# e-Learning The Portal Approach



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**SAP Learning Solutions GmbH** 

# **Agenda**

Introduction

**International Specifications & Standards** 

mySAP Learning Solutions

The Learning Object Advantage

Products already available

The Market

**Positioning** 

**Availability & Schedule** 

Consulting

**SAP Learning Solutions** 





## **Education**

**New Economy = Knowledge Economy** 

Knowledge Workers move from project to project - taking their knowledge with them

Job security is something remembered from the 'old days'. Today, security lies in

- what you know how to do,
- what you can learn to do, and
- how well you can access knowledge.

People can expect to change jobs, even careers, numerous times during their professional life.

Education continues for a lifetime.

Workers who neglect to invest in their own intellectual capital do so at their own peril, as they can no longer rely on a single set of skills for lifetime employ. (Morgan Keegan & Co., Inc.)





# Knowledge

Performance measures drive our day to day activities

To achieve maximum performance, the right knowledge is needed at the right time

Knowledge is available everywhere - and still hard to find

Knowledge based decision making becomes a critical success factor

Knowledge leads to flexibility and confidence ... and power.

The ability to 'learn' is becoming the core competency for all people participating in this journey

How can we control what should be learned, transfer the right knowledge to the right people, provide everyone with a personalized learning experience and manage skills level based on performance results?





# **Welcome to e-Learning**

#### Where ...

- Qualification is delivered ,tailored to your needs'
- Information & Knowledge is presented in an instructionally sound way
- Modularization allows for individual pace and timing
- Ad hoc learning creates an environment of flexibility
- Self-paced learning leverages the use of time
- Collaboration offers a way to tap tacit knowledge
  - **♦** Asynchronuous Learning (forums, newsgroups, etc.)
  - ◆ Synchronuous Learning (vc, chat-rooms, whiteboards, etc.)
- Learning results in
  - **♦** Improved performance
  - **♦** Sustainable competitiveness





# What Is Driving e-Learning

- Rapid obsolescence of Knowledge and training
- Need for just-in-time training delivery
- Search for cost-effective ways to meet learning needs of globally distributed workforce
- Skills gap and demographic changes drive need for new learning models
- Demand for flexible access to lifelong learning

 Internet access becoming standard at work and at home

 Advances in digital technologies enable creation of interactive, media-rich content

 Increasing bandwidth and better delivery platforms make e-Learning more attractive

 Growing selection of high-quality e-Learning products and services

 Emerging technology standards facilitate compatibility and usability of e-Learning products

e-Learning

e-Commerce / e-Business

SRI Consulting and WR Hambrecht + Co



# **International Specifications & Standards**



"We do not think it is too strong a statement to say that learning standards are the Holy Grail of the e-Learning industry." Morgan Keegan & Co., Inc



















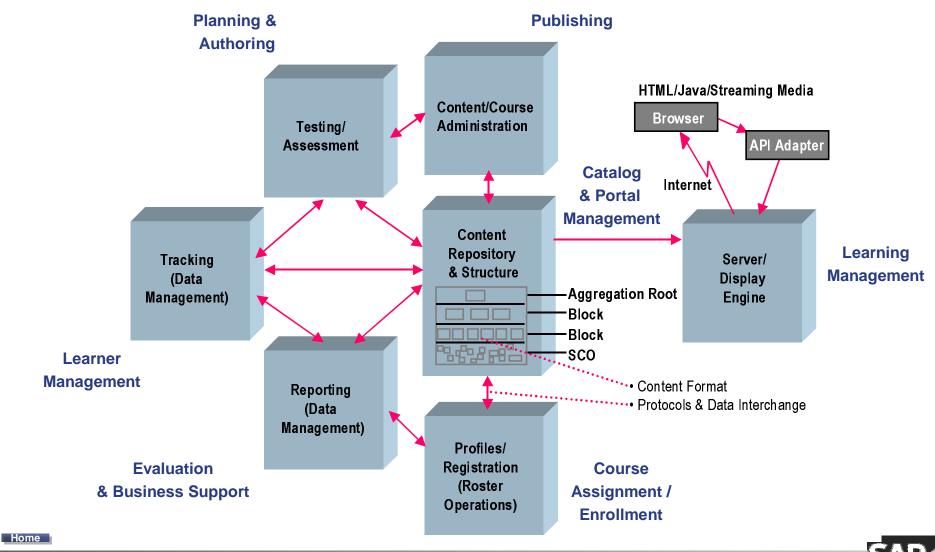
**Specification** 

**Standardization** 

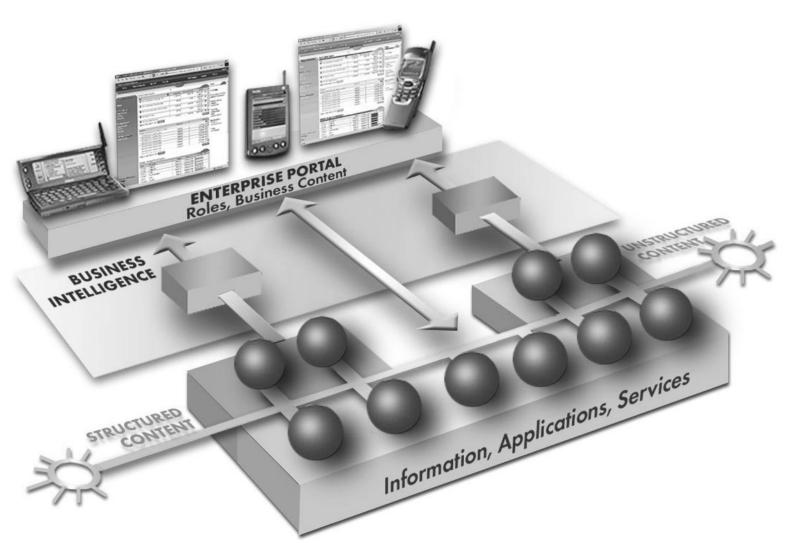




# Match to the SCORM - LMS Model



# mySAP - Solutions







Home | Personnel | Costs | Sales | Employee | Intranet | Private |
Overview = E-mail / Calendar = Meeting minutes / Notes = Approval = test

#### → Outlook

Mail inbox

New mail.

