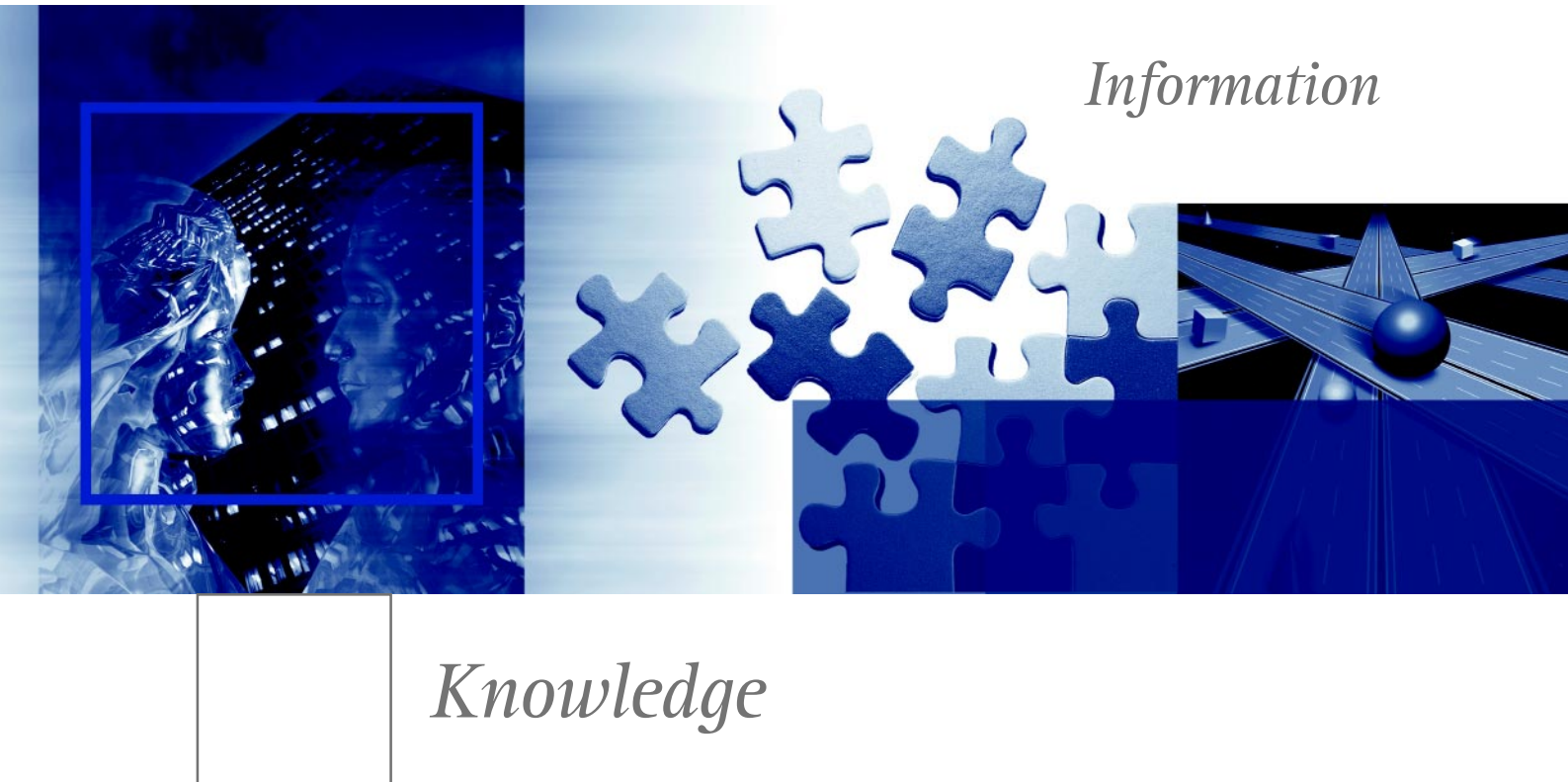




## Introducing Knowledge Management with mySAP.com



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## Intro

This white paper consists of six sections:

1. “Overview: Knowledge Management with mySAP.com” provides a business context for Knowledge Management, describes the Knowledge Management cycle in action, and provides an example of how knowledge differs from information.
2. “Common Knowledge Management Scenarios” explores various corporate uses of Knowledge Management.
3. “The Components of Knowledge Management with mySAP.com” describes the components that add up to a comprehensive knowledge management solution.
4. “Supporting the Knowledge Management Cycle,” shows how Knowledge Management with mySAP.com supports the people who perform the tasks associated with the processes of knowledge development and transfer.
5. “Leveraging SAP Contents” shows how your organization can benefit from reusing content developed at SAP.
6. “Reviewing the Challenges and Benefits of Knowledge Management,” summarizes both the challenges organizations face and the solutions Knowledge Management with mySAP.com offers.

## Overview: Knowledge Management with mySAP.com

### Knowledge as a Key Production Factor

Earnings and profits are usually considered the key indicators of a company's success. The underlying assets of that success include the classic production factors of labor, capital, and real estate. Although any company must create, accumulate and maintain those assets in order to succeed, that's no longer enough. Increasingly, a company's success depends on making the most of its collective knowledge. And that means supporting the people and the processes required to accumulate, structure, and transfer knowledge effectively.

Of course, knowledge is not as easy to quantify or to manage as the other production factors. Because it exists in numerous forms, in diverse media, and in random locations, many companies don't even know the extent of their knowledge assets. Experts estimate that the typical organization has enough information to fill a good-sized library.

And that's just the information that has been captured in documents. However, related information is often just as crucial, such as knowing who's who, who changed what and when, or following the thread of a discussion that led to an important decision. In addition to information that remains relatively constant over time, having immediate access to the latest information – including information from external sources – can provide a critical competitive edge.

Just as important as information stored in some form is the so-called "tacit" or uncaptured knowledge – the experience and insight of individual employees and teams. Ask new employees how they found a critical piece of information and they are likely to tell you that they asked someone. This illustrates a critical aspect of any knowledge management solution: an organization's culture must encourage and reward information sharing, including informal sharing. That means a culture where it is acceptable to ask for help and for information, where people pass along information of value to others, and where they take responsibility for contributing to the professional growth of their colleagues.



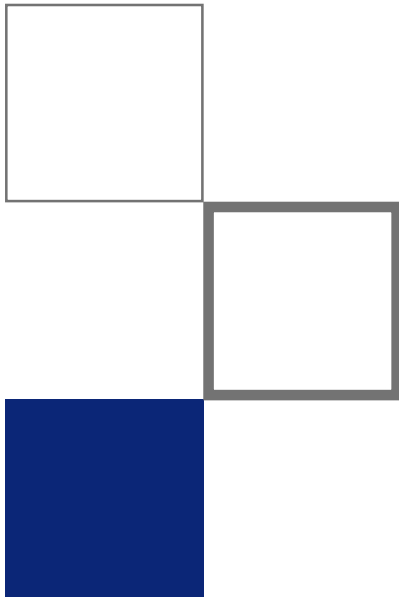
This illustration shows how many different types of knowledge contribute to a company's knowledge base. The challenge is to make this information both accessible and useful.

Without such a culture, any solutions will remain limited at best. However, if such a culture exists, a knowledge management solution can provide not only the basis for connecting people with information, but also for connecting people with one another.

The challenge of knowledge management, then, is to facilitate access to all kinds of knowledge, including corporate documents, information about people in the organization, external information, and the “uncaptured” knowledge of an organization’s employees.

“Knowledge Management blends the insight and expertise of people, highly collaborative work processes, and broad access to the enterprise’s information stores into a cohesive, interconnected environment.”

Gartner Group



## Knowledge Management in Action

SAP’s stated mission for its knowledge management solution is:

“To connect those who know with those who need to know.

To convert personal knowledge to organizational knowledge.”

In designing a knowledge management solution, SAP’s basic goal was to provide the technical infrastructure to make knowledge transfer more efficient. To do that, SAP examined how processes, people, and technology interact to capture, process, retrieve, apply, and improve knowledge.



One way of looking at knowledge transfer is to define how technology can bring together the efforts and needs of various people. The mySAP.com Workplace enterprise portal is this point of intersection, the place where information, transactions and reports “change hands.”

The people who interact in the knowledge management cycle include:

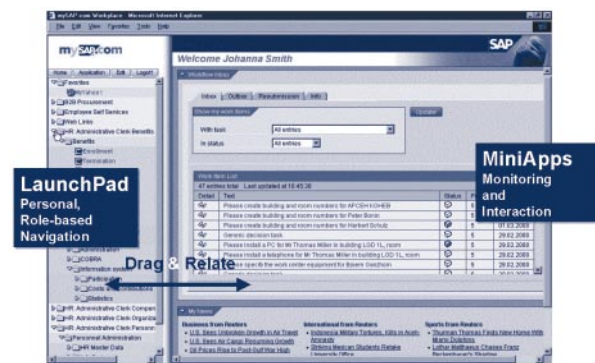
- Knowledge Brokers, who are responsible for defining their organization’s overall knowledge landscape to determine any gaps, while avoiding the information overload associated with outdated, redundant, or poorly organized information. In addition to determining what kind of information to provide, they are responsible for determining strategies for locating, filtering, and planning appropriate strategies for knowledge transfer.
- Knowledge Suppliers, who in turn fall into two main categories:

- ◆ Content developers, including marketing writers, technical writers, course developers, Web developers, translators, localizers, testing specialists and anyone else who contributes personal knowledge to the organizational knowledge.
- ◆ Content management specialists who manage the structure, production, maintenance, testing, and delivery of corporate knowledge.
- Knowledge Consumers, who retrieve, use, and provide feedback on knowledge.

### Connecting Knowledge Suppliers with Knowledge Consumers

A primary knowledge management requirement is to support the professionals who make up the Knowledge Suppliers and Knowledge Brokers, who serve as a bridge between “those who know” and “those who need to know.” In addition to supporting the processes for knowledge workers, Knowledge Management with mySAP.com seeks to make it easy for *all* employees to share the information they have.

