enhance this asset by generating new knowledge.

Overlapping with these stages is the **dissemination** and **sharing** knowledge stage. This stage involves the technology you will implement to allow people to work collaboratively, share knowledge, and access the information they need.

According to this model, the overlap and proper execution of these three stages will lead to **rich knowledge management solutions**.

Case Study

Let's use an example to illustrate this model. Your company would like to enhance an existing service. Under this knowledge management process model, you would start your approach by looking at what you know. What do you know about this existing service? What do your employees know about this service? What are other businesses offering?

From here you would begin creating new knowledge to enhance your service. How would you like to better this service? What could you do to make it better? What do your customers want from this service? What are your employee's recommendations for enhancing this service? What resources do you have to help you carry out this task? What are other businesses in this industry offering and how do we make our offer more attractive?

Once you have decided how to improve your existing service, you need to share this information with whoever will be impacted by these changes. This includes employees and managers, as well as customers.

How could you implement this model in your workplace? Be sure to include practical examples.

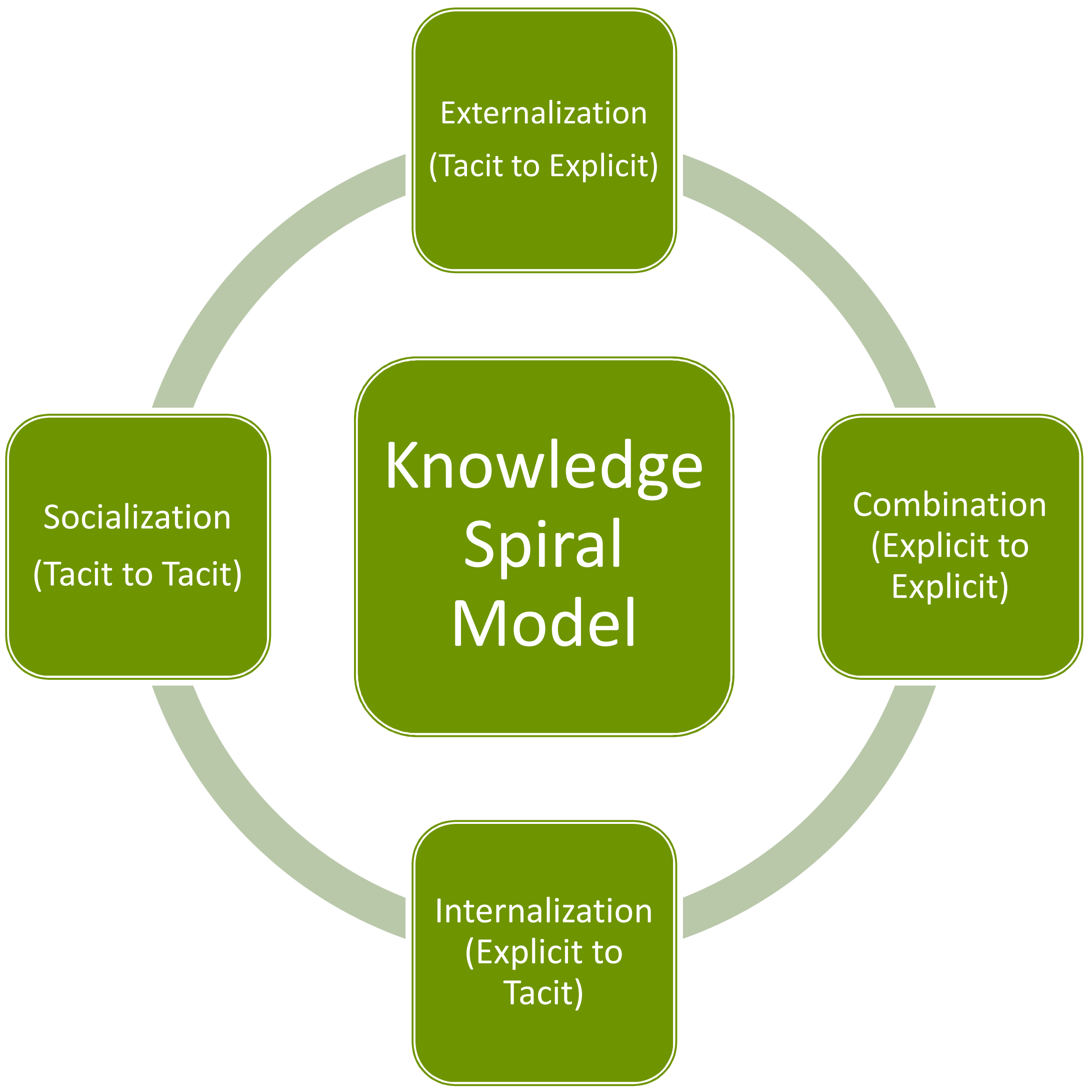
Knowledge Spiral Model (Nonaka and Takeuchi)

Introduction

The Knowledge Spiral Model was proposed by Ikujiro Nonaka and Hirotaka Takeuchi in 1995. It specifically analyzes how tacit and explicit knowledge interact through four conversion processes: *socialization* (tacit to tacit), *externalization* (tacit to explicit), *combination* (explicit to explicit), and *internalization* (explicit to tacit).

Nonaka's model argues that all knowledge is transferrable under the right conditions. The model is called the **Knowledge Spiral** because Nonaka viewed the transfer of knowledge as a continuous learning process. In this process, the learner comes to deeper and deeper levels of understanding on a particular topic as they move around the cycle.

Model Overview



Case Study

Let’s use an example to illustrate the transfer of tacit and explicit knowledge within the context of the Knowledge Spiral Model.