Calendar

New appointment

Telephony

Place a new call

Check my calls

Call team secretary

Send SMS

Company address book

Yellow pages

White pages

switch skin: Yellow, Blue

#### Form Tray Layout



Google"

Go

#### **Text Tray Layout**

IT to make up 15 percent of the EU's GDP

IDG, 11/23/2000

"Information and communication technologies contribute 15 percent of the European Commission said in its semi-annual economic forecasts published on Wednesday." Broken Undersea Cable Cripples Net

E-Commerce Times, 11/22/2000

"Parts of the Internet ceased to function Tuesday when one of world's largest and damaged, stalling Web users around the globe. Internet traffic jams were worst in the undersea damage, but effects of the break in the intercontinental cable were also felt Employers, workers begin to hang up on telecommuting

C/Net, 11/15/2000

"Sick of sitting in traffic and toiling in a nondescript skyscraper while the rest of the world.

Visa to lay down the law on Web security.

C/Net, 11/15/2000

"Visa is sending online merchants a tough message:Bulk up your Web site security or" The Net's Bad Apples

E-Commerce Times, 11/15/2000

"The internet has certainly thrown a new wrinkle into the journalism game, ratcheting up run for their money. Of course, along with the wave of first-rate newcomers comes the Drudge Report."

#### Complex Tray Layout



0 - ×

SAP TV SAP Labs

SAP University

SAP University America

SAP Training Cataloge







No 72 | July 2000 No 71 | June 2000

No 70 | May 2000 No 69 | April 2000

No 68 | March 2000

#### Simple Tray Layout

Wholesales Inventories Up Merrill Analyst Makes S&P 5 Pfizer Sees 25 Percent Earni Lucent's Agere Unit Files for I Iraq Export Obstacle Lens Fe

#### Simple Tray Layout

Russia's Yeltsin Has Catarac Suppreme Court Allows Smol First High Speed U.S. Train Service Iraq Instists On Surcharge; O Sales

Official Tally in Romania Shov

#### Simple Tray Layout

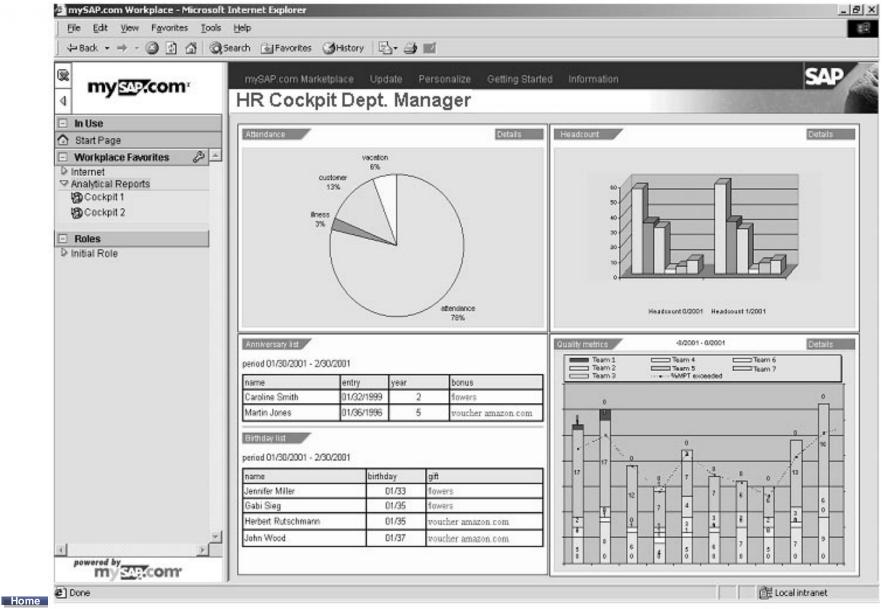
Who's Who
Leave Request Overview
Create Leave Request
Change Own Data

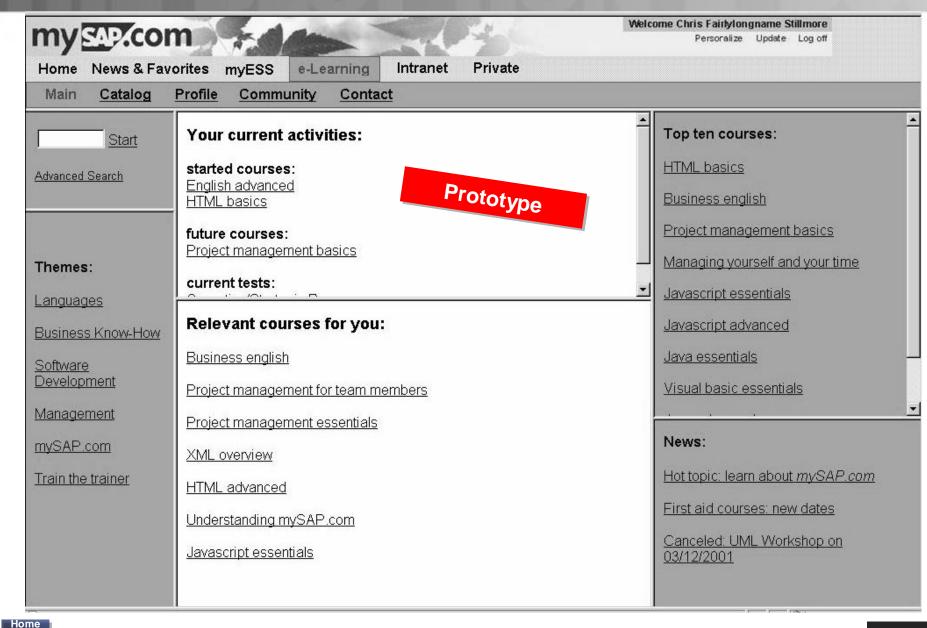
# **SAP's Solution Offering**

#### - Content directory Support - Portal builder Information - User management Consulting - Reports, News - Single sign-on - Policies, Laws **Browser** - Personalization - Product/Market info - Retrieval Miniapps on JAVA Applications • WCM - Frontend opera-- Publish & subscribe tional apps - Search - Analytical Apps - Classfication - Crawlers Services - Content store - Travel service - Distr. Authoring - Financial services **Basic Portal Platform** Collaboration - Workflow, Inst Mess. - Appl. Sharing - Collab. Filtering **Portal** Colla-BW WCM - Teamrooms Server boration • BW - Data Warehousing - ETL, Reporting **SAP & Non-SAP Applications** - Analysis - Data mining

Portal Server

# **SAP BW – HR Webcockpits**





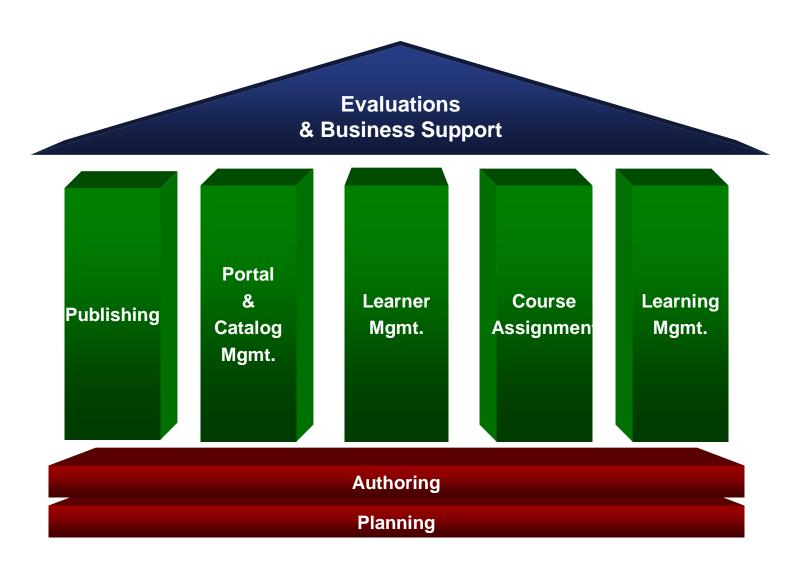


# The Environment for e-Learning

# Human Capital Management E-Learning Knowledge Management Business Intelligence CRM mySAP Workplace - Web Content Management



# e-Learning



# The Scope for e-Learning

**Business driven Knowledge Transfer** 

**Hybrid Learning Portals** 

**Personalized Learning Processes** 

**Assessment based Learning** 

**Objective based Dynamic Course Assembling** 

**Learner Collaboration** 

**Learner Progress Tracking** 

**Skills Management** 

**Knowledge Mining** 

Shareable (among various systems) Courseware

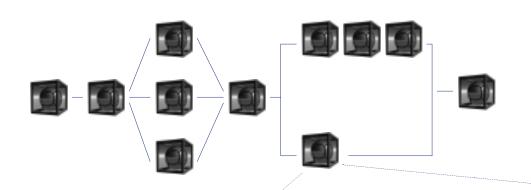
Reusable (for several delivery paths) Courseware

**Performance Support** 

**Training Quality Assurance** 







- **Learning Paths**
- **Learning Objects**

#### Objective Statement

#### Instruction

IE: Motivation (eg: statement of benefits)

IE: Presentation (eg: concept, facts, rules, examples, etc.)

IE: Activity (eg: discovery, simulation, matching, questions, etc.)

IE: Summary (eg: conclusion, self-assessment, etc.)

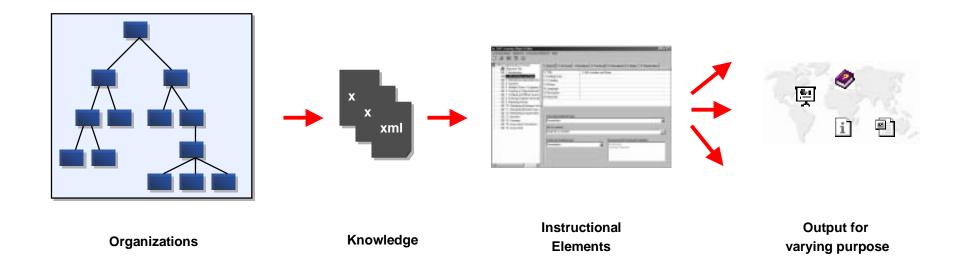
IE: other

**Assessment Tests** 

Home



# Managing Knowledge Assets

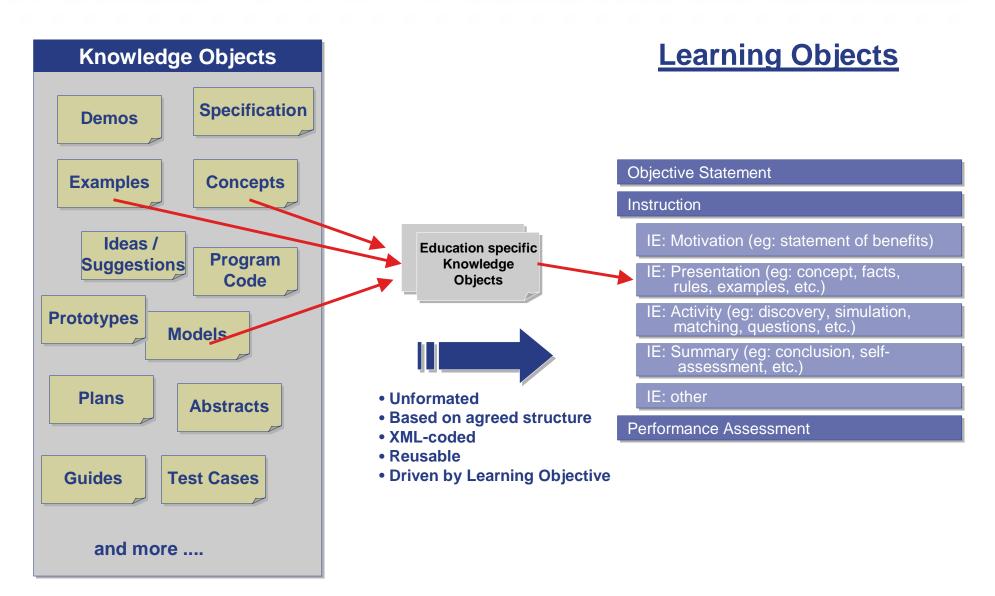


Organizations produce generic knowledge, coded in xml, which can be used as instructional elements within a Learning Object for which content in different output formats can be generated to serve a multitude of business purposes





# **Bridging from Knowledge to Education**







# The Learning Object Advantage

Achieving the company's goals

**Business purpose and results** 

A high degree of cost-reduction

High manageability of content

High level of reusability

Support for widely accepted industry specifications and standards

Faster & focused learning

Increased fairness during assessment tests

Changed behavior and higher retention

Personalization & individualization

**Performance Improvement** 



Purposeful business information





# **Cost Savings**

## **Expenses (according to Computerwoche 43/2000)**

- German companies spent 34 Billion DEM on employee education in 1999 amounting to around 2207 DEM per person
- 47 % of these expenses relate to travel, tuition and training fees the bigger part for continuing payroll while on training
- Average training expenses per person and day = 350 DEM

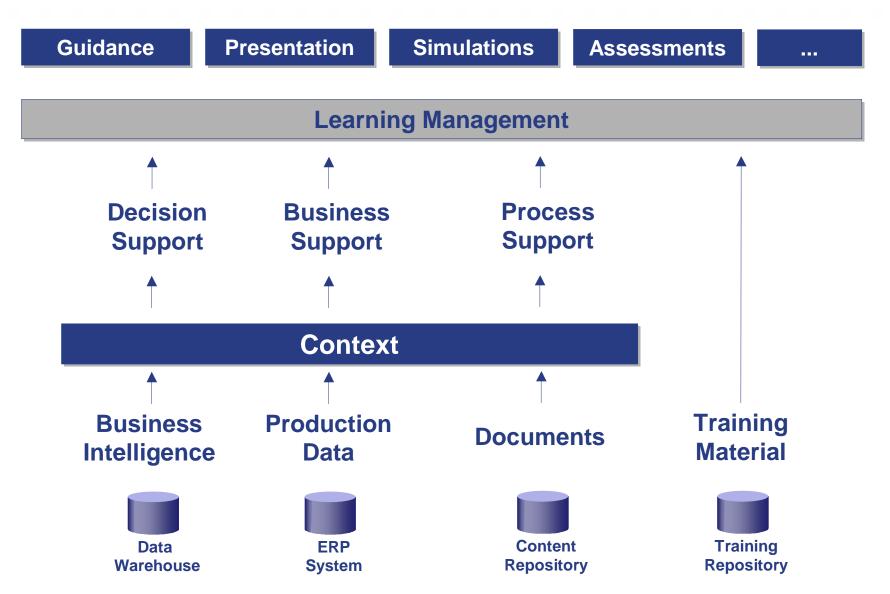
# With e-Learning

- Travel is not required
- Participation in whole events is not required Absence time from work environment decreases
- Courses that 100% meet business objectives can be assembled dynamically
- Exchange of ideas and knowledge takes place globally, not localy in small group of course participants
- Skills information is generated without manual maintenance
- Generate multiple output formats from one content





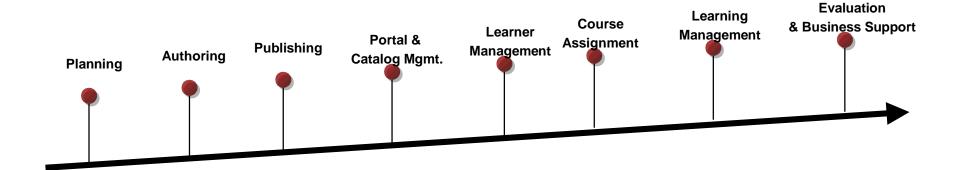
# Eventually: The LMS as a Knowledge Broker







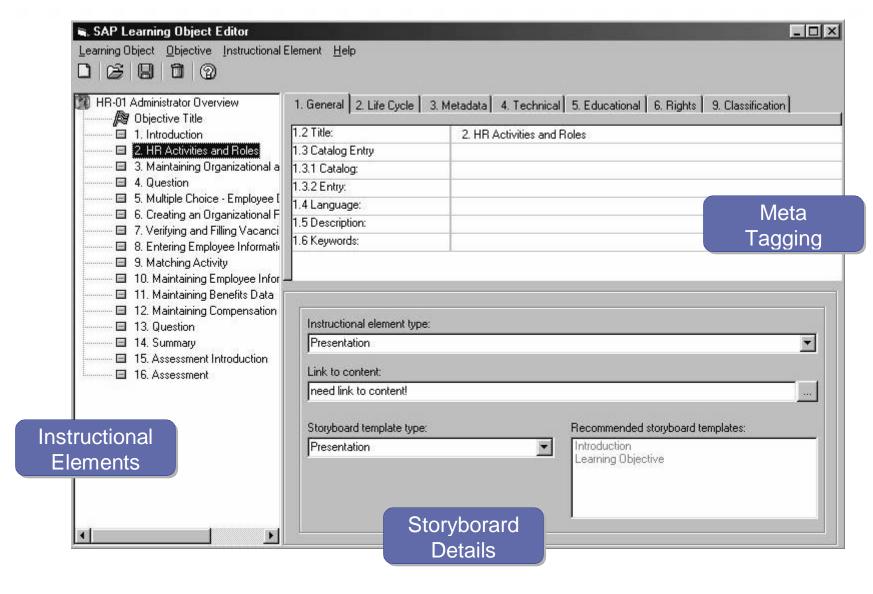
# **Components Available**



- Qualification Management
- PAW
- LO Editor (prototype)
- IDE

- Workplace
- Knowledge Warehouse
- HRMS
- TEM **Booking**
- ESS **Enrollment**
- Objective Mastery **Tracking**
- Mediator
- Test Results Reporting
- SPSS Interface

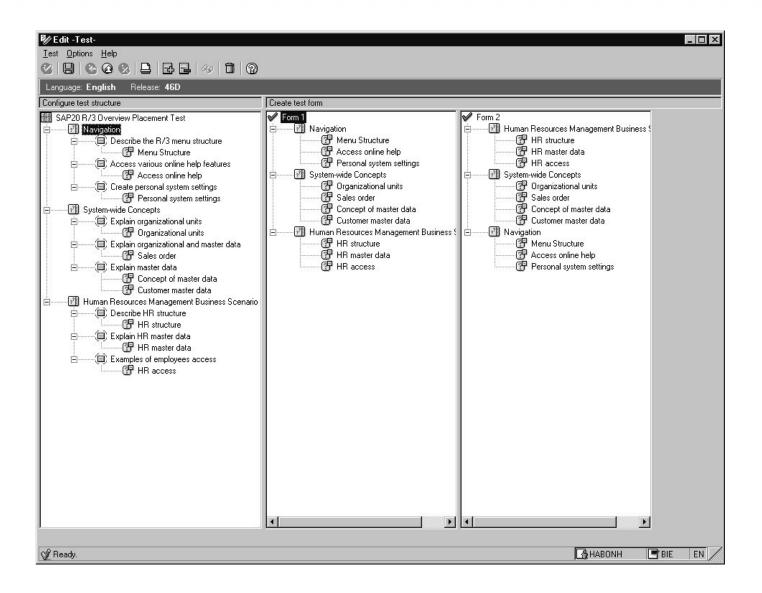
# **Learning Object Editor**



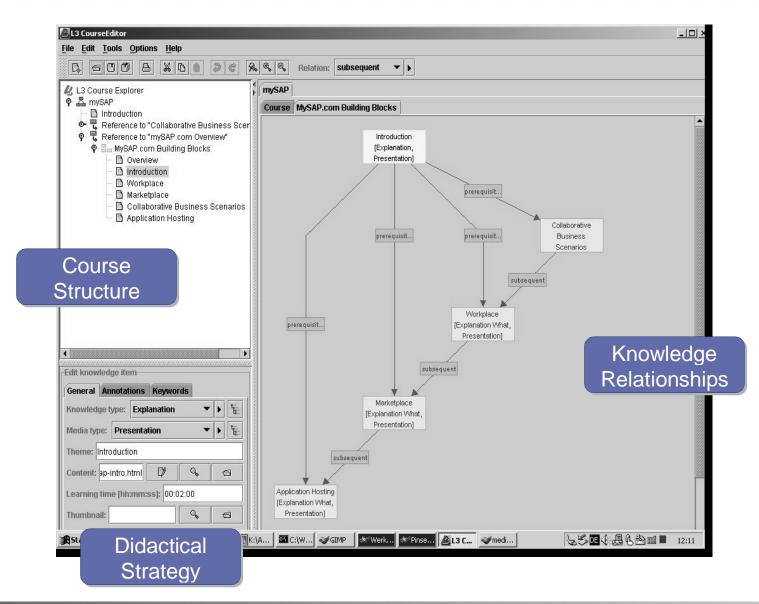
Home



# **Test Authoring**



# **Instructional Design Editor**



Home



# **Learning Portal – Self Services**





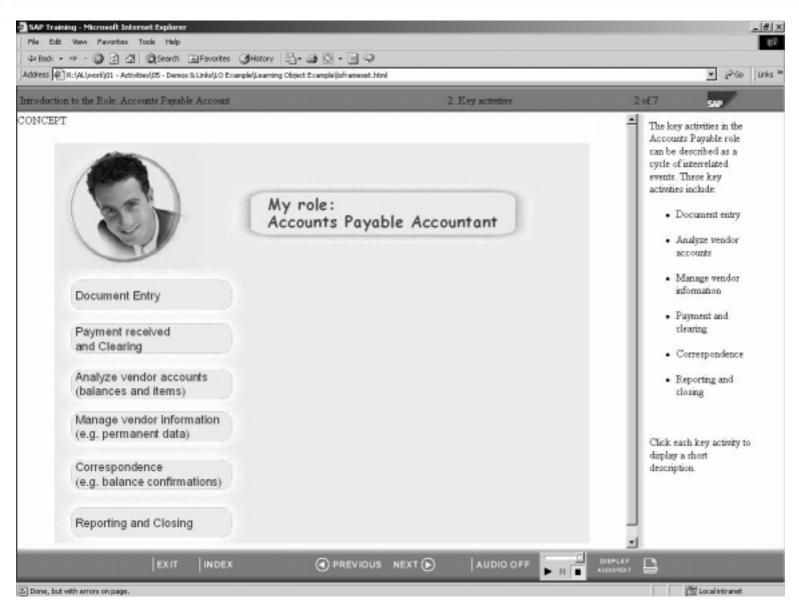


# A Course in Knowledge Warehouse

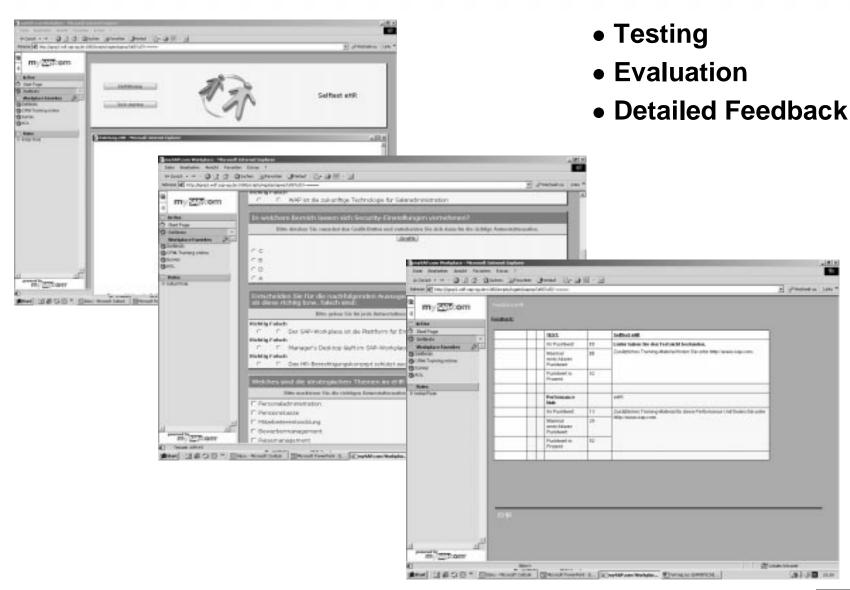




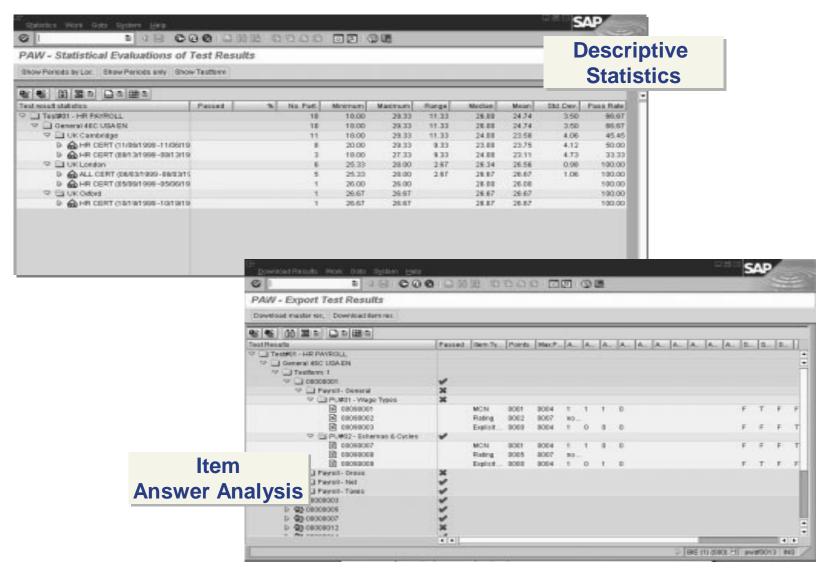
# A Sample Learning Object



# **Web-based Testing**



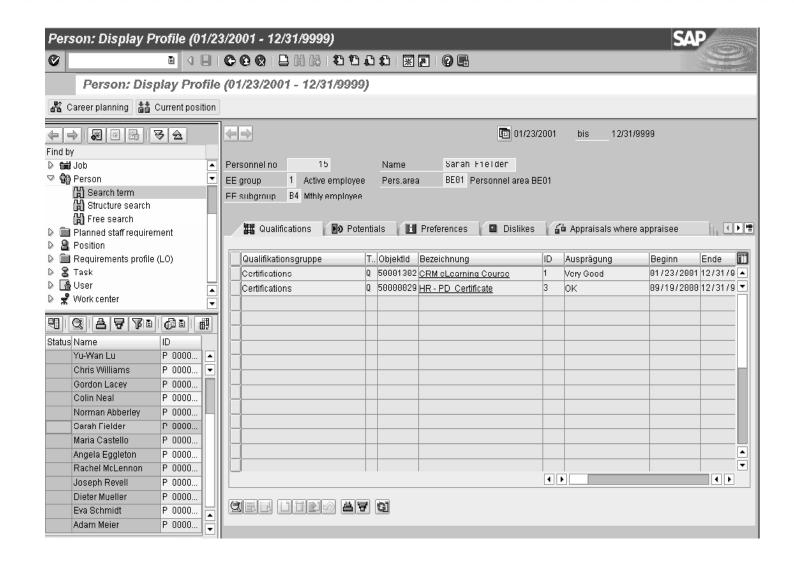
# **Business Support & Evaluations**



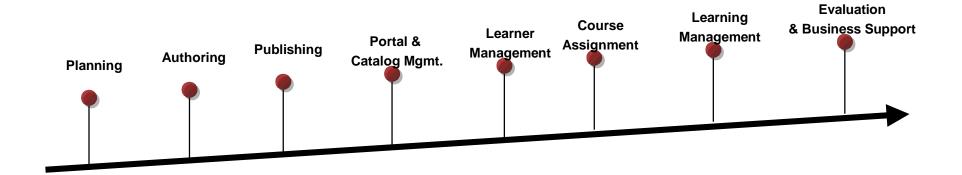




# **Skills & Competency Management**



# Components Outlook (names are working titles)



- Qualification Management
- PAW LO Editor (prototype)
- IDE

- Workplace
- Knowledge Warehouse
- HRMS
- TEM **Booking**
- ESS **Enrollment**
- Objective Mastery **Tracking**
- Mediator
- Test Results Reporting
- SPSS Interface

- EBO Catalog
- Learning **Object Editor**
- Learning Path **Editor**
- Web-Based Objective **Editor**
- LOM Tagging Support

- Publisher
- Web-Content Management

WP 3.0

- Learner
- Account
- Web-based **Assignment** & Enrollment
- Generator Learning Path

LearningPath

- **Navigator** SCORM
- **Learning Server**
- CSF Support

- Survey Engine
- Training Quality **Analysis**
- Learner Progress Reporting





# **What Others Say**

"Web-based training market poised for staggering growth."

WRHAMBRECHT + CO

"The next few years should see revolutionary changes."

WRHAMBRECHT + CO

"e-Learning is ... a fundamentally more efficient and effective way [than traditional education and training] to organize and deliver knowledge resources to businesses and individuals competing in the knowledge economy."

Morgan Keegan & Co., Inc.

"There are two fundamental equalizers in life – the Internet and education."

John Chambers, CEO Cisco Systems, 1999





# The <u>higher education</u> e-Learning market development

- The U.S. higher education market consists of 3,700 educational institutions and accounts for \$225 billion in expenditures.
- Enrollment in institutions of higher education was over 14 million students in the 1996-1997 school year, and is expected to increase to 16 million by 2008.
- There are 6.6 million adults (persons aged 25 and older) projected to enroll in higher education by 2007.
- The number of high school graduates is expected to increase 20% from 1995 to 2008 (from 2.5 million to 3.0 million).
- Sixty-five percent of all high school graduates go on to college.
- The number of students enrolled in distance education is expected to grow from 753,640 in 1998 to 2.2 million by 2002. (Source: NCES, IDC)
- By 2003, over 50% of all higher educational institutions globally will be offering e-Learning programs to students.



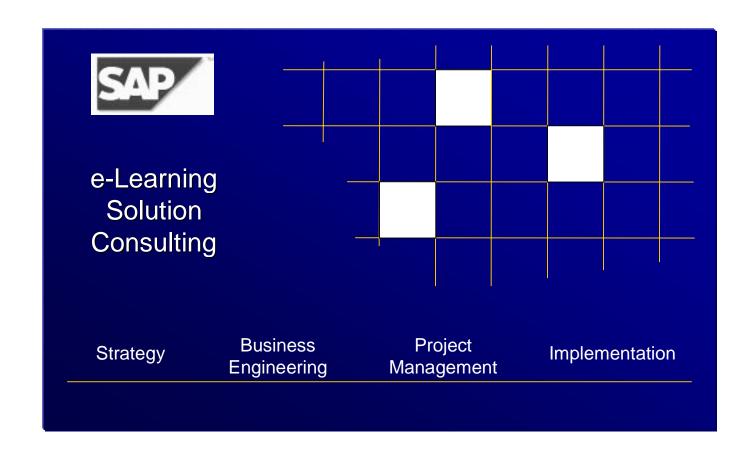
(Source: Gartner Group)



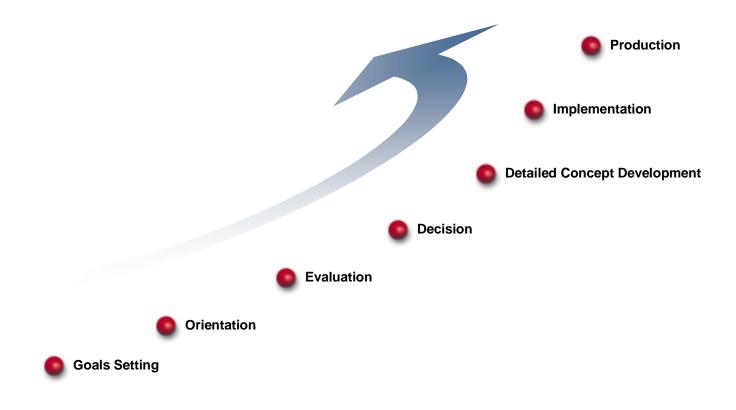


## THE BEST-RUN E-BUSINESSES RUN SAP





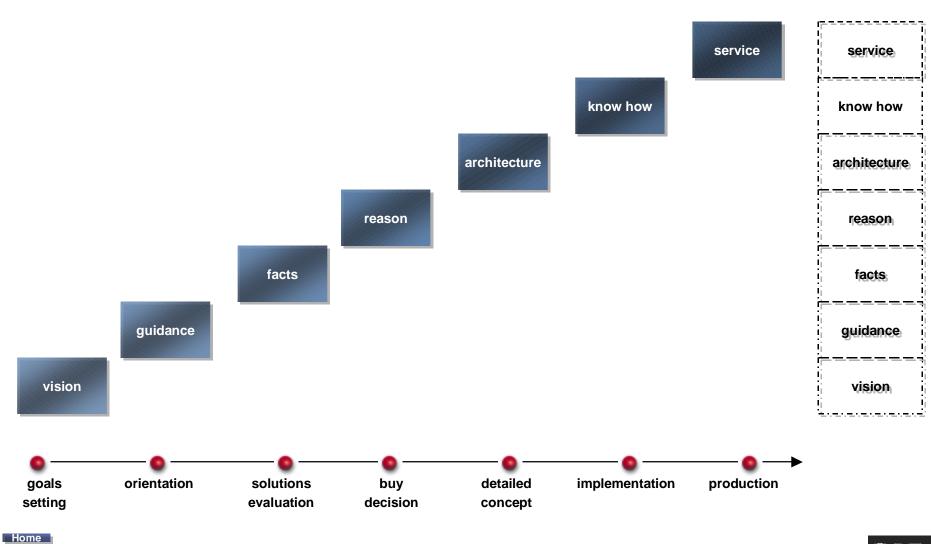
# The route to a production system



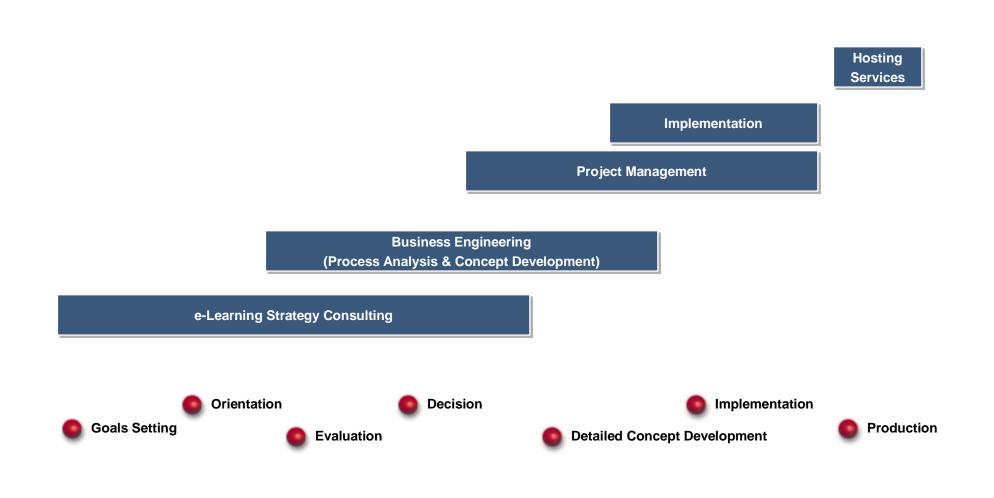




# Added Value



# **Consulting Services**



#### **Strategy Level** Concept Level PM Level **Imlementation Level** Future State Modelling Project Planning Installation & Setup of Strategy Development mySAP Workplace 2.1 Solution Architecture Internal Analysis mySAP Workplace 3.0 IT Infrastructure Resource Management Environment Analysis Knowledge Warehouse 5.1 Organizational Aspects Goals Setting Change Management PAW 2.0 Measures Planning Detailed Process Design mySAP HCM e-Learning Planning Project Coordination Gap Analysis Customization Content Devl. & Mgmt. Managing Offerings Reviews Business Cases Admin & Accounting Add-on Development Motivation Check Learner Management Benchmarking Collaboration Processes Cost Benefit Analysis Potential Analysis Managing the Learning Experience ROI Projections Evaluation & Quality Assurance Hosting Topic Seminar Assessment Detailed Solution Design SCORM Authoring Environment(s) e-Learning Content Repository KM PortalIntegration Human Perf. Improv. Learner Account e-Learning in HER LMS CRM & e-Learning HR Integration & Workflows



Coaching



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