Of course, information is only as good as a user's ability to find and use it. This awareness is the basis for the design of the mySAP.com Workplace. This portal automatically displays the information, reports and transactions users need, based on their roles in the organization. It provides a single point of access to all relevant tasks and information – corporate, team, and personal.



**This sample workplace, would provide access to all the SAP transactions the user needs to perform. In addition, this user has easy access to key business figures, various analysis tools, and predefined links to internal and external news.**

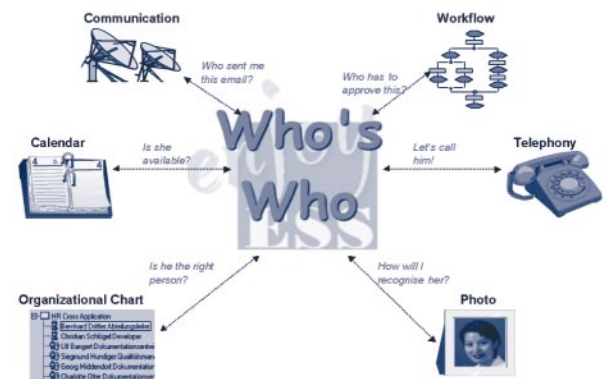
Since everyone is both a supplier and consumer of knowledge, Knowledge Management with mySAP.com seeks to make it easy to be both.

### Integration: For a Better Return on Information

However, knowledge management is more than just the efficient creation, management, and distribution of information. For optimal value, knowledge should be related to the business processes that it supports. Only SAP can offer the benefits of integration with a range of transactional and analytical data in other components within mySAP.com. For employees, that means that the source of the information they use is transparent; the information is simply there when they need it. For managers, this integration shows information in a business context, with the means to filter, compare, and quantify information to support the decisions they need to make. Speedy and accurate decision-making can provide a decisive competitive edge for any organization.

### Connecting People with People

Often finding the right information first means finding the right person. To address that need, each employee has access to corporate “Who's Who” information. For example, to find out who's working within an organizational unit, employees can display the organizational assignment of other employees. Or, to find people with the skills for a particular task, they can search the Human Resources database and check the appointment calendars of the prospects to find out their availability.



In addition to finding people who can answer questions or provide needed expertise, Knowledge Management with mySAP.com can provide the basis for creating other kinds of collaboration, including areas for storing shared documents, templates for experience reports and troubleshooting scripts, and frameworks for managing questions and answers.

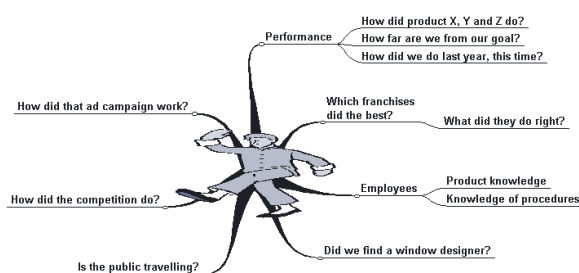
The technical infrastructure, tools, and integration potential of Knowledge Management with mySAP.com are explained in more detail later in this paper and in other referenced literature. But first, an example that shows knowledge in a business context and some common uses of knowledge management within organizations.

## The Value of Knowledge: An Example

Consider the following scenario: Tim is the manager of a retail chain that specializes in upscale travel gear. When he reviews the monthly reports he sees that sales and profits for most of the franchises are down, for the third month in a row. “Bad news,” he thinks, “we really have to do something.”

The question is, what? Reduce overhead, change the product line, increase the marketing and advertising effort, change the management team, or close some of the stores?

This dilemma provides a simple illustration of the most common information problem – facts are not enough. Instead, the facts have to be seen within a context to give them meaning. In this case, the context includes information about other retailers in this market, information about individual products in the product line, details about the relative performance of the franchises to one another, changes in the productivity of the employees, and news that might affect business in general. Only within such a context do performance statistics become truly valuable as the basis for making an informed decision.



By generating a variety of other performance reports, Tim can get answers to his questions about how various stores and products performed relative to one another. He notes that the stores in the Southwest are doing particularly poorly, but that the corporate ad

campaign and promotional sales increased sales at all locations, including the underperforming stores. By displaying and sorting several news items to which he subscribes, he finds that the largest employer in that area recently announced major layoffs, which would help explain the substandard performance of those stores. By querying his company's database on competitive information, he finds that the competitors' nationwide results are even worse. And by checking his travel statistics, he sees that pleasure travel is at its lowest point in years. Given that context, the bad news suddenly starts to look good.

However, he also sees that product Y, a new product in the product line, is not selling well as well as projected by several market surveys. He sends an e-mail to his key sales people to ask them about their experiences with the product. The result surprises him – most sales associates don't know how to properly position or sell the product. A search of available training courses shows that none of them cover how to get the most benefits from this type of product. He calls his training manager, Sandra, and they decide to address the problem with a one-hour course, filmed with a “live” trainer and delivered via Internet technology to the sales associates of each store. Sandra proceeds to search the company's Human Resources database for a course developer with experience in both the product area and in developing courses for distance learning.

Tim's discussion with Sandra raises another issue: a large number of new employees are having problems with the end-of-day reconciliation procedures. After observing several employees at this task and talking with them about their difficulties with the procedure, Sandra decides that a job aid would solve the problem. This time she searches the Human Resources database for a technical writer, who reports that an existing procedure in the system documentation could be easily modified to show simple instructions right beside the actual work area on the screen.

## Common Knowledge Management Scenarios

How companies use their knowledge assets depends on many factors. Their products, for example. For some companies – such as publishers of books, magazines, or information websites – knowledge *is* the core product. For others, knowledge supports their core products, such as information needed to sell the product, use the product, or train users. Regardless of details of product or culture, all organizations need to find ways to share the knowledge in the heads of some employees with the entire organization. All organizations need to efficiently share corporate knowledge about customers, organizational news, new products, and employee opportunities. And all organizations need to facilitate the working within teams.

The following uses for knowledge management provide an overview of the breadth of knowledge needs within an organization. Depending on your company's needs, one or all of these scenarios may be of interest.

- Creating a web presence and an Intranet.
- Creating information products
- Supporting collaboration
- Creating corporate universities
- Developing certification programs
- Supporting SAP implementations and continued improvement
- Supporting SAP end-user training and performance

Knowledge Management with mySAP.com supports solutions for all of these scenarios. The cornerstone of this solution is the SAP Knowledge Warehouse, which provides a repository and the required tools.

### Creating a Web Presence and an Intranet

The growth of the Web as the primary way for companies to communicate with their customers is unprecedented in scope and speed. Most companies require a web presence simply to compete. In particular, those who sell directly to consumers have found great advantages in making their products available on the web. There are numerous examples of companies of all sizes who have increased their revenue manifold by simply taking their business to the Internet.

Just as the Web as a way to communicate between businesses and their customers has grown explosively, the corporate Intranet has become the primary way to communicate with employees. In just a few years, over 90% of organizations now have some sort of Intranet. These sites generally combine corporate information for all with specialized access for certain groups, and the ability to meet personal information needs.

At SAP, for example, employees can see daily corporate news, video clips of speeches by executives, and corporate policies and benefits. They can order material via linked B2B transactions, search for people, apply for vacations, register for courses at the corporate university, find and contribute to project documents, or find someone who has a rare Beatles album.

The SAP Knowledge Warehouse provides a repository to manage site and navigation structures of internal or external web sites, as well as the tools for creating and editing content and links. It is simple to use for knowledge consumers and occasional authors and provides complex possibilities for modeling and managing content for administrators. Its abilities to grant (or not to grant) role-based access to whole structures or single documents and to manage multiple versions and languages make the Knowledge Warehouse a powerful solution for managing international information of different degrees of sensitivity.

### Creating Information Products

Every company needs to create and distribute information about itself.

One audience of such information are an organization's employees, who need to stay informed on corporate strategy and who need to access corporate policies, instructions on how to do their work, and so on. Another audience are potential customers, who need to find out whether a product will meet their needs. Because this information needs to grab attention and convince, many companies go beyond printed materials to provide web animations on their sites or multimedia presentations at trade shows or on CD-ROM. Once the decision is made to buy, customers often need training and instructions on how to use (or not to use) the product. And alongside any sales or pro-

duction cycle, governmental agencies may require special documentation or the archiving of certain information.

The SAP Knowledge Warehouse provides a repository for all of these types of information, including any kind of non-relational data captured in document, graphic, or multimedia file formats. In addition, the Knowledge Warehouse provides the tools for creating, managing, and distributing various kinds of content.

Another benefit is the ability to link information objects to related business objects. Because information products often require the services of external vendors and products, managing such products often involves extensive project management. A video production, for example, may involve the use of professional speakers and the rental of time in a production studio, which in turn may require contracts with the speakers and purchase orders for the production studio. By linking the video with the business objects associated with its production, knowledge management can help to optimize project management.

## Supporting Collaboration

One part of managing knowledge is highly structured and methodical. Data has to be categorized, stored, and accessed, versioning has to be controlled, and information has to be delivered to the right user in the right release and language at runtime. The Knowledge Warehouse is a master at these tasks.

But knowledge is also dynamic. It's about putting ideas into action. Encouraging information flow. Making expertise instantly available. It's collaborative, collegial, and interactive. Supporting and adding value to this dynamic process continues to be a major focus of future development of the Knowledge Warehouse.

The Knowledge Warehouse can currently provide the basis for project hubs, where information can be created, deposited, organized, and shared. Keyword searches find information about key issues, people assigned to projects, documentation, schedules, deliverables, and so on. And discussion forums provide an efficient way to get specific answers and keeping everyone informed on the issues. In addition, live e-Learning sessions can quickly distribute the latest informa-

tion around the world, where session participants can ask the expert questions or interact with other participants.