You are a new employee at your organization and a friendly colleague becomes your mentor. You are learning information from this person through observation and interaction. Through a process of **socialization**, they are transferring their experience (tacit knowledge) to you, which results in you acquiring new skills.

You have a question about why your mentor does something in a particular way. They try to pass this knowledge onto you through a conversation, which means they are transferring knowledge to you through a process of **externalization**. They are making tacit knowledge explicit by telling you stories of their experiences, using metaphor or analogies to explain concepts, and through dialog.

You still have questions about how to enter data into your computer and your mentor is out for the day. They ask you to e-mail the questions and they send you back step-by-step answers for data entry. Now you are transferring knowledge through the **combination** process. Your mentor has given you relevant knowledge, edited it, and processed it to make is usable.

You have been at the job for a year and notice how much your productivity has increased. You now know the processes and have found ways to improve how you do things. You have **internalized** knowledge; in other words, you have transformed explicit knowledge into tacit knowledge.

Summary of the Models Presented

The knowledge management models presented provide theory to inform your practice. While these models have similar elements, they also differ from each other. This is an accurate reflection of knowledge management: there are basic pillars that comprise the concept (like the involvement of people, technology, and processes), but there can also be variation within the development and execution of the idea.

This variation mimics the development of knowledge management within your organization. You will need to have a solid foundation based on the principles of knowledge management, but you will also need to tailor your program to suit the needs of your organization.

Cross-Functional Teams

Defining Cross-Functional Teams

A cross-functional team is a group of employees that have a diverse background working toward a common goal. For example, you may have people from HR, Manufacturing, and Training and Development all mixed together. Members may also be invited to join the team from outside the organization.

The life span of a cross-functional team is much like a community of practice. If people see value in these teams, they will continue to participate and maintain the team arrangement. If not, teams may dissolve once their task or goal is achieved.

These teams work best when they are self-directed and able to focus on less structured interaction to solve a particular problem or achieve a goal. This allows the knowledge sharing practice to happen organically, much like the processes advocated within the community of practice model.

Making Connections

Have you worked on a cross-functional team?

If so, what was your experience?

What might be the benefit of a cross-functional team within a knowledge management system?

Case Study

Let's use an example to illustrate this technique.

Olivia's organization manufactures plastic products that are distributed all over the world. Her company is trying to become more environmentally friendly and introduce products that use less plastic. They are also trying to introduce products that use a higher percentage of recycled plastic than new plastic.

Olivia has been asked to put a team together to brainstorm ways to achieve these objectives. She remembers what she learned in her knowledge management course and chooses to create a cross-functional team from members within and outside the organization.

She first thinks of who can help her solve her problem. What departments and what positions would allow her to get the most results? She asks a senior manager from the products department, an employee from purchasing, an employee from sales and marketing, and a supervisor from training and development. She also asks an outside supplier to be part of the team. She then formulates a list of questions to focus the group on the problem at hand.

To help kick off the brainstorming and knowledge sharing, she informs the group of the goal she is trying to achieve. She also gives the following questions to each member:

- What might be one way we can decrease the amount of new plastic we use in our products?
- Are there other plastics companies who have attempted to use less new plastic and more recycled plastic? How did they accomplish this? What was the outcome?
- How might customers perceive our company if it is more environmentally friendly? What is the benefit or cost of this perception?

The great advantage of implementing cross-functional teams is that these teams turn traditional organizational learning upside down. They defy the top-down approach to knowledge sharing. These teams also operate without adherence to where you sit in the organizational hierarchy.

If you look at the team members Olivia has chosen, these members come from different levels within the organization: she has employees, supervisors, and senior managers working together for one common goal or objective. Normally, we see employees and senior managers travelling within the same circles. The cross-functional team breaks this class system and illustrates a few key points, most importantly that regardless of your experience, background, and status within the company, you have something to bring to the table. This attitude is open-minded, inclusive, and refreshing. It's just the right type of environment you need for people to share and build their knowledge in pursuit of a viable solution.

Mentoring

Albert Bandura is a psychologist who is famous for his social learning theory. This theory proposes that people learn by socializing with others, particularly through observing and modeling behavior. Through a series of social psychology experiments, Bandura identified the importance of modeling. He argued that people watch and emulate the modeled behavior of others. This theory underpins the importance of mentoring.

Making Connections

What is a mentor?

Have you had a mentor either personally or professionally? Describe your experience. What did you learn? Was this relationship beneficial to you?

Have you been a mentor? Describe your experience.

What did you teach? Was this relationship beneficial to you? Did you learn more about your craft by teaching it?

What might be the benefit of a mentoring program within an organization?

Defining Mentorship

A mentor can be defined as an adviser, but it can also be much more than that. A mentor performs the following functions:

- They ask questions to provoke thought within us.
- They help us understand and master new concepts and processes.
- They help us understand and master the day-to-day activities we do to perform our jobs.
- They can be our own personal counselor and coach.
- They inspire us to grow and achieve and are interested in our growth and achievement.
- They can be a sounding board for our ideas.
- They model behavior for us to observe and imitate.

Having a mentor system within your organization is a powerful tool. A positive mentor experience can **connect people in a profound way** and goes beyond the boundaries of the office. It is an intimate exchange between two people that is **designed to help both people grow**. Mentors learn more about their craft and have a deeper understanding by teaching another person, and the person being mentored gets the chance to have their own personal teacher and advocate.

Mentoring is a great tool for sharing tacit knowledge. The mentor is forced to reflect on why they do what they do in the effort to pass this knowledge to the student. The student gets to observe and absorb knowledge that may be hard for the mentor to verbalize.

Additionally, a mentoring program is a great tool for helping onboard new employees. Of course, new employees can learn the policies and procedures of the organization through documents and conversations with colleagues, but mentoring offers a much more interactive, fulfilling, and stimulating approach.

