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eLearning @ Cisco

Norsk Hydro – 15th March 2002

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Our Goal : Leadership in all Functions



Culture and Tools Enable Change

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- Responsive culture enabled rapid re-focus of processes and tools
- Benefit: Increased productivity



E-Learning Waves

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Productivit Annual Cisco Gains Acquisitions rning Mgmt System deo on Demand \$31M Line Growth **Product Global Streaming Network** Content Portal by Role Virtual Classroom \$42M+ Solutions Selling **Limitless Conte Global Platfo** Learning O

E-Learning current wave

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Account Manager Learning Environment:

- Multimedia, modular content
- 2001 "Best Trained Sales Force"
- 40–60% cost savings over ILT
- 90%+ training is online

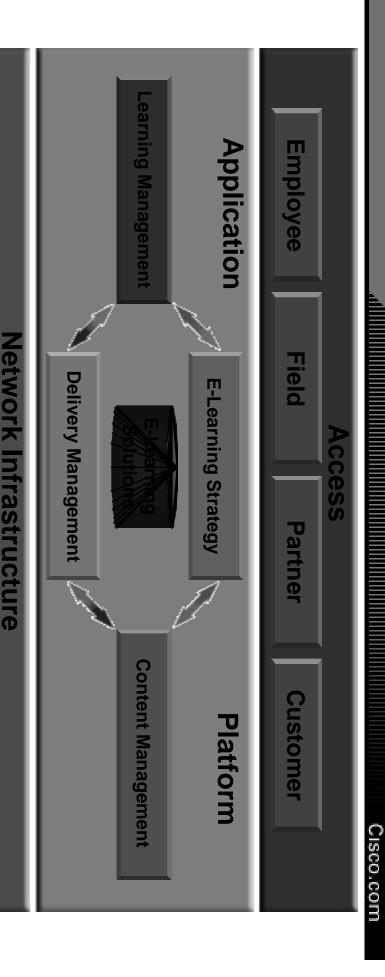
Partner E-Learning Connection:

- 40,000+ global partners
- Mobile training
- 30% increased comprehension
- Elimination of product road shows

Solutions Selling



Cisco E-Learning Solutions Architecture



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Intelligent Network Services
QOS / Policy / VolP / Manage / Multicast / Performance

Content Delivery Networks

AVVID

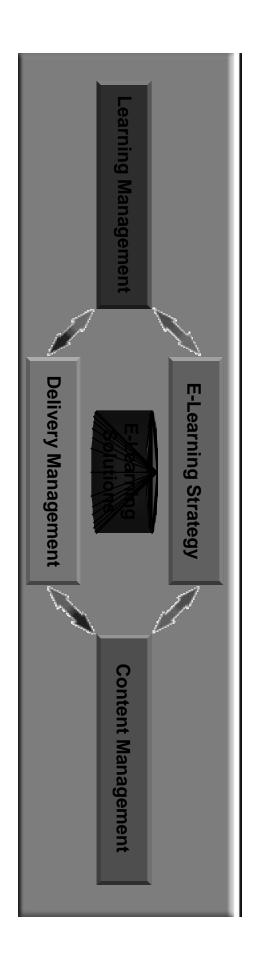






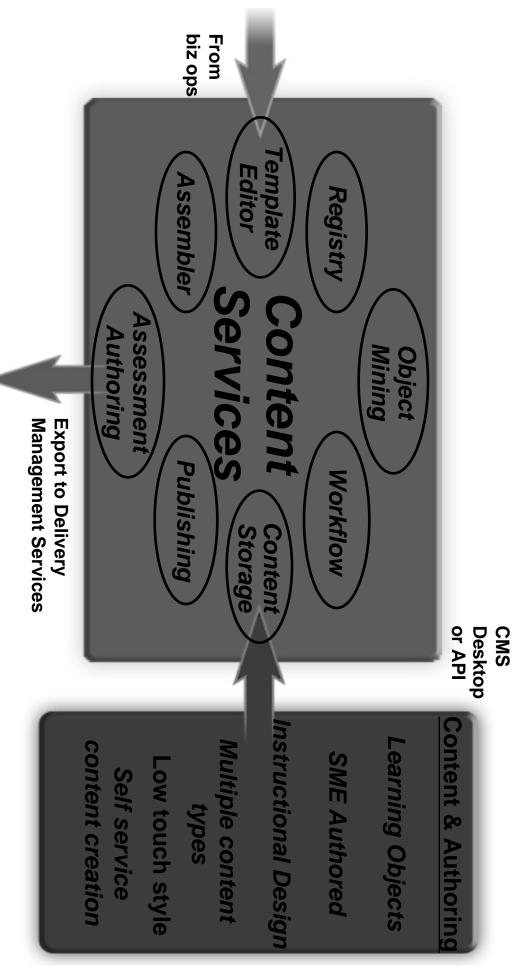
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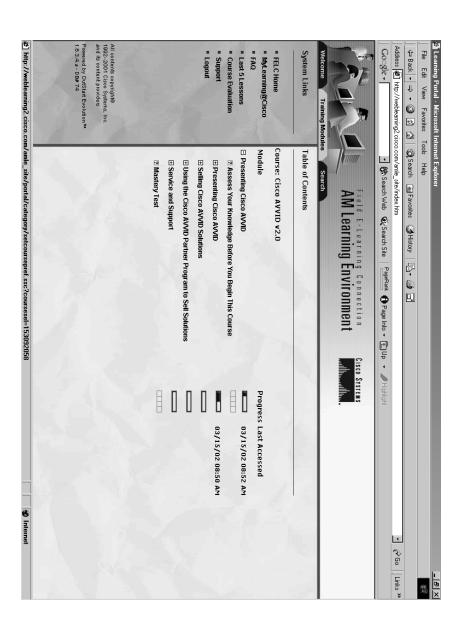
Content

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Content





Content & Authoring

Learning Objects

SME Authored

Instructional Design

Multiple content types

Self service content creation

Creating the right content

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Identify whether you need to create information or instruction.

- "Avoid thinking e-learning=e-training.
 It is about education, training,
 information, and communication"
 Tom Kelly, ILSG, Cisco Systems
- "In the Internet economy time-toknowledge is as important as "time-tomarket."
- "Don