Building Blocks of an E-Learning Infrastructure

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Agenda

- Why is E-Learning Hot?
- Requirements for an E-Learning Infrastructure
- E-Learning vs. Knowledge Management
- How do you get started?
Rapid Uptake Predicted for E-Learning

CAGR: 100+%

1997: $197 m  
1998: $550 m  
1999: $940 m  
2003: $11.4 b

Source: IDC
Why is E-Learning Hot?

“The next big killer application of the internet will be education... it will make email look like a rounding error.”

John Chambers, CEO, Cisco Systems

"It is estimated that 50% of employee's skills become outdated in 3 to 5 years."

Merrill Lynch

"We have become a knowledge-based economy, fueled by lifelong education and training..."

Alan Greenspan

"Thanks to the internet, adult education may become our single largest industry."

Peter Drucker, Forbes Magazine
Corporate Applications for E-Learning

Workforce Transformation

- Enable Mergers and Acquisitions
- Enter new markets
- Improve Skills

Sales Channel Optimization

- Increase Sales
- Improve Time to Proficiency
- Reduce Turnover

Customer Education

- New Revenue Sources
- Increase Customer Satisfaction
Dramatic Shift from the Classroom

Annual Revenue by Methodology in $000s

- Instructor-Led
- E-Learning

E-Learning overtakes Classroom instruction By 2003

E-Business Initiatives
Better, faster, cheaper
E-Business Initiatives
Better, faster, cheaper
E-Learning is A Business Imperative

What it is:

- A strategic tool to drive change and results
- A way to improve existing learning and training
- A tool for competitive advantage
- An internet business service

What it is not:

- Only a way to reduce the cost of training
- A way to replace classroom instruction
- A support function
- A simple web site with online courses
The Challenges of E-Learning Today

Content
- Instructional Design
- Integrating Experts
- Buying and learning Web Development Tools
- Building Courses

Technology
- Development Tools
- Lack of Integrated Solutions
- Integrating Chat and Virtual Classroom Technology

Services
- Training Tutors
- Developing a Custom Portal
- Installing Customizing
- Managing Learning Management Systems
- Hiring Staff
- Creating 24 X 7 Web Infrastructure
E-Learning is a Portal Solution

Any Learning Content

Platform

Personalized
Relevant
Available
Scalable
Complete

Customer Portal
Partner Portal
Employee Portal

Experts
Courseware
Hosted Courseware
Documents
Video Files
Images
Tests and Assessments
Fundamental Building Blocks

- Development Environment
- SME Environment
- User and Manager Portal
- Learning Environment Content Delivery
- Management Infrastructure
- Content
- Tracking and Business Data
- External Content
- Internal ERP
Fundamental Building Blocks

- Development Environment
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Developers, Designers
Developers, Designers
Learners, Administrators, Managers

External Content
Internal ERP
The Learning Environment

Integrated Components
- Syllabus
- Glossary
- Help
- Classmates
- Tutors / Experts
- FAQs
- Discussion
- Simulations
- References
- Assessments
- Audio
- Video
- Bookmarking
Branded Portal and Courses

- Your Learning Portal
  - Logos, Colors
  - Course Catalog
  - Registration
  - Content
  - Marketing
  - Feedback
  - Tutors
Tracking and Reporting

- Bookmarking by Page
- Track Progress
  - Learners Themselves
  - Managers
  - Executives
- Enterprise Reporting
- AICC Specification
  - Open 3rd Party Content
  - Level 1, 2, 3
Completion requires People to Intervene

SME’s want to author content!

SME’s Integrated into Instructional Design
  - Review all exercises
  - Initiate communication

SME Portal

SME Reporting

SME Feedback to content developers
Fundamental Building Blocks

- Development Environment
- SME Environment
- User and Manager Portal
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- Content Delivery
- Management Infrastructure
- Tracking and Business Data
- Content
- Tracking and Business Data
- Internal ERP
- External Content

Developers, Designers
Developers, Designers
Learners, Administrators, Managers
Management Infrastructure

- Registration
- Enrollment
- Scheduling
- Dynamic Catalog
- Integration with HR and Financial Systems
- Skills Management
Technology Infrastructure