These features can contribute to creating a knowledge community among a geographically dispersed workforce and streamline project management. As hand-held PCs continue to proliferate, using secure dial-up connections to corporate Intranets provides additional opportunities to give or get information from anywhere; for example while interacting with a customer.

## Creating Corporate Universities

Corporate universities are educational organizations created and run by corporations. In the past 10 years, the number of corporate universities has grown from 400 to over 1,600; forty percent of the Fortune 500 companies have started corporate universities. Some have campus locations around the globe, others have made a commitment to e-Learning with a strictly "virtual" curriculum.

While some corporate universities are designed and run primarily for employees, others include the educational offerings for customers, partners, and suppliers. Those organizations that serve employees usually provide targeted curricula for each role within an organization, as well as training intangible skills that span roles, such as creative thinking or conflict resolution. In addition to the actual content, corporate universities help to spread the culture and values within an organization.

Because finding good employees is difficult and expensive, corporate universities are an effective way to create a skilled, flexible workforce. For employees, access to such learning opportunities provides a major benefit that tends to increase job satisfaction.

The Knowledge Warehouse can provide the repository and management and assessment tools for both the classroom and e-Learning content of a corporate university. The integration possibilities with various aspects of Human Resources with mySAP.com provide rich possibilities of streamlining the entire personnel management process.

For more information, see the Factsheets *e-Learning at SAP*, *SAP Knowledge Management – Integration with SAP HR* and the White Paper *SAP Learning Architecture*.

## Developing Certification Programs

Many organizations certify certain groups of employees because governmental agencies require them to do so. For example, flight attendants must renew their Federal Aviation Administration (FAA) credentials every year. By providing on-line videos and drills of how to use the emergency equipment on the company's fleet of planes, flight attendants can prepare for and take the FAA test on-line. As a result, airline companies can realize huge savings by not having to take thousands of people off the job each year and flying them to a training facility.

Other organizations develop certification programs to assure customers that the company's representatives have a proven level of competence. Because computer companies such as Microsoft, Cisco, and SAP require highly skilled consultants to help customers install and get the best use from their products, vendor certification programs are increasingly common. In fact, there are currently hundreds of technical certifications in the field of IT alone. In addition to vendor certifications, there are programs sponsored by professional groups to provide their members with occupational credentials.

Certification brings benefits to the certified professionals, to their employers, and to their clients and customers. The certification sponsors also benefit, of course. Every certified expert is an endorsement of the company, and the product's success will increase with the number of people who have mastered it. In addition, companies can profit from offering certification courses and materials and charging for the credential itself.

Certification tests must be valid, reliable, and legally defensible. To develop such tests, an organization must have highly skilled employees who have experience in designing and creating computer-based tests, testing the validity of test items, and assuring that the conditions surrounding the testing are beyond reproach.

As part of the Knowledge Warehouse, SAP provides not only the tools for authoring and for the statistics, but also for the administration and delivery of certification tests. For more information, see the White Pa-

per *SAP Learning Architecture* and the Factsheet *SAP Knowledge Warehouse*.

## Supporting mySAP.com Implementations and Continued Improvement

For the business and technical experts involved in an implementation or optimization project, Knowledge Management with mySAP.com provides a dynamic way to share evolving project information. For example, the Knowledge Warehouse can serve as a centralized location to capture, store, and categorize best practices. For finding the best people for the project, such as matching consultant expertise with project requirements, the mySAP.com Workplace lets you access the appropriate functionality of SAP HR. The Knowledge Warehouse can also provide the structure for contributing to project documents, participating in discussion threads, and accessing up-to-the-minute learning opportunities, such as those provided by SAP's "e-Learning: Live" sessions.

In addition, the Knowledge Warehouse can be delivered with optional SAP training or documentation content, to quickly get an implementation team up to speed. This content includes all SAP classroom course materials and all documentation that was delivered with the product, in a format customers can edit to include their customization decisions.

For more information, see the following Factsheets: *SAP Education Products and Services*, *SAP Documentation Products*, and *e-Learning at SAP*.

For an overview of classroom courses and self-study options, go to <http://www.sap.com/education>.

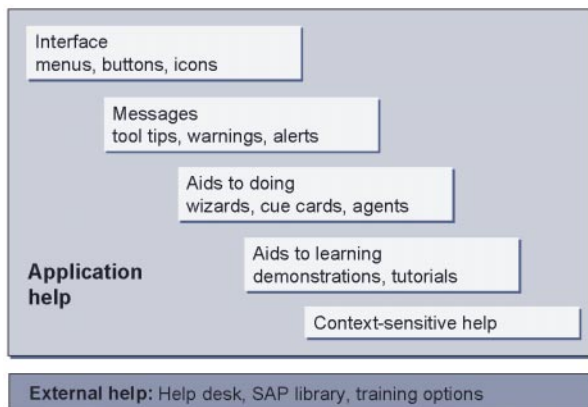
## Supporting SAP End-user Training and Performance

One challenge companies face with any system implementation is to train their end users to efficiently use that system. Because business processes are often optimized to conform to best business practices in the process, this training usually needs to include an understanding of new processes in addition to the training of step-by-step procedures. Because many implementations involve customizations, SAP's consulting partners often provide targeted training for end users.

In addition, SAP provides resources customers or partners can use to jump-start the training effort for end users. These resources include classroom training targeted at numerous end-user roles. These courses provide a connection of how the specialized business knowledge users need translates to the transactions they will use. For additional savings and flexibility, SAP's "e-Learning: Self Paced" modules are designed for specific roles that teach the key activities required for those roles. Because the e-Learning courses are arranged into small learning units, users can complete a unit whenever they have the time, using a browser interface.

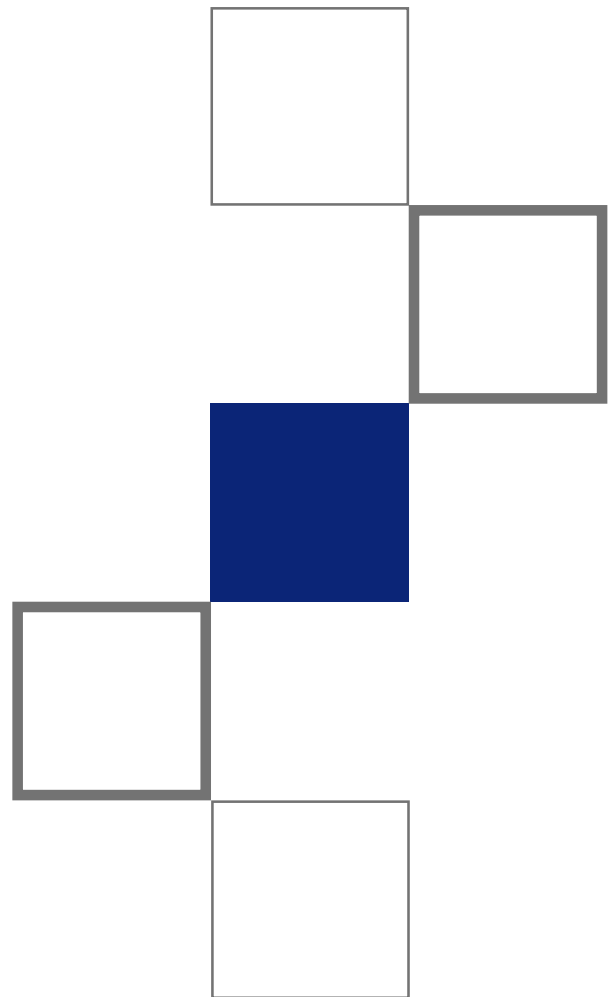
Once end users are trained, it is essential to support them in their day-to-day work. As with the term "knowledge management," there is no consensus about all the elements of an electronic performance support system (EPSS). In general, EPSS describes a system that can display small "chunks" of information directly related to what the user is doing. Based on what is traditionally known as on-line help, such information can be enhanced with "show me" demonstrations, wizards that guide users through tasks, or links to related external information. SAP's iTutor tool makes it possible to create such demonstrations.

The major trend in EPSS is to embed help into user interfaces or keep it closely connected to the interface, rather than having a separate application that works alongside the software application. Several complementary approaches are possible:



This illustration shows different levels of performance support, starting with elements built into the user interface and going all the way through various training options.

For more information, see the following Factsheets: *SAP Education Products and Services*, *SAP Documentation Products*, *e-Learning at SAP* and *Supporting User Performance*.

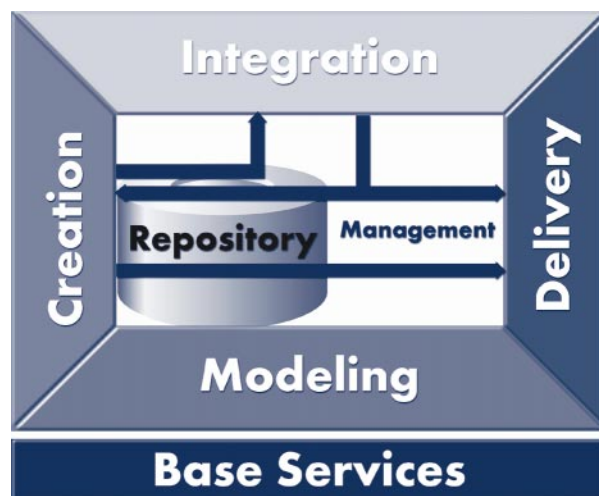


## The Components of Knowledge Management with mySAP.com

Knowledge Management with mySAP.com offers a comprehensive solution for all aspects of knowledge management. The SAP Knowledge Warehouse is the cornerstone of that solution. Because it is integrated with mySAP.com, it provides the scalability for which SAP is known. And because it complies with industry standards and open interfaces, it can be extended to include other solutions.

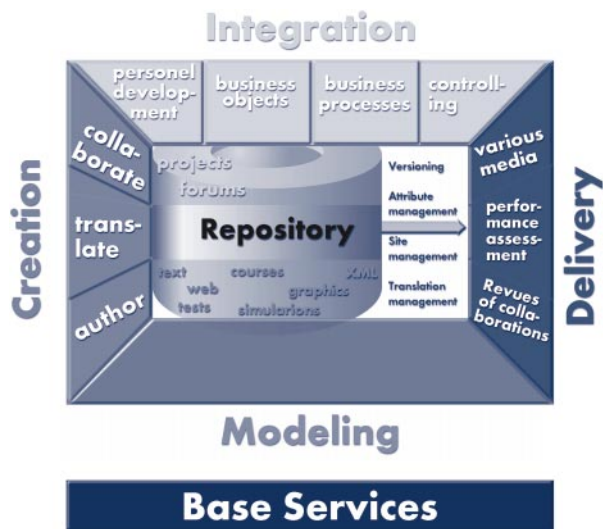
Supported by essential base and administrative services, the SAP Knowledge Warehouse includes functionality that provides:

- Content modeling
- Content creation
- Content management for any kind of unstructured data
- Content delivery to knowledge consumers, who may get the information as web content, in printed form, as a film or video, or as performance support on their desktops. Content may also be accessed through integrated mySAP.com components.



## Overview of the SAP Knowledge Warehouse Components

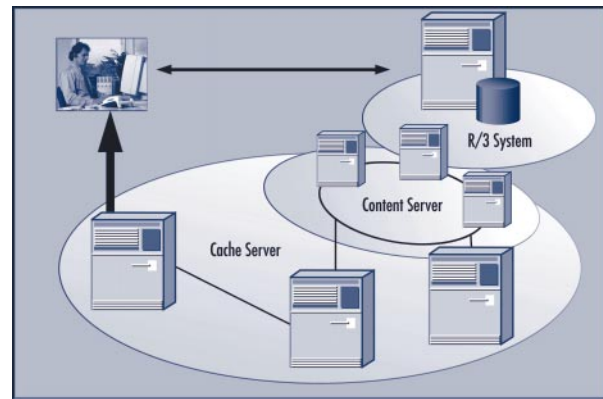
- The Base Services provide the core services that support the functionality of the SAP Knowledge Warehouse.
- Content modeling makes it possible to create data models for various types of content. These models standardize content components and provide a wide range of attribution options. The resulting models can be used to standardize and simplify content creation.
- For content creation, the SAP Knowledge Warehouse provides a standard interface to which other applications can connect. MS Word, MS PowerPoint, and Visio are already connected, to allow content developers to work seamlessly in a familiar environment. Organizations can connect their preferred authoring tools as well; for example, organizations in the publishing area will want to provide their authors to work with Quark Express or Pagemaker. In addition to the contents created by an organization, content may be purchased from external content providers or come from business processes linked to information objects. For authoring system simulations that can be included in on-line courses or in EPSS systems, SAP offers its own iTutor application.
- Content management works to assure that all content in the repository is managed so that the latest version of the right information is available to the right users. At the heart of this functionality is the concept of "context," which consists of a combination of characteristics, such as language, industry, release, or user-defined characteristics. For example, if mySAP.com detects that a user has signed on in Spanish, that user will be sent Spanish information objects first.
- Content delivery can involve many different formats and many different media, as defined in the object's data model. For example, a description of how to complete a business procedure may be displayed on the Web, accessed on-line through the Performance Assistant, it may be part of a printed training manual, and it may be distributed on CD-ROM as part of an update package.



## Base Services for the SAP Knowledge Warehouse

The SAP Knowledge Warehouse is based on a distributed architecture that provides a number of base services to make content creation and transfer possible. This architecture consists of the following components:

- A central R/3 system that manages the assignment of physical to logical information objects (see page 18), and therefore also the document context, user profiles, and other meta data
- Content servers that contain the actual content files, for editing
- Cache servers for viewing to speed up access for the user work stations



Content is stored in the Knowledge Warehouse repository as "info objects." When an end user clicks a link to call up an object, the R/3 System supplies the unique URL of a physical information object that matches the document context and user profile. The appropriate info object is then automatically transferred from the content server to the cache server to which the user is connected. Because info objects are replicated only when they are accessed the first time, only those objects required by users at a particular location are stored on the corresponding cache servers. That means the contents of the SAP Knowledge Warehouse can be distributed widely, even when particular locations only have "small" cache servers.

This architecture provides significant performance benefits because communication with the central R/3 system (which can be located anywhere) requires only

minimal bandwidth, whereas data-intensive transfers take place locally and do not affect the interactions of other mySAP.com users. This architecture also makes the most of an organization's hardware resources.

The base services that underlie the SAP Knowledge Warehouse include:

- Content storage services, which handle the distributed replication triggered by a user request or specified by an administrator
- Caching services, which control the storage of information on cache servers for faster user access
- Conversion services to enable web display, including e.g. Word to HTML and PowerPoint to GIF or JPG
- Backup services
- XML services, for controlling XML documents
- Security services, which leverage the mySAP.com security mechanisms
- Administrative services, which leverage the work of the mySAP.com system administrators; for example, by making available existing user profiles.

## Modeling Content with the Document Modeling Workbench

The Document Modeling Workbench component of the SAP Knowledge Warehouse makes it possible to define data models for various types of documents and information structures, including area, class, object, and their attributes. The characteristics of each kind of structure can be inherited through the hierarchy. For example, a corporate intranet would be considered an area, associated classes could include the site structure and framesets of specific sub-sites, and objects could include individual HTML pages or other documents. On each level of such a model certain attributes are specified that are then inherited by the lower levels. In a corporate intranet this could mean that the area "intranet" limits formats to HTML, DOC, PPT and GIF and specifies to which other areas links may point. Subsequently any class of that area requires the listed file formats and may in addition specify certain content blocks of specific files, e.g. the class "Manual" needs the block "Table of Contents" and must be in format DOC. An object in the class "Manual" then has to be submitted in format DOC, must contain a table of contents and may only link to certain other areas. In

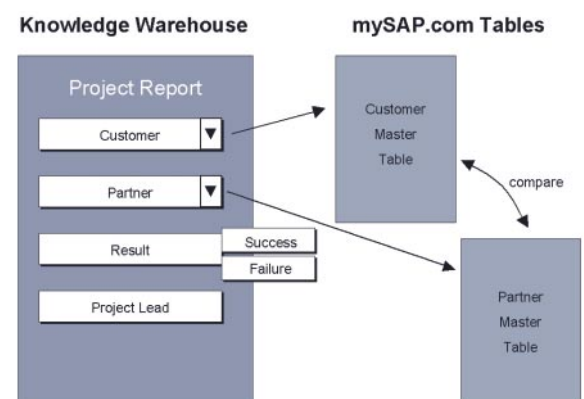
addition, language and version can be specified at any point of the modelling hierarchy.

For those who plan and enforce an organization's overall information landscape, this functionality makes it possible to define style and content structures for various types of documents, to ensure consistency and speed up content development.

Using an interface that is integrated into the ABAP Workbench, modeling can be used to define and manage different aspects of information objects, including:

- Logical info object classes<sup>1</sup>
- Physical info object classes
- Relations between these classes
- Info object attributes (optional)
- Relation classes (optional)

What makes modeling so powerful is that it makes available data structures contained in mySAP.com tables and the related functions for defining attributes, assigning values, checking the validity of content, and so on. For example, a model for the info object "Project Report" could include a "Customer" attribute that uses the customer master table as input, a "Partner" attribute that accesses a partner table, and then use a filtering function to check that the selected partner has a relationship with the selected customer. The resulting model can be transported as needed between systems.

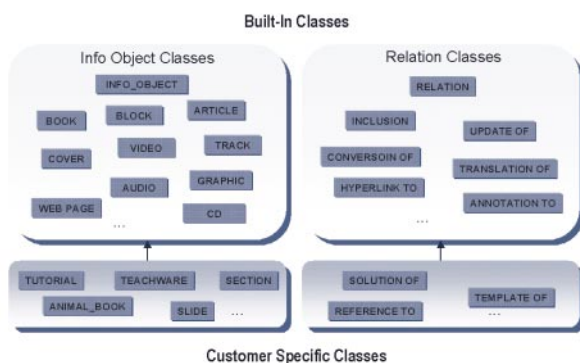


<sup>1</sup> For an introductory discussion of physical and logical objects, see page 18

Because models define the relationships *between* info objects, they help guarantee the semantic consistency of all information in the SAP Knowledge Warehouse. Possible relationship definitions include:

- Version relations, which show from what info objects another object was updated from, translated from, or converted from.
- Reference relations that show what other info objects an object is linked to
- Containment relations, which show what info objects are contained in other objects
- Processing relations, such as shared style sheets
- In addition, the user can define other relationships, such as “answer to question,” or “layer to picture.”

The SAP Knowledge Warehouse includes preconfigured models, with default settings for attributes, values, hierarchies, and relations. Companies can customize this model to provide an accurate map of their own knowledge landscapes.

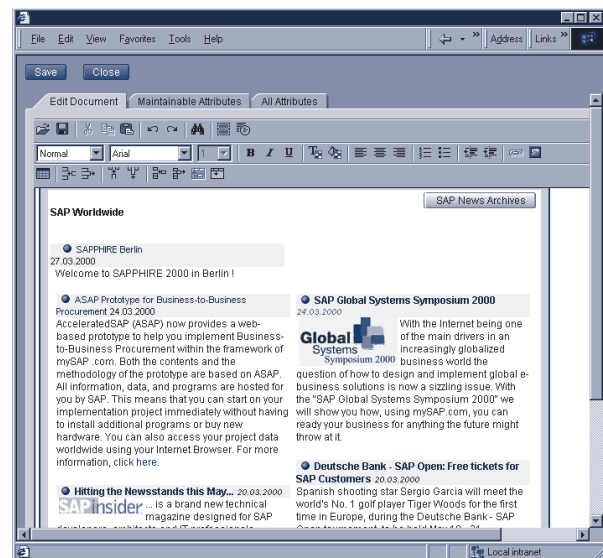


Relation of information objects in the Knowledge Warehouse according to built-in and customer specific classes.

## Creating Content with the SAP Knowledge Warehouse

The SAP Knowledge Warehouse includes the tools that give every employee the opportunity to become a content supplier, while providing special features for professional content developers.

- To allow everyone to contribute information quickly and easily, users can check in information via their browser interface. SAP will soon provide WebDAV (Web-based Distributed Authoring and Versioning) support as well, to allow users to collaboratively edit and manage files on remote servers.



### Editing of HTML-pages directly in the webbrowser

- Content developers who primarily create web content can easily edit content and set links within the browser interface.
- Content developers who primarily create text-based materials or presentations can work in the familiar Word, PowerPoint, or Visio environments. An open standard interface makes it possible to connect to other authoring tools as well.
- Content developers can create and maintain corporate glossaries and terminology databases.
- Course developers and creators of EPSS systems can create demonstrations and exercises with the iTutor tool.

- Course developers can create quizzes or tests to measure whether the learning objectives were met. The test results – including the percentage correct, points assigned, or pass/fail – can be stored in the Human Resources database and used to automatically update the participant's records.
- Certification testing professionals can use the Performance Assessment Workbench component of the SAP Knowledge Warehouse to create and validate tests used for certification purposes.

Regardless of the type of content, the SAP Knowledge Warehouse provides the following benefits in content creation:

- Linking between different information objects simplifies reuse of those objects. For example, a user developing web content can easily include a link to relevant documentation. This ability can help assure consistency, minimize redundancy, speed up authoring, and reduce translation costs.
- Object locking to assure that only one author at a time works on a document.
- Status control to assure a smooth workflow. Each document is assigned a status, which shows what stage of the process a document is in. When an author assigns the status of "Released," for example, it means that the next person in the process can access and, for example, translate the document.
- Check-out to download contents to the user's PC, to reduce network traffic and to provide for faster editing of large or compound documents.
- Wizards that prompt authors for information to make check-in easier. This information, in turn, defines the attributes that help to manage that information object and that define its context.

#### Content translation

- Translation status control, which shows translators what documents need to be translated, whether they have been translated before, or whether they are new documents.
- Translation workflow support, which shows which documents have been released for translation, which are in progress, and which are completed.
- Checkout capability for working with external translation agencies.

- The ability to work together with third-party products that provide translation memory technology, which recognizes existing translations and automatically proposes them to the translator. This process ensures consistency when many translators work on a large body of material.

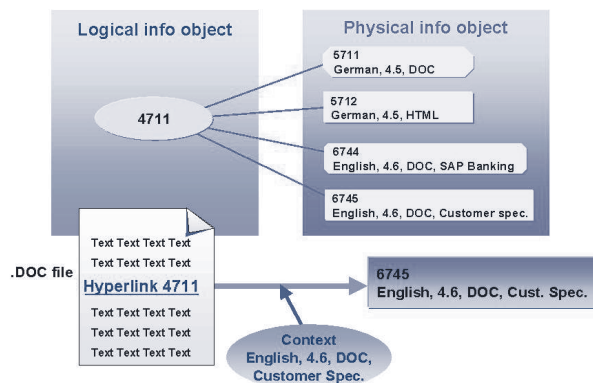
#### Collaboration

- The ability to easily check in information. For example, a group of consultants could add individual solutions to a collection of projects.
- The ability to provide links to real-time chats or to threaded discussion forums.
- The ability to provide links to third-party products with collaboration functionality.

### Managing Content with the SAP Knowledge Warehouse

Content management is at the heart of knowledge management technology. In exploring the functionality that makes up content management capabilities of the SAP Knowledge Warehouse, it is important to understand the concept of a "context".

Every info object stored in the Knowledge Warehouse consists of exactly one logical info object and at least one or more physical info objects. A logical info object can point to several physical objects, each of which contains a different variation of the same information. For example, a procedure may exist in four different languages, it may be available in different delivery formats, and it may contain release-specific information. All of these physical objects are held together by the logical object, while each physical object belongs to a different context. The Knowledge Warehouse can deliver the document that contains the right combination for any particular user, by referring to the document's context and the user data. Users either chose the context they wish to see or are automatically assigned to one, depending on their logon data that specify their preferred language, authorization, etc. This concept is important to much of the content management functionality of the Knowledge Warehouse. Please refer to the two following graphics for an illustration of this concept.



In this example, the logical Info Object "4711" has four associated physical objects. When an English-speaking user of the SAP Banking solution logs on to an SAP 4.6 system, the physical info object "6744" is automatically displayed when the document requested.

This arrangement greatly reduces the effort involved in maintaining related content, such as translations, customizations for industry-specific solutions, new releases, and so on. It also makes possible a high degree of personalization. And because the source documents are not changed, it is always possible to return to a known state.

The content management features of the SAP Knowledge Warehouse handle the assignment of physical objects to logical objects, taking into account the attributes defined in the data models created in the Modeling Workbench. When a user requests a document, the user context and the user profile determine which document is delivered.

In managing logical objects and the associated physical objects, content management provides the following functionality:

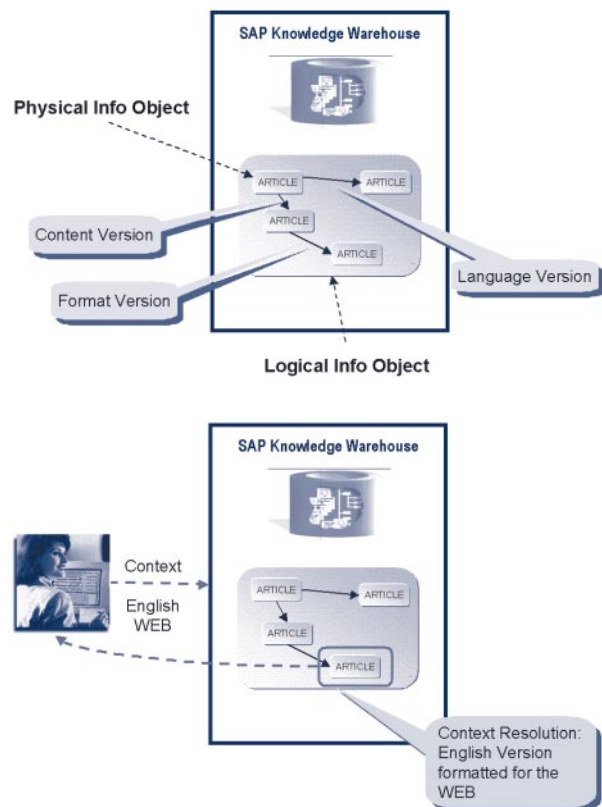
- Versioning
- Attribute management
- Site Management
- Translation Management

## Versioning

Versioning ensures that only the most up-to-date documents are delivered. For document versioning, that means that knowledge consumers always see the most current information in the most personalized form available. For language versioning, it means only the most up-to-date documents are translated.

The SAP Knowledge Warehouse provides for two types of versioning, linear or context-specific.

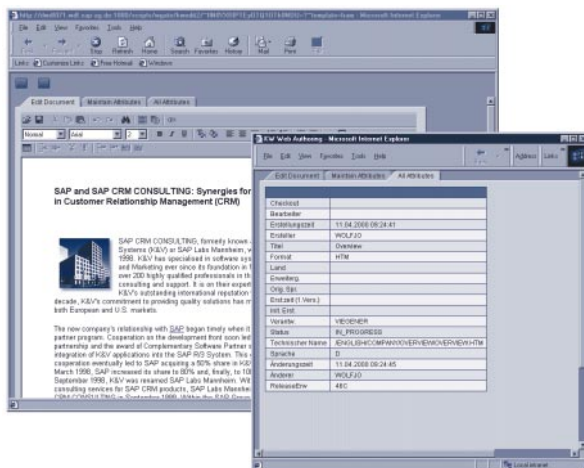
- In linear versioning, the latest version of a specified info object is always accessed.
- In context-specific versioning, the physical info object that corresponds to the context of a user is accessed. If that object is not available (e.g. no translation), predefined rules apply to determine which context is displayed.



## Attribute Management

Info objects include attributes that contain information about that object, such as who created and last changed an object. Some attributes are created automatically. For example, the system uses the login to determine the document's creator and automatically adds information about when and by whom a document was changed. Other attributes are taken from information the author enters, such as the title of the document.

Attributes make it possible to find a range of information about an info object, as shown in the illustration. For example, if the data model for a project report includes attributes for customers or partners, information about those attributes can be manipulated as needed. By sorting and searching for particular attributes, for example, it is possible to get many different views on available information, such as all documents created by a particular author, or an audit trail of information changes.



### Editing of document attributes directly in the webbrowser

## Site Management

The following site management features contribute to the optimal management of web content:

- The ability to create templates that define framesets and layout features, as well as style sheets for the definition of text attributes. Using such features simplifies content creation and helps enforce the corporate look and feel.

- The ability to create persistent links that are not “broken” when destination pages are moved, so there’s no need to maintain links. This unique feature is also a result of the approach using logical and physical information objects. Because the link is not a relative path, but rather a pointer to a logical object, the latest version in the appropriate context is always accessed.
- The ability to incorporate existing web content, either by linking to it or by checking it in. A Wizard is available to simplify the check-in process. During the process, the required components and links are automatically created.

## Translation Management

The SAP Knowledge Warehouse includes a number of features that greatly contribute not only to the management of the documentation and localization process, but also to the productivity of individual translators.

These features include:

- Language versioning, which ensures that only the most up-to-date source document is translated.
- Translation status control, which shows translators what documents need to be translated, whether they have been translated before, or whether they are new documents.
- Translation workflow support, which shows which documents have been released for translation, which are in progress, and which have been completed.
- Checkout capability for working with external translation agencies.

## Integration with mySAP.com

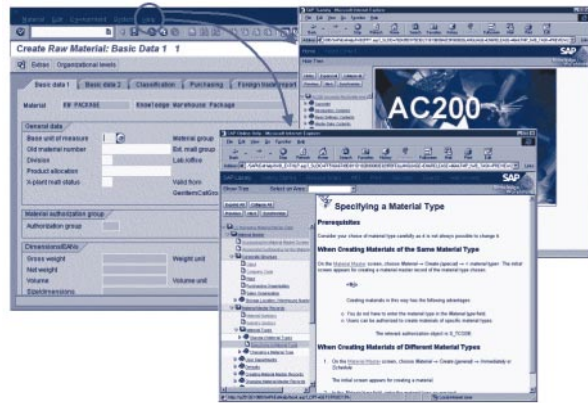
One of the unique benefits of Knowledge Management with mySAP.com lies in its ability to leverage one of the strengths for which SAP is known: the integration of data from diverse areas of the company. The same is true of information. Because information is most valuable in how it contributes to an entire body of personal or corporate knowledge, making the right connections is as important as the information itself.

- Ability to link information objects with business objects and vice versa
- Ability to trigger business events and start a workflow
- Access to corporate “Who’s Who” information
- Integration with Corporate Learning Solutions
- Integration with Quality Management
- Additional integration possibilities via API

### Linking Information Objects with Business Objects and vice versa

SAP provides preconfigured context-sensitive information to all important elements of the mySAP.com Workplace. In addition, the integration of the Knowledge Warehouse into mySAP.com makes it possible to link any type of information with web-transactions or other elements of the workplace. Links from a transaction can take users to a page of the corporate Intranet, project data, the SAP Library, to customer-specific modifications of the latter, or to related training – all of which can be stored and managed in the Knowledge Warehouse. Based on the login data of the requesting user, the same link will lead to different language versions or other modifications of the specified logical information object. This ensures that users can access the appropriate, context-sensitive and user-sensitive information at all times, while only one link has to be maintained.

The Document Management System (DMS) provides the preconfigured option to link any object in the Knowledge Warehouse to project documents. The maintenance of links in the opposite direction is equally simple, thus ensuring integrated access to project data and any type of related additional information.



**Links to information in the SAP Knowledge Warehouse can be set from anywhere within the system.**

### Triggering of Events and Workflows

In many cases the creation of a new document or certain changes of an existing document may lead to required follow-up actions. The Knowledge Warehouse already provides predefined workflows for the approval and copy-editing processes needed when collaboratively working on documents. If this workflow is triggered, a new or changed object will automatically be transferred to the inbox of the person responsible for review, e.g. the superior of the document's author.

Additional standard workflows are a focus of current development and will enable the Knowledge Warehouse to trigger complex processes in all other mySAP.com components. A good example would be a photograph that was delivered by an external agency. This agency is now entitled to receive a certain fee for each usage of the picture. The file is stored in the Knowledge Warehouse and its attributes contain the necessary information to trigger the payment process. When a content developer includes the photograph in his text, that event automatically triggers the display of the corresponding purchase order in the purchaser's workflow, so that he can authorize payment to the agency that delivered the photograph.

### Corporate “Who’s Who” Information

Whenever information in form of a document is not enough, it may help to speak to the expert in the field. To locate this person quickly, the mySAP.com Workplace gives you access to the corporate “Who’s Who” information maintained in SAP HR. Additional links

from here to the Knowledge Warehouse and back assist in correlating the information stored in documents and the expertise of the people behind these documents.

## Integration with Corporate Learning Solutions

To maximize and extend the value of the content and tools of the SAP Knowledge Warehouse, it is closely linked to tools and information in various SAP Human Resources components to support training administration and the tracking of qualifications, education histories, and organizational assignments to roles, jobs, and positions.

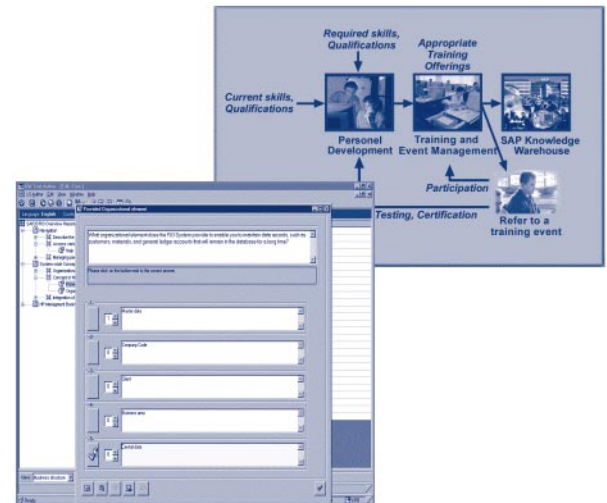


Information on items in the Personnel Development component of SAP HR now include the option to set a "Knowledge Link," from which course materials or other information stored in the SAP Knowledge Warehouse can be displayed.

Examples of how Human Resources components can work with the SAP Knowledge Management Solution include the following:

- By using Human Resources information about employees' organizational roles and their skills profiles and training histories, it is possible to generate personal learning proposals that suggest available training events or self-study options.
- Such information can be used to determine demand for a training event and to plan the times and locations to meet that demand. The system can allocate rooms, instructors, and other resources. Employees can review schedules and book and cancel events using a Web-based interface.

- As employees complete the training, the system automatically updates their skills profiles and training histories in the Human Resources database. As a result, anyone searching for employees with particular competencies can find them.



This illustration shows how the SAP HR components determine an employee's skills gap, recommend appropriate courses to fill that gap, and provide a link to the SAP Knowledge Warehouse so that the employee can work through the course materials. The results of any progress or certification tests can be used to update the employee's records. Certification tests can be designed and conducted online with the assistance of the Performance Assessment Workbench.

Knowledge Management with mySAP.com simplifies the process of how employees inform themselves and access their company's training options. By working together with SAP HR, SAP Business Workflow and SAP Employee Self-Service, Knowledge Management with mySAP.com provides the following benefits to employees, with resulting savings to their employers:

- Employees can be notified when certifications or licenses expire and automatically get renewal information.
- Employees can be notified of training events as courses or materials relevant to their jobs or skills become available.
- Employees can inform themselves about training options and book events, cancel them, and coordinate their schedules.
- The system automatically sends required approval forms for training to managers.

- Employees are automatically informed when their job, role, or position is updated with new requirements.
- When tests are completed successfully, the system automatically updates employees' skills.
- Employees can view up-to-date course materials and complete exercises and tests right at their desks.

For additional information, see the Factsheet *Integration with SAP Human Resources*.

### Integration with Quality Management

The DIN EN ISO 9000 specifies that an organization shall prepare a quality manual that describes how the requirements of this standard are implemented in the organization. As the medium for creating and making available the quality manual are not specified, organizations are free to maintain it electronically. The SAP Knowledge Warehouse provides a wide range of functions to create a quality manual for any organization and to organize, easily store and retrieve the elements of that manual. In addition, the standard content of the Knowledge Warehouse includes the official definitions, specifications and outlines for creating a DIN EN ISO 9000 compliant quality manual. The Quality Manual in the SAP Knowledge Warehouse simplifies the creation and administration of your own company-specific Quality Manual, based on the requirements of DIN EN ISO 9000.

For additional information, see the Factsheet *SAP Quality Manual in the SAP Knowledge Warehouse - DIN EN ISO 9000*.

### Additional Integration Possibilities via API

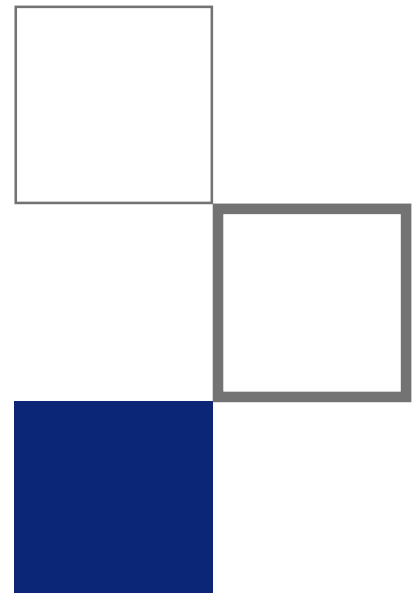
In addition to the described integrations of the SAP Knowledge Warehouse, customers have the option to design specific interfaces to other applications in co-operation with their project team. As the controlling system of the Knowledge Warehouse is an R/3 system, all the possibilities of SAP's Application Programming Interface (API) can be used.

## Delivering Content with the SAP Knowledge Warehouse

When users request documents, the retrieval functionality of the SAP Knowledge Warehouse delivers the requested item, usually by displaying it in the user's workplace. Certain content can also be pushed to the user's workplace to stay informed whenever information changes.

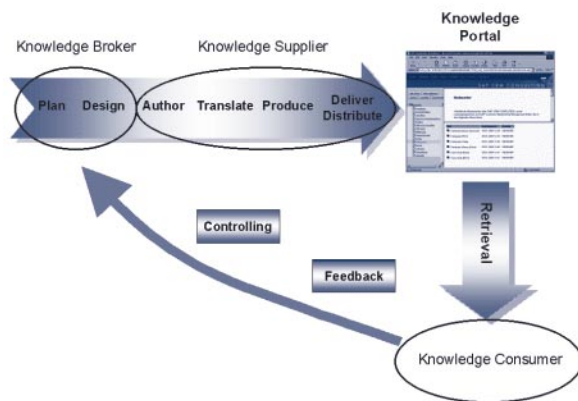
For finding information, users have a number of options:

- Searching for a word or phrase to find either the word in an index or conduct a full-text search.
- Searching for attributes to find out information related to info objects
- Combining searches for info objects or business objects



## Supporting the Knowledge Management Cycle

The previous section focused on the functionality provided by various components of Knowledge Management with mySAP.com. This section provides an overview of how this functionality maps to the processes of knowledge development and knowledge transfer that are central to any knowledge management solution.



The simplified knowledge management cycle is driven by knowledge brokers, suppliers and consumers.

## Supporting the Processes of Knowledge Development

The knowledge development processes involve the capturing of information and converting that information into various forms that others can use. Whether or not this information leads to knowledge largely depends on the skills of the knowledge professionals – the Knowledge Suppliers and Knowledge Brokers – who are primarily involved in these processes.

### ■ Planning:

“There’s never time to do it right, but there’s always time to do it over.” Many people nod knowingly and smile ruefully when they hear that cliché. Just as houses are built according to a blueprint, curricula, book projects, and corporate intranet sites should be constructed according to a carefully defined plan. This plan should be based on a comprehensive needs analysis, to make sure the right information types are created to meet the right infor-

mation needs. Such plans also help to clarify priorities, so that when inevitable time pressures make it necessary to do less than planned, the equivalent of decorative elements – not supporting beams – are eliminated.

### ■ Design:

If the plan defines the overall structure and the corresponding components, the design determines how the finished product will look and how the information is presented. Commonly known as “look-and-feel,” the design largely determines the product’s appeal to the user group it is supposed to serve, as well as its overall usability. In addition to appearance, the design also defines strategies for navigation, searches, and error recovery.

### ■ Authoring:

Once the design is complete, authoring can start. In this step, the content developers gather and capture information from various sources and write their content. They also classify the content according to the form it will be delivered in – fast-breaking news on the home page of the corporate intranet or as a “live” e-Learning session, an on-line help system to support end users, or training courses to be delivered in a classroom or via the Internet. Regardless of the type of information or the way it is delivered, the SAP Knowledge Warehouse tools support content developers in creating information.

### ■ Translation:

In the translation phase, keeping track of different versions and translation workflows becomes a major requirement. To speed up the translation process and to contain costs, information that has been translated once should always be available as the basis for any new translations.

The SAP Knowledge Warehouse can work together with third-party products that provide translation memory technology, which recognizes existing translations and automatically proposes them to the translator. This process ensures consistency when many translators work on a large body of material.

### ■ Production:

In the production phase, the content management specialists are very busy. The base services that support the SAP Knowledge Warehouse automatically convert documents to the appropriate presentation format. In addition to testing the conversions, the

content management specialists need to make sure that the user contexts (see the discussion on page 18) are defined properly so that updates run smoothly. The SAP Knowledge Warehouse assists in these tasks with functionality that provides version control, status control, and workflow control. In addition, print support is available for creating handouts, documents, and manuals.

## Supporting the Processes of Knowledge Transfer

Once content has been captured, developed, and stored in the SAP Knowledge Warehouse, managing the stages of knowledge transfer becomes the central concern.

### ■ Distribution:

In the distribution stage, the base services that support the SAP Knowledge Warehouse can instantly replicate information worldwide. Because the content management specialists can set up user contexts, and because the corresponding “info objects” are loaded to the cache servers only when a user requests them, distribution is targeted and requires minimal storage resources.

### ■ Delivery:

In the delivery phase, the ability to use standard mySAP.com authorizations to control user access makes it easier for the Knowledge Brokers to determine what is delivered to whom, whether information is “pushed” to certain users, and how to filter and organize how information is delivered.

### ■ Retrieval:

This is the point where users interact directly with the system to get the information they need. Although role-based interfaces in the mySAP.com Workplace already provide for the basic knowledge needs for each user role, individual users will always need to search for information in highly specialized ways.

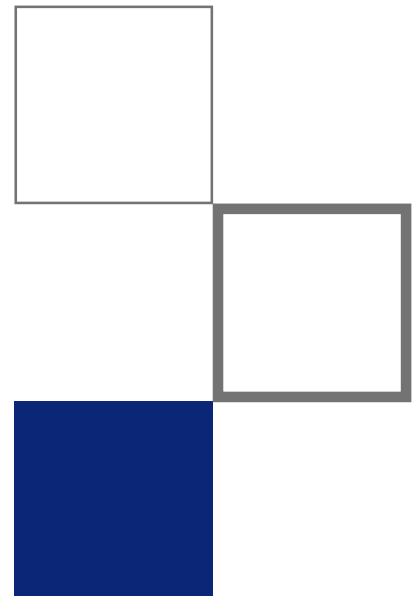
### ■ Feedback:

To achieve and maintain a high level of usability, it is necessary to efficiently incorporate feedback. In addition to direct feedback, Knowledge Brokers in any organization will be looking for automated feedback capabilities, such as capturing how often particular items are accessed and how long information seems to be of interest.

By providing Knowledge Consumers with a way to evaluate the usefulness of particular pieces of information, they can directly contribute to keeping information timely and relevant. For training content, the assessment capabilities of the SAP Knowledge Warehouse include the ability to test whether the learning objectives have been met.

### ■ Controlling:

Tracking the costs related to knowledge development and transfer has been very difficult, given the number of people involved and the complexity of the associated processes and technologies. However, the Activity-Based Costing subcomponent of the SAP Controlling component provides an infrastructure that makes such tracking possible. SAP plans to make this integration available, so that Knowledge Brokers within organizations can track and analyze project costs, incorporate that information into future planning for resource requirements, and support effective scheduling.



## Leveraging SAP Contents

To provide its customers and partners with the knowledge to get the most from mySAP.com, SAP provides a range of information resources, including internal and public web sites, a wide range of promotional materials, an extensive documentation suite, and hundreds of courses. Most of these materials are translated into several languages.

In designing and producing these materials, SAP realizes that just getting information to people isn't enough. Everyone has had the experience of reading a document, understanding all the words, but still not getting the point. Similarly, a common complaint about training is that people may get lots of information, but that they quickly forget the details and can't use the information once they are back on the job.

To help alleviate these problems, SAP Knowledge Management provides not only technical solutions, but seeks to support customers in creating content that users can understand, remember, and use. Based on learning theory and the findings of instructional design technologies, SAP Knowledge Management provides support in incorporating the following key elements into various kinds of content:

- Context and structure
- Engagement
- Feedback

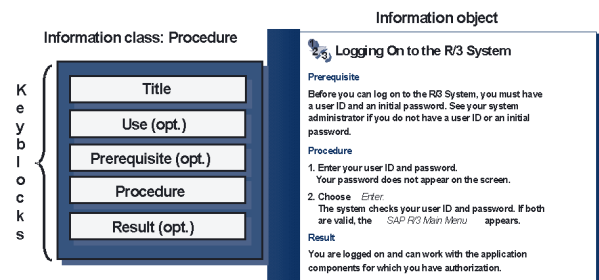
### Structure: Key to Understanding

Information in itself is just so many words, often too many words. One way in which knowledge differs from information is that knowledge contains an inherent structure that makes analysis and comparison possible. It is only through those processes that information becomes relevant to users' questions by providing the all-important context.

The ability to structure information meaningfully will always remain a uniquely human ability. It is a task of knowledge management to support that ability by providing the tools for indexing, cataloguing, sorting, searching for, and retrieving documents. Technology can add even more value to retrieved information; for example, by displaying it graphically. SAP's Business Information Warehouse is an example of how technol-

ogy provides this type of decision support, especially in the area of graphically representing structured data.

For example, SAP documentation follows a structure (called the "info design") that is based on a thorough analysis of various types of SAP-related information, including functions, processes, objects, and procedures. For each information class, the associated information is further categorized into "keyblocks."



**The "Procedure" information class, for example, contains the following keyblocks: Title, Use, Prerequisite, Procedure, and Result.**

This approach speeds up documentation development by making it easier to organize information, to provide a consistent approach and level of detail, and to reuse individual components. In addition to supporting the person who writes the documentation, this approach helps users because information that is always in the same place is easier to find, and information that is presented at a consistent level of detail is easier to understand.

SAP is currently implementing a similar approach for training materials. Based on individual training "packets" that contain content directly related to learning objectives, users learn faster and remember more when content is clearly "clustered" and pertinent to a goal. Developing courses also becomes easier when individual packets can be reused.

### Engagement: Key to Learning

The psychologist Fritz Perls said "learning is discovering that something is possible." This quote summarizes another essential aspect of acquiring knowledge: engagement, that quality of excitement and discovery that Perls alludes to. Given how most of us are bombarded by information, content that is engaging enough to capture and retain our attention has a bet-

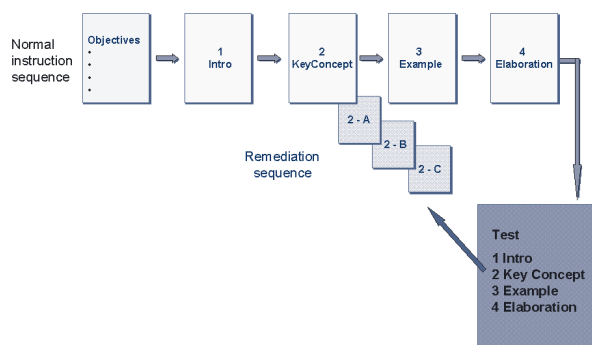
ter chance of becoming knowledge. Content elements that make information engaging include graphics and animation, which can also help to clarify concepts and bring words to life.

Even more important to eliciting engagement is interaction. When users can practice what they've seen and actively solve problems as they come up, retention and learning increase dramatically. To increase the value of such interactions, people should be able to repeat them. For example, exercises that are completed in a classroom setting should be complete and self-explanatory, so that students can repeat them when they are back on the job.

Some of the courses that are part of the SAP content include multimedia elements such as demonstrations and practice exercises. The iTutor tool and assessment tools of the SAP Knowledge Warehouse make it possible to encourage a high level of engagement.

## Feedback

Success is one of the rewards of learning. When developing a training course, periodically checking whether users have grasped the material helps to keep them engaged and motivated. But feedback not only helps users monitor their progress, it also helps the instructor to set an appropriate pace and to determine what remedial information or activities would be helpful.



**For example, if a user fails a question that tests the key concept addressed in Screen 2, the course developer can develop additional materials to explain the concept. Any users that fail that item can be automatically routed to the remediation sequence**

Testing can also be useful before users take a course. These pretests can determine whether someone has the necessary knowledge to participate in a class, or they can group together people with similar abilities.

In addition to feedback designed for self-monitoring or for measuring progress, many jobs require that employees periodically renew their credentials. By linking to information in the SAP Human Resources component, the system can automatically notify employees when credentials are about to expire or when new training becomes available. To complete the picture, people can register and often complete the required training and testing on-line. The system then automatically updates the employee's records.

## SAP Contents

For organizations that use mySAP.com to streamline their businesses, training and supporting users in using mySAP.com efficiently is extremely important. For such organizations, obtaining the SAP Knowledge Warehouse with optional content (in multiple releases and languages) may help them jump-start their training and performance support efforts.

Companies can obtain the following training offerings:

- Over 250 standard training courses, including industry-specific courses, for technical and implementation specialists.
- About 30 role-based courses for end users.
- Instructor guides training the trainers.
- Delta courses that highlight changes in release functionality.

Access to documentation is a standard part of the mySAP.com software and includes the following components:

- SAP Library, including context-sensitive Help
- SAP Glossary
- SAP Terminology

The Quality Management Manual in the standard content of the SAP Knowledge Warehouse assists organizations in creating their specific QM manual:

- Quality Management Manual (see also page 23)

Those organizations that want to use these materials as a starting point of their own documentation can purchase these contents as part of the SAP Knowledge Warehouse. By modifying and adding to these contents to reflect their customizing decisions and unique user needs, they can use SAP contents and the SAP Knowledge Warehouse as the basis of their own performance support systems.

End users typically need information that is specific to their company, site, and business unit. For that reason, performance support is usually developed to reflect any customization of the user interface. Studies of how end users work show that their questions tend to be very specific, such as “What do I enter here?” or “What do I do next?” End users rarely go to external information sources while performing their tasks. If what they need isn’t obvious in the interface, in the messages they receive, or at the touch of a key, they tend to ask a colleague or to call the help desk.

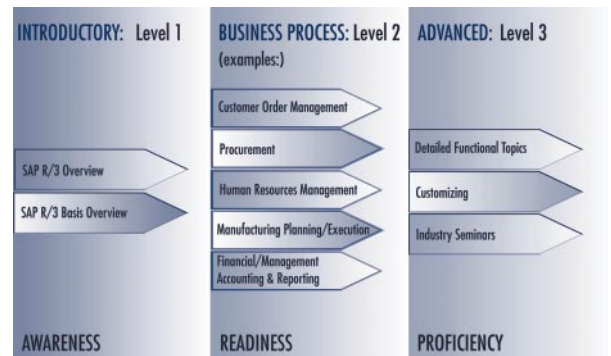
### Training: Preparing Employees for the Job

For most companies, training is a crucial component of any knowledge management mix. Well-trained employees are not only more effective; they help make other employees more effective. However, training managers are coming under increasing pressure to justify the expense of training, which usually includes time away from the job and may include travel costs as well. For that reason, there has been an increased focus on measuring the return on investment (ROI) of training, as well as finding alternatives to traditional classroom training.

When looking at the benefits and costs of training, it is important to realize that training is a process, not a one-time event. As with any other process, clearly defining the associated workflow and required environment to support that workflow makes the entire process more efficient. In addition, the diversity of training needed in most organizations requires a company-wide strategy that defines all aspects of the training development and delivery process, as well as the underlying technology that enables that strategy.

The SAP Knowledge Warehouse can provide the infrastructure and tools to support a corporate training strategy that includes the full range of corporate

knowledge, including professional knowledge related to jobs, company-specific workflows and procedures, and SAP-related knowledge. For example, companies that implement SAP need to train the project team at the beginning of an implementation and end users just before going live. Once the business is running, all users need to be trained periodically to take full advantage of new release functionality or more efficient business processes.



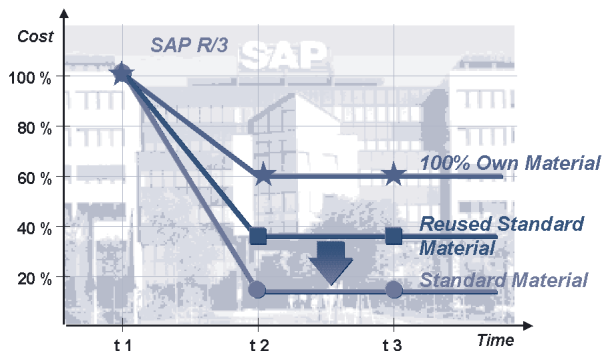
### Getting a Jump Start on Training

For organizations that run large parts of their businesses in mySAP.com, using SAP training materials as the basis for training their own project team and end users can provide substantial savings. These SAP materials include over 250 standard classroom-training courses, about 30 role-based training courses for end users, and self-study options such as the Delta Study Guides.

Customers benefit from having proposed training sequences, predefined course structures, and contents and exercises that have already been used to successfully train users. By evaluating these resources and determining how to modify and extend them to include customized processes, sample data, and examples relevant to a company’s users, training can be developed more quickly – a critical benefit during the high-stress phase just before going live.

Over the life of the product, reusing existing customized courses and largely automating maintenance and distribution continues to provide substantial savings of both time and money. Because updates do not affect customized areas of courses, maintenance is simplified – only the original SAP contents are updated automatically. By examining these updates, the task of

defining how to update company-specific information is simplified as well.



### Getting a Jump Start on Documentation

Complete and well-structured documentation is a crucial component of any software package. Documentation at SAP is developed in cooperation with hundreds of technical writers, editors and translators, thousands of software developers, product managers and technical quality control staff. Customer feedback from consultants, partners, and support teams is also incorporated in the documentation. The goal is to provide the right information to the right user at the right time. For members of the project team, that may mean knowing how a business decision affects a process and the corresponding configuration setting within an SAP System or within mySAP.com.

For end users, it may mean knowing the next step in one of their daily tasks. The project team – consisting of the company's business and technical specialists, SAP consultants, and SAP partners – is the primary audience of SAP's documentation. By providing high-level conceptual information, SAP helps the team to plan the implementation scope and to organize its progress from the very beginning. Detailed functional and "how-to" information assists the specialists in their implementation tasks and in the creation of the end user documentation.

As it has been mentioned for training, reusing existing documentation provides substantial savings of time and money. Because updates of the SAP materials do not affect customized areas of the documentation either, maintenance is simple. By examining these updates, the task of updating company-specific information is simplified as well.

## Reviewing the Challenges and Benefits of Knowledge Management

Before reviewing the benefits of SAP's Knowledge Management solution, it makes sense to summarize the core challenges any knowledge management solution must address:

- Overcoming employee reluctance to share information
  - ◆ This reluctance is often the result of corporate culture and must be addressed within the context of that culture.
  - ◆ Instead of gaining a perceived personal advantage from hoarding information, incentives can be structured so that sharing information is both valued and rewarded.
  - ◆ A knowledge management solution can facilitate the process by making it easy to share information and easy to get to information others have shared.
- Business problems in managing knowledge
- The time and costs associated with knowledge creation, transfer, and maintenance.
  - ◆ Creating content that is easy to understand, remember, and use requires considerable expertise and the willingness to continually elicit user feedback.
  - ◆ Avoiding redundant effort
  - ◆ Providing a common look-and-feel despite different content creators
  - ◆ Providing a context for information
  - ◆ Overcoming the problems associated with capturing tacit knowledge
- Technical problems in managing knowledge
  - ◆ The sheer volume of information
  - ◆ Keeping information up to date
  - ◆ Dealing with a variety of formats
  - ◆ Providing version integrity
  - ◆ Getting information to users
  - ◆ Qualifying users for access

In addressing these challenges, Knowledge Management with mySAP.com – as part of the Business Intelligence initiative and working together with numer-

ous other components of mySAP.com, such as SAP Human Resources, the Document Management System and the Business Information Warehouse – provides significant current benefits. It also provides the foundation for vast benefits in the future. These benefits, which will vary according to the business environment at various times, include the following:

- The mySAP.com Workplace, a role-based information portal that acts as a single point of access to automatically provide users with the information they need, as well as comprehensive search functionality to get the information they want
- The tools, repository and initial content to plan, design, create and administer a corporate intranet
- An architecture that supports distributed access and allows central maintenance
- Complex administration possibilities, but easy access for users and authors
- The ability to share data and functionality with other mySAP.com components
- The ability to link business objects to information objects
- The possibility to trigger workflows in other systems by changing a document
- The ability to create electronic performance support systems and to support help-desk personnel
- A basis for connecting people to one another, including access to information about the skills and competencies of individual employees
- Faster, more cost-effective training to prepare users for the job, with support for scheduling classes and tracking the completion of classes
- Increased end-user acceptance and productivity
- Vast savings by reusing existing materials and simplifying maintenance
- Rapid incorporation of release functionality and changes in business practices

Regardless of how Knowledge Management with mySAP.com is used, it provides a flexible basis for a corporate strategy for managing information in the long term. It simply all adds up:

$$\begin{array}{l}
 \text{Knowledge Management with mySAP.com} \\
 \text{Business Integration of other mySAP.com Components} \\
 + \\
 \hline
 = \text{Best Return on Information}
 \end{array}$$



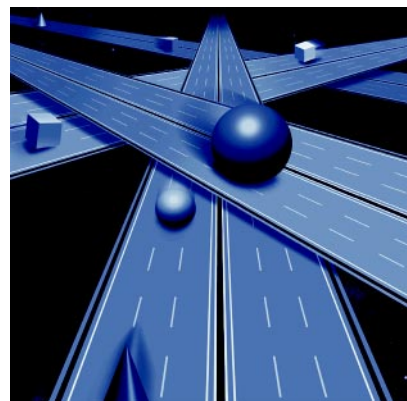


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