However, mentoring should not only be reserved for new employees. Remember the pre-assignment about Mary, her retirement, and the stores of knowledge that would be walking out the door with her departure? A solution could be Mary mentoring another employee within the department. The key here is that Mary must be open to the idea of mentoring and understand what is involved in the mentoring process. She would need to be present and willing to mentor another person.

This brings us to one very important point. **A mentor relationship or program must be voluntary.** Those who mentor must want to help others. Forcing people to be mentors can have disastrous consequences. Some people are uncomfortable with the idea of teaching another and having someone shadow them. The person who mentors must make their own decision to do so and be extremely comfortable in their professional skills and abilities. They must also be comfortable with sharing their experiences and lessons learned.

Organizational Culture

Making Connections

What is culture?

Can organizations have culture?

What impact does culture have on what we hope to achieve within an organization?

Can we leverage culture to help us achieve our goals?

What type of culture does your organization have?

Let's take a look at an organization that prides itself on its culture and has worked tirelessly to maintain a culture that supports its strategic efforts.

Zappos – Much More Than an Online Shoe Store

The Zappos online shoe store originated from an unsatisfied customer. When founder Nick Swinmurn could not find a pair of shoes he wanted at a local store, he looked for investors to start an online shoe store that would alleviate this problem. Swinmurn sought investors and found them in Venture Frogs, headed by Tony Hsieh and Alfred Lin. Eventually, Hsieh took on a more active role in this investment and became co-CEO with Swinmurn.

In 10 years, Zappos grew from an unsatisfied customer's idea to a company with $1 billion in annual sales company. It was eventually acquired by Internet giant Amazon.com. Most companies would be focused on the numbers, profits, and success of this acquisition, but Zappos was concerned about maintaining its culture. They felt that this was the key ingredient for the company's success.

Zappos' organizational culture is fairly unique. Here is an overview of Zappos culture and core values.

- Employees enjoy free lunches and free health care.
- The Zappos office has a library, no-charge vending machines, and a nap room.
- People are encouraged to decorate their departments and cubicles in whatever way they see fit.
- Managers are required to spend 10-20% of their time with employees outside of work in a recreational setting.
- Employees often lead spontaneous parades through offices and departments.
- During the hiring process, all employees (regardless of their position) are required to go through the Zappos four week customer service training program. At the end of this program, every employee is offered a $2000 "quit now if you want" incentive.
- Employees have two interviews: one to figure out their qualifications and one to figure out if they will fit in with the existing Zappos culture.

Zappos even has a culture book comprised of two to three paragraphs from each employee stating what Zappos' culture is and means to them. (This book is available at http://www.zapposinsights.com/culture-book. This link was accurate at the time of publication. Velsoft takes no responsibility for the content or accuracy of this site.)

Along with its culture, Zappos has the following Family Core Values:

- Deliver WOW through service
- Embrace and drive change
- Create fun and a little weirdness

- Be adventurous, creative, and open-minded
- Pursue growth and learning
- Build open and honest relationships with communication
- Build a positive team and family spirit
- Do more with less
- Be passionate and determined
- Be humble

(Source: http://www.zapposinsights.com/culture-book)

With these values and their staunch commitment to maintaining the company's culture, it seems as if Zappos has done much more than just sell shoes. They have carefully crafted a culture that has been paramount to their success. However, don't mistake a fun culture for lack of business focus. Zappos leveraged its culture to create engagement with their employees, to create an environment that encouraged innovation, and to boost knowledge sharing within their organization.

This brief look at Zappos' culture comes from Tony Hsieh's book *Delivering Happiness: A Path to Profits, Passion, and Purpose*.

Making Connections

We just learned about how a company used its culture to achieve its strategic priorities. If our priority is to maximize the use of our organizational knowledge:

What changes can we make to our organizational culture to facilitate this priority?

How can we leverage culture to help implement a knowledge management system?

How can we change our organization's culture so that it encourages collaboration rather than competition?

Grow Your Culture to Support Your Initiative

Zappos crafted its culture to encourage collaborative effort on the part of its employees in order to provide the best customer service possible. They also built an environment to support this goal.

When looking to implement a knowledge management program in your organization, you must consider the main premise of knowledge management: that knowledge will be **shared**. The big questions to ask when examining your company's culture are:

- Does your organization encourage sharing or competition?
- Does your organization value continuous learning and act in an appropriate way to support this belief?
- Does your organization encourage, support, and reward divergent thinking and innovation?
- Does your organization encourage employees to see themselves as continuous learners?

Your organization's approach can either enable the sharing of knowledge or hinder it. If your company focuses on rewarding competition between employees, then people will get the message that it is best to hoard knowledge in order to get ahead. Additionally, saying we endorse something and not following up with appropriate actions is a surefire way to lose the support of your workers. When implementing a new program, you need to make sure that your culture can support the intent of the initiative.

Tips for Crafting a Knowledge Sharing Culture

Reward Collaboration Rather Than Competition
Highlight collaborative efforts in your organization. Talk about who was involved, what the outcome was, and why this type of behavior is so important on both an individual and organizational level. Put this information in a high traffic area to ensure that each member of the company has a chance to view the success.

Figure Out What You Are Already Doing Well
When seeking to craft a knowledge sharing culture, figure out what you are already doing well. Find ways to enhance and extend these processes to enable knowledge sharing.

Encourage Employees to See Themselves as Continuous Learners
To craft your knowledge sharing culture, you need to encourage employees to see themselves as continuous learners. They need to realize that they are the heart, soul, and brains of your organization. Encourage this mindset by offering regular workplace and personal training and development, offering educational benefits, and sharing success stories from your people.

Learn From Others
Do your research and find out what other organizations are doing. Are there any approaches they are using that might work well in your environment?

IT Solutions

Technology is a very important component of organizational knowledge sharing. Throughout the course, we have touched on some IT solutions that can support your knowledge management program. Let's recap these solutions and share some additional approaches that can help you capitalize and maximize the knowledge within your organization.

Company Directory

Creating a company directory or "yellow pages" can help connect people. This can be achieved manually or with a computer program that allows users to upload data about themselves. Ideally, each user will have their own page that provides basic contact information, their areas of expertise, a work history, their interests, key internal and external contacts, and a picture.

Best Practice Database

A best practice is a solution that has been tried in one place and might be effective in another. Use a database to capture organizational success stories and ideas worth replicating.

Content Management System (CMS)

A tool that helps users input a variety of content (such as recordings, sound bites, documents, pictures, and videos) while adhering to parameters set up in the system to ensure quality documentation. This tool helps organizations manage large volumes of information.

Document Management System

A tool that is normally part of the CMS. It is used to:

- Capture data
- Classify data
- Search and retrieve information
- Version data
- Limit access
- Save and back up documents

Help Desk

A help desk serves as a place for employees within your organization to pose questions and get support. If appropriate, other members of the organization can answer questions in addition to the IT team.

Company Intranet

An intranet is a private network within your organization. Depending on what your organization values, having an intranet can offer many knowledge sharing benefits. Here are some examples:

- A space to provide e-mail
- A space to deliver training
- A place to publish information, such as company updates
- Ensuring quick and easy access to information for everyone in the company, no matter where they are
- Encouraging collaborative work as users can simultaneously work on the same document
- Discussion areas for users to interact
- Shared calendars and project management tools to increase and encourage collaboration
- Access to your company directory
- Access to company policies, mission statements, manuals, etc.

Company Extranet

An extranet is an extension of the intranet that is open to outside users, such as customers, suppliers, partners, etc. An extranet can be used to:

- Provide product and service information
- Recruit employees
- Exchange data
- Sell products and services
- Purchase supplies and services
- Collaborate with partners

Company extranets are a great way to share knowledge with people who are involved with your business that are not internal staff. Normally an extranet is password and firewall protected to ensure the security of sensitive information (like specific product details, customer information, financial results, etc.).

Electronic Whiteboard

This tool is similar to a blackboard or whiteboard, but because it is an electronic version, it allows users to share documents and drawings. This solution works well for:

- Displaying data
- Analyzing data
- Brainstorming
- Drawing concepts, flowcharts, etc. to help express an idea

This approach works best when paired with an audio device that allows users to discuss the information as it is being recorded.

Videoconferencing

Videoconferencing can be done from your desktop or from a designated space within your organization. The biggest advantage of videoconferencing is that you can link more than two locations to meet at the same time. This can be extremely cost efficient and time effective when trying to meet with multiple parties to discuss a topic.

Integrated IT Packages

An integrated IT package contains multiple tools to connect your organization. For example, a single service might offer voice services, videoconferencing, text chat rooms, discussion boards, file storage, and instant messaging. Most packages allow you to pick and choose the features you want. Some companies will even customize the tools you choose to meet your organization's needs.

Summary

These examples are just a starting point of available technologies that can be useful with a knowledge management program. There are hundreds of IT-based solutions to help your organization share its knowledge.

When you are choosing a new solution, keep in mind the questions we discussed in the Technology portion of Session Four of this course. Additionally, keep in mind the goals you are trying to achieve with this technology. What do you want it to do and how do you want it to perform this task? Thorough research and comparison will help you identify the IT solution(s) right for your organization.

Which Technologies Would Be Best?

Case Study

Andrea is working with a team to implement a knowledge management approach within her organization. They've got buy-in from the CEO and employees; now they just need to figure out what would work best for their organization. Andrea has been put in charge of deciding which IT solutions would fit her company's needs.

Andrea's company is relatively small, with about 150 employees. However, the business is expanding and the company has just opened a small office overseas. With this expansion, there has been a natural amount of upheaval. However, there have also been a high amount of complaints from staff. They feel that the tools they are using to share knowledge are no longer sufficient to support the shift in the organizational structure.

Andrea looks at the knowledge sharing tools they currently have. Right now, they have a basic company intranet that is used mostly for e-mail. Andrea wonders what else this intranet might be able to accomplish. They also have a basic document storage database but it is not systematized or monitored and people have no standard to adhere to when inputting information. Actually, Andrea has overheard employees saying they stay away from this database because they find it useless.

Andrea then thinks about what she wants from an IT solution(s). She wants a place for customers to be able to view products and services that would give more information than the company website. She also wants employees to be able to collaborate on documents, especially with the opening of the overseas office. She knows that although there are only 150 employees within the company right now, this number will soon rise. This means that people need to have networking tools and a way to tell them who else is in the organization. Your job is to help Andrea get on the right track with her IT solutions.

Discussion Questions

Based on the information in the last session, which technologies would be best for Andrea's organization?

Can you think of some potential IT solutions that were not presented in the last session?

Give a brief description of why you have chosen these technologies.

Implementing Knowledge Management Initiatives

Building Knowledge Networks

A knowledge network can be defined as either individuals or groups of people that network in the effort to share, build, create, disseminate, and apply knowledge. Let's examine some common types of knowledge networks and how to build them.

Knowledge Networks

Communities of Practice
Communities of practice are learning communities formed when people voluntarily come together to share information about a common topic of profession. Communities can be formed based on common interests or with the intent of solving a problem or goal. The function of these communities is to connect people in the effort to build and share knowledge.

Communities of Interest
Communities of interest are similar to communities of practice but they are less focused. They do not require a Community Coordinator to facilitate knowledge sharing and can have a much larger membership than communities of practice. The function of these communities is to share knowledge, but this process takes place in a much less formal environment than communities of practice.

Cross-Functional Teams
A cross-functional team is a group of employees that have a diverse background working toward a common goal. For example, you may have people from HR, Manufacturing, and Training and Development all mixed together. Members may also be invited to join the team from outside the organization.

The life span of a cross-functional team is much like a community of practice. If people see value in these teams, they will continue to participate and maintain the team arrangement. If not, teams may dissolve once their task or goal is achieved.

Discussion Boards
Discussion boards are online tools that provide a forum within which people can be part of a knowledge network. Discussion boards can be unstructured; think of discussion threads or comment sections on the internet. Anyone can add to these and no one really monitors the content.

Discussion boards can also be structured. These boards are monitored and managed by a facilitator. The facilitator's job is to ensure that content remains on topic. They also help ensure that specific goals (and actions to fulfill these goals) are completed within an agreed-upon time set out by the discussion board members.

Mentoring
Mentoring is an intimate exchange between two people that is designed to help both people grow. Mentors learn more about their craft and have a deeper understanding by teaching another person, and the person being mentored gets the chance to have their own personal teacher and advocate.

Summary

Remember that knowledge networking does not have to be limited to people involved in the same organization. It is also important to incorporate members from outside of the organization. This gives us an even greater knowledge base and offers a more holistic perspective. Think about involving key customers, outside experts, and other businesses in your knowledge networks.

How to Build Knowledge Networks

Knowledge networks are an organic process where people connect with each other for mutual benefit. This means that if people are unwilling to participate and collaborate, we cannot force them into it. However, we can guide people through encouragement and by modeling the way.

Lead by Example

Communicate to your people that your organization believes in continuous, collaborative learning. You might establish events for employees to connect with each other, involve all levels of the organization in the knowledge sharing process and broadcast the results, and share the vision of your company with everyone involved.

Show What's in it for Them

Use real examples to show people how knowledge management will positively impact them. Show them examples of how knowledge management programs have decreased costs and frustrations, while increasing efficiency, productivity, and quality. Inform people that the key to a great knowledge management program is the sharing and building of the company's collective knowledge. Once they begin sharing, they and the organization will begin to reap the benefits.

Give Time to Get Value

Members of knowledge networks need to perceive value in the network, but value takes time to build. Value is created as time passes and the collective knowledge of the network builds. Make sure that expectations are set appropriately and that members understand what they will get from the network as time goes on.

Creating a Knowledge Management Body of Knowledge (KMBOK)

Making Connections

What is a body of knowledge?

How do we build a body of knowledge?

What kind of information would be included in a body of knowledge?

Does your organization have any existing bodies of knowledge?

Can you think of any body of knowledge examples?

What is a Body of Knowledge? What is a KMBOK?

A **body of knowledge** is made up of the terms, concepts, and activities that comprise a field of knowledge. This information can be housed in forums such as libraries, journals, and/or websites. A body of knowledge is an authoritative source for people looking to find and share information on a specific field.

Two examples are the CITBOK (for Canadian information technology professionals) and the PMBOK (for project management professionals).

A **KMBOK** is a body of knowledge that pertains to the knowledge management field, such as the Journal of Knowledge Management Practice.

While existing KMBOK's can provide you with a lot of useful information, they are likely not tailored to your organization's needs and can be time consuming to sift through. This means that you will likely need to create your own KMBOK that is designed and tailored for your company.

Steps to Create Your Organization's KMBOK

Decide What Material to Include

The first step in designing your KMBOK is deciding what information you want to include. What topics need to be discussed and addressed? This question will be answered through an examination of both your knowledge management program and your organization.

Design a Space

The next step you need to take when designing your KMBOK is to decide where you will house it. Will it be on the internet, on the company intranet, or have an office space dedicated to it?

Build a Library

When building your KMBOK, it is important to source out existing literature that fits with the mandate of your body of knowledge. Do your research and find material that fits with the knowledge you want to build. Make sure you obtain appropriate permissions when reusing information.

Design Member Input

Allowing member input will increase and enhance your body of knowledge. Have members contribute best practices, additional resources, lessons learned, and any other pertinent pieces of knowledge. Member input should be monitored so that the information in your body of knowledge remains relevant.

Organize Content

When building a KMBOK, it is important to think about how you will organize content. Will you organize it by the date the information was contributed, by theme, or by topic? This will help ensure ease of use and prevent confusion. A KMBOK that is not organized may eventually fall into disuse.

Creating a Chief Knowledge Officer (CKO) Position

A Chief Knowledge Officer position communicates to everyone that your organization takes its knowledge seriously. It also gives your knowledge management initiative a figurehead. But what is a Chief Knowledge Officer? What do they do? Where should they come from – inside or outside of the organization?

What is a Chief Knowledge Officer?

A Chief Knowledge Officer (CKO) is an organizational leader that focuses on maximizing the use of their company's knowledge in order to create value. They are also the keeper of the knowledge management program and in charge of the tasks and responsibilities of the knowledge management team.

CKO's help organizations capitalize on their knowledge by implementing processes that enable knowledge to be shared, stored, retrieved, and created. CKO's also help organizations divest knowledge that no longer has value. They can then focus resources on initiatives that will benefit the company.

A CKO position within an organization also helps draw attention to knowledge issues within the company. Furthermore, since a CKO is positioned at the managerial level, they are better able to access the resources needed to support a knowledge management initiative.

What is a Chief Knowledge Officer Responsible For?

A CKO has a variety of roles and responsibilities. Their most common duties typically include:

- Assessing the existing knowledge within the corporation
- Developing processes that guide the knowledge management initiative
- Identifying gaps in existing organizational knowledge
- Facilitating knowledge sharing strategies
- Promoting knowledge management within the organization
- Measuring the success of the initiative

These responsibilities require that a person has the skills and abilities to travel many organizational terrains. They need to be effective communicators in order to promote the initiative within the company. They must also be adept at connecting people, working within a team, and knowing how to persuade people to change the way they work. They must possess strong leadership qualities and have extensive IT skills.

Hire Internally or Externally?

This question is a challenge as both hiring someone inside the company and hiring someone externally have advantages and disadvantages.

If you hire someone internally, that person will be familiar with your business. However, you need to choose the right person from your internal staff. They have ideally been there for years and have established personal credibility and a proven track record. You would like to see that they have held a number of positions within the organization and that these experiences have given them a more in-depth knowledge of how your company operates. They should also be well-connected with management and executives. They must know the personalities they are dealing with and understand how to navigate and leverage managerial perspectives.

The problem with hiring internally is that this person may be unable to see the faults of the organization. They may not have enough distance between themselves and the problems to look at the situation objectively and make a plan for change.

The advantage of an external hire is that they can view the organization with a fresh set of eyes. They are easily able to identify the problems and think of creative solutions. However, they lack the advantage that an insider has and have a steep learning curve to understand your organization's existing processes and procedures.

Hiring internally or externally is a subjective decision. That is, there is no one right answer. The key point is *who* you are hiring. Making sure you have the right person for the job is vital to the success of your knowledge management program.

Advertise for Your CKO

Create a job advertisement for a Chief Knowledge Officer position. The job advertisement should include the following components:

- Your company name
- Description of your company and why your company is great to work for
- Title of position that needs to be filled
- Description of the position that needs to be filled
- Education and experience requirements
- Salary
- Contact information and instructions on how to apply

Use the space below to sketch out your advertisement.

Creating a Post-Mortem Plan

What is a Post Mortem?

A post mortem is a discussion that takes place after an event has occurred. A post mortem can take place at the end of a work day, the end of a meeting, or the end of a major project. The purpose of this discussion is to analyze and learn from the event. Carefully crafted questions help people reflect on and learn from the completed task.

Create a list of questions for a post mortem. What questions would you ask to learn the most about the completed task?

Benefits of Post Mortems

Wide Variety of Situations
One benefit of the post mortem is that they can be applied in a wide variety of situations. They can range from a simple discussion at the end of a workday to a multi-day session held at the end of a long project.

Environment of Continuous Learning
An organization that promotes post mortems shows that it is committed to continuous learning. By holding a post mortem, the organization is modeling behavior that supports knowledge management. This can have a cascading effect on the culture of your organization and, by extension, the attitudes of employees.

Make Tacit Knowledge Explicit
Post mortems help to make tacit knowledge explicit by encouraging people to reflect on their thought processes and why they did what they did. The process of articulation helps individuals recognize their tacit knowledge and share it with others. In turn, by identifying and sharing this knowledge, we can capture it.

Increase Improvement
The informal nature of the post mortem allows individuals to share and contribute in a nonthreatening way. These processes are not meant to be linked to any performance reviews or assessment. Therefore, they become a forum for people to learn how to improve both individually and on an organizational level.

How to Conduct a Post Mortem

Here are some simple guidelines to follow when conducting a post mortem.

The Sooner the Better
Conduct your post mortem as soon as a task has been completed; the sooner the better. This helps to prevent people forgetting what has taken place. It also improves availability, since people often have not had time to move onto the next task.

Build Your Environment
A post mortem works best when it is held in an environment that promotes openness and honesty. Reassure participants that the comments they make will not be held against them and that these comments are for educational purposes only.

It may also be a good idea to set some guidelines or rules for how these sessions will be conducted. Members of the group should all feel comfortable in contributing their thoughts. A way to create this safe environment is to have some ground rules for your post mortem sessions. These rules can be created by the group or established before the session takes place. Some sample ground rules could include:

- Everyone must contribute.
- No idea gets criticize, no matter how unconventional.
- Be considerate of those around you. Allow a person to finish their thought before jumping in.
- One person speaks at a time.

Having guidelines can help to create a safe environment without hampering the learning taking place. Additionally, if rules are not in place you may have outspoken group members taking over the session. If that happens, you may miss out on a fantastic piece of information that could make a future task much easier.

Have a Moderator
The role of the moderator is to monitor the climate of the environment, ensure that no one is being blamed, make sure the guidelines of the session are being followed, ensure everyone participates, and ask questions to stimulate deep thought and quality answers (which will help everyone get the most out of the session).

Make a Recording
When conducting a post mortem of a large project, it is best to record the session on video. This will allow you to review and refine the information presented in the session once the post mortem has ended.

Accentuate the Positive
Begin your session by bringing attention to the original goals of the task. What did we set out to do? How did we accomplish these goals? Encourage participants to celebrate the success of the initiative and to identify processes that may be worth replicating in the future.

Learn from Mistakes
Once you have identified the successes of your task, ask what went wrong. Could we have done something different to have a more desirable outcome? What might we do differently next time? Remind participants that the focus is on continuous improvement, not failure. The purpose of this activity is to learn from our mistakes and avoid repeating them in the future.

After the Post Mortem

Review and Refine Your Post Mortem
Using the recording of the session, review and refine the information presented, summarize it for others to review, and share it as appropriate. This will help reinforce lessons learned with those involved with the session and share the knowledge with others in the organization.

When refining the information, you should focus on the key points of the session and present the information in a logical way. Start with basic information like what the session was about, who was present, and when and where it took place. Then include the lessons you learned from the project, what actions you would repeat, and any other key points that need to be shared with your audience.

To guide you through this process, ask yourself, “What would I hope to learn from watching this post mortem?” This question will help you focus on what material to include in your presentation.

Share this Knowledge
Store the recording of the post mortem in a place that is easily accessible to others within the organization. Consider who else in the organization would benefit from this knowledge and encourage them to learn from your post mortem.

Creating Measures

Making Connections

What is measurement within an organization?

Why do we measure?

How do we measure? What tools can help us measure?

How can we plan to measure?

What items can we measure in an organization?

What items does your organization measure?

Introduction

When implementing a new program in your organization, it is important to determine one or more ways to measure the success of this program. It is simply not enough to say that a program is successful. You need to provide concrete examples to illustrate how this program has improved the performance of your organization and helped your organization reach its strategic goals.

But what do we measure when looking at knowledge management? How do we measure the program's success? Let's look at some techniques.

Plan to Measure

When implementing a knowledge management approach, you need to plan to measure the success of the initiative. Here are some tips for starting the measurement process.

Define Your Goals

When you are measuring the impact of the knowledge management program on your organization, you need to start at the beginning. A great way to begin is to revisit the original goals of the program. What was it that you set out to do? Clearly defined goals help you to establish processes and procedures for measuring success.

Know Who Will Be Assessing Your Measures
Different people in your organization will have different beliefs about the success of the program. For example, employees will want to see how this approach has benefitted them, while managers and senior staff will want to see an improvement on the bottom line. Keep these perspectives in mind when measuring for success. Address each party to illustrate the success they would like to see.

Define Your Measures
Now that you have a clear idea of your goals and who will be assessing your progress, define how you will measure the success of the program. Make sure that your assessment of the initiative's success is valid and reliable.

Define Your Data
You will also need to decide what data will be collected, who should collect this data, how the data will be collected, and when and where the data will be collected.

Analyze the Data
During this process, you will need to look back at the goals of the initiative. Does the data show if the goals were or were not achieved?

Evaluate Your Measurement Process
When measuring results, periodically check to make sure your measurement process is still providing an accurate depiction of the program's influence within your organization.

What to Measure

To decide what to measure, first decide the **purpose** of your measurement. For example, if the purpose of your measurement is to determine whether or not your knowledge program has increased productivity, you could measure this by getting feedback from employees, customer, and management. When you measure, there needs to be a clearly defined purpose for why you are measuring. Haphazard measurements lack focus and tell you little about the success of your program.

Ways to Measure

There are many ways that you can measure your program's success. Let's look at a few of the most common techniques.

Existing Organizational Measurements
If your organization has existing tools for measuring success, assess them and see if you can use them. The advantage of using existing tools is that these approaches have been accepted and tested within the organization and employees should be familiar with using them.

Balanced Scorecard
A balanced scorecard is a performance measurement technique that focuses on matching an organization's strategies to specific measures. Its aim is to give an organization feedback on how successful a strategy is. Developed by Robert Kaplan and David Norton, it focuses on four perspectives: financial, customers, internal business process, and learning and growth. Notice that all but one of the measurements listed are intangible. The balanced scorecard approach moves away from traditional accounting to encompass the intangible assets of an

organization, which makes it a good fit for measuring the success of a knowledge management initiative.

Let's have a closer look at the four perspectives. It is best to frame these concepts as questions in order to focus what we are trying to measure and to enable us to see and create value. Additionally, when we answer the posed questions, we can compare the four perspectives in the effort to see which assets give us the most value.

- **Financial:** How is our financial health? How do our shareholders see us? How can we improve our bottom line?
- **Customers**: How do customers see us? Do we meet their expectations?
- **Internal Business Processes:** What do we need to do to succeed? Which processes have the greatest impact on our customers and our bottom line?
- **Learning and Growth:** How can we use learning to improve in the above three areas? How can we leverage learning to grow, create value, and improve?

Knowledge management fits into the fourth category of the balanced scorecard. If you look at the first question posed in this category, it becomes very apparent that learning and growth (knowledge management) has an enormous influence on the above three perspectives. This perspective is listed last because the ability to meet the objectives in the other perspectives depends on the organization's ability to learn and grow. Thus, learning and growth are performance drivers. They are harder to measure but have a direct impact on outcomes like financial growth and development.

Employee Feedback

Since people within your organization are the driving force behind the knowledge management process, it is important to get feedback from them. Design surveys that measure people's opinion of and attitude toward the knowledge management program. This information will be highly subjective, but it will give you insight into what people are thinking about the program and how they are feeling about it. This will help you understand their attitudes and the behavior that follows from these attitudes. For example, if you receive negative feedback from employees, it may be time to think about revamping your initiative, developing a new strategy, or adjusting components to your existing strategy.

Start With a Pilot

When implementing a knowledge management program, is it better to start with a pilot or to make a full organization change? When creating a knowledge management program, it is best to view it as a new development or new product. Would you test a new product before releasing it to your customers? The answer would most certainly be yes. Let's look at how you can use a pilot program to start small, iron out the kinks, and prepare for company-wide release.

Steps to Creating a Pilot Program

- **Describe the pilot**: Describe what you want to deliver with this new program.
- **Explain the benefits**: Get buy-in from your organization by explaining the benefits of this initiative.
- **Make a list of objectives**: Develop a list of clear objectives to guide you through your pilot process.
- **Determine what you need**: Include a list of the people, funding, technology, and training that you will need for your pilot.
- **Develop measurements**: Figure out how you will measure the success of your program. Has the program achieved your clearly defined objectives?
- **Manage the change**: Put measures in place to help people through the changes that will come as a result of this pilot.
- **Develop a timeline**: Give stakeholders an idea of how long your pilot will last.

Benefits of a Pilot Program

List three benefits of starting with a pilot project rather than a full organizational launch.

Easier to Acquire Funding

Any new initiative within an organization requires resources, which includes funding. It will be easier to acquire the funding you need and make the case for a pilot knowledge management program than it would be for a full organizational program. Providing a large amount of resources and funding without proof that your initiative will bring success is a risk that not many organizations are willing to take. It is better to try this initiative out on a smaller scale that will allow you to build the evidence for why your organization needs a full knowledge management program. This will make a larger future investment much easier to acquire.

Easier to Get Buy-In

Having a pilot project allows you to prove the concept and gain credibility. This can make the process of getting buy-in from members of the organization much easier when you launch a full knowledge management program.

Easier on You

Let's face it: launching an organization-wide program can be a daunting task to say the least. Start small to put less pressure on yourself. This will allow you to focus on the task at hand and do what's necessary to help the initiative be a success. A little bit of stress can be a good motivator but too much can impede your progress.

Easier to Expand Across the Organization

Once your pilot program is a proven success, it will be much easier to expand across the organization. During your pilot, you will learn a lot about the processes and hurdles involved with implementing a knowledge management program. These lessons learned will enable you to launch a larger program with more confidence and experience.

Where Do I Put This?

Making Connections

Think of where you might place a knowledge management program within your organization. Provide reasons why you have chosen that particular spot.

If you already have a knowledge management program, list some reasons that senior management placed the initiative in that particular spot.

Choosing a Location

Since knowledge management spans all facets of your organization, deciding where to place your knowledge management department can be a challenge. Knowledge management can be placed in:

- Human resources
- Research and development
- IT
- Quality management and control
- Every department
- Its own department

When deciding where knowledge management should be placed in your company, you need to consider the nature of your organization and its structure. Let's look at options for two common types of organizations: centralized and decentralized.

Centralized Organizations

A centralized organization typically has a strong governing core and encourages strong interdependencies among departments. If your organization is centralized, it may make the most sense to place your knowledge management initiative within the head office. Additionally, the head office can help implement your policies and processes.

Decentralized Organizations

A decentralized organization typically has various business units that each have a high degree of independence. The units may allocate resources, have budgetary discretion, develop policies, and determine their business objectives. In this type of organization, there are two possible places to put your knowledge management program. One is to put the program within a single division. However, this does not mean that your knowledge management team will service only that particular unit.

The other option is to create a knowledge management team that exists outside of the business units. This team will operate independently and collaborate with each unit to develop rich knowledge management solutions. (One corporation that has successfully adopted this approach is energy giant Shell.)

You Have A Place – Now What Do You Need?

Once you figure out where to place your knowledge management unit, you need a few key items to function properly and fit the unit into the organization. You will need to be able to:

- Have a budget and the autonomy to spend this budget on knowledge management initiatives.
- Have access to and support from senior members of the organization.
- Make sure your processes and procedures are aligned with the overall strategies of the organization. This will also help you get the support of organizational members.

Figuring out the right place for knowledge management and making sure you have the proper support is key to the program's success within the organization. You need to think about the established flow of your business and fit this new approach into your structure in the most natural way possible.

Support Your Organization Through the Change

Implementing a knowledge management program will inevitably cause change within your organization. Since you have done your research and planning, you are probably convinced that a knowledge management program will bring positive change. However, some individuals may need a little more convincing and support to guide them through this transition. Here are some tips and techniques to help you make the organizational transition as smooth as possible.

Tips for Organizational Change

Change with Purpose and Understand the Effect of this Change
When making an organizational change, you have to make sure the change has a clearly defined purpose. What is this change intended to do? What will this change achieve?

You must also think about how the change will affect the entire organization. What might be some of the consequences that result from this change? How will you deal with these consequences?

Clearly Define and Explain the Change
To increase your chances of getting organizational support, you need to clearly define the change. This can help you clear up any ambiguities and it can give you a very clear picture of what the change will look like. Both of these things will help you better implement the program.

Strategize to Get Support
When implementing a change, it is imperative that people within the organization support the initiative. It's important that you show people what is in it for them. A great approach is to start by informing your management team, as these people will be instrumental in helping the change transition smoothly.

Share Your Vision
If you want to get your organization's support for a change, you need to include them in your vision. Get employee and managerial feedback about ways that you can ease them into the transition. Also, share what you are planning to do with the organization. They may be able to offer feedback and prevent implementation problems.

Communicate
Keep people well-informed throughout the stages of the change. This gives people time to get involved in the process by asking questions and voicing concerns. It also communicates consideration and prevents people from being blindsided by a sudden change.

Empathize with People
Even by following the above steps, you may still have people that are resistant to the change. Empathize with them by acknowledging that change can be a challenging and difficult process. Show them that you understand and consider their perspective and concerns. You should also emphasize the rewards of change. Illustrate how this change is being made to bring about positive results.

Model the Attitude

People take cues from those around them. They mimic the behavior and attitudes of the organization. Make sure the attitude toward this change is a positive one. Encourage management to be enthusiastic about the change and to model the desired outlook that they would like employees to have.

Further Reading:

- ✓ Bergeron, Bryan. *Essentials of Knowledge Management.* John Wiley & Sons, 2003.
- ✓ Dixon, Nancy M. *Common Knowledge: How Companies Thrive by Sharing What They Know.* Harvard Business School Press, 2000.
- ✓ O'Dell, Carla, and Cindy Huebert. *The New Edge in Knowledge: How Knowledge Management Is Changing the Way We Do Business.* New John Wiley & Sons, 2011.
- ✓ Pasher, Edna, and Tuvya Ronen. *The Complete Guide to Knowledge Management: A Strategic Plan to Leverage Your Company's Intellectual Capital.* John Wiley & Sons, 2011.
- ✓ Rumizen, Dr. Melissie Clemmons. *The Complete Idiot's Guide to Knowledge Management.* Alpha Books, 2002.