- **Scalability**
  - Thousands of Users, very long login times
  - Complex objects – graphics, video, text

- **Availability**
  - Learning is “optional” – people will drop out
  - Frequent off-hours usage
  - Customers and Partners expect availability

- **Feature Rich**
  - Synchronous and Asynchronous Learning
  - Virtual Classroom Technology is here
Fundamental Building Blocks

- Development Environment
- SME Environment
- User and Manager Portal

- Content
- Tracking and Business Data

- Learning Environment Content Delivery
- Management Infrastructure

- Internal ERP
- External Content
Content Development Environment

- Less than 1% of the e-learning content needed is available today
- Dropout rates can be very high, so you must be aware of ...
  - Instructional Design Issues
  - Technology and performance issues
  - The right content type for the right audience
Content vs. Audience

<table>
<thead>
<tr>
<th>Skills Transfer</th>
<th>Information Distribution</th>
<th>Community Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming in Java, Value-Based Selling, Introduction to E-Business, Internet commerce, etc.</td>
<td>New product announcement, new company announcement, new company procedures, etc.</td>
<td>The CEO online with the state of the company, the Java guru talking about Enterprise Java Beans performance</td>
</tr>
<tr>
<td>Asynchronous</td>
<td>Asynchronous</td>
<td>Synchronous</td>
</tr>
<tr>
<td>Web-based course or kiosk</td>
<td>Web-based learning object</td>
<td>Virtual Classroom</td>
</tr>
<tr>
<td>Hours in length</td>
<td>&lt; 2 hours</td>
<td>&lt; 1 hour</td>
</tr>
</tbody>
</table>
DigitalThink Instructional Design

Community

Design Principals

Standard Organization
- Objectives-Based, Modules, Lessons, Sidebars, Exercises, Quizzes, Case Studies

Common Elements
- Syllabus, Projects, FlipBook, MouseOver, Simulations, Glossary, Applets, Learning Checks

Standard Look and Feel
- Graphic Objects, Images, Quotes, Audio, Code Samples
- Naming Standards, Reusable

Tellme, Showme, Letme
- Objectives, Interactivity, Performance, Projects

Discussion, Classmates, Messenger Tool, eMail, Tutors
Content Development Methodology

- Define
- Design
- Develop
- Produce
- Publish
- Deploy
- Portal-Enable
- Maintain

Instructional Plan
Course Design
Content Architecture
Content Management, Tools, Workflow, and Consistency
The Total Solution

- Development Environment
- SME Environment
- User and Manager Portal
- Learning Environment Content Delivery
- Management Infrastructure
- Content
- Tracking and Business Data
- Internal ERP
- External Content

Developers, Designers
Developers, Designers
Learners, Administrators, Managers
E-Learning and Knowledge Management

**E-Learning**
- Online Courses
- Assessment
- Learning Plans
- Certification
- Skills and Competencies

**Knowledge Management**
- Knowledge Databases
- Asset Mapping
- Categorization
- Search
- Expert Access

**Next Generation e-Learning**
No distinction between learning and doing, words like ‘training’ and ‘course’ go away
Scalable Learning and working environment
Real time access to Knowledge, People, Resources
...anywhere, any time, any subject, any language
...just in time, just enough, just right
Getting Started

- Find strategic business focus
  - Workforce Transformation
  - Sales Channel Optimization
  - Customer Education
- Build or buy decision
  - Focus on learning and content first
  - Infrastructure and environment second
- Find a partner
About DigitalThink

We provide a total end-to-end solution for corporate E-Learning.

- Driven through enterprise-class outsourced e-learning technologies
- Providing award-winning, business focused learning content
- Complemented by world-class business analysis and course development services.
DigitalThink: Industry Leadership

“DigitalThink has become the standard against which other players compare themselves…”
WR Hambrecht, July 12 2000

“We believe DigitalThink is uniquely positioned to become the defacto e-learning platform…”
Robertson Stephens, July 7 2000

“DigitalThink is setting the standards for the exploding B2B e-learning market”
Chase Hambrech and Quist, May 2000

“DigitalThink is the category-defining company in this space.”
Chase Hambrech and Quist, May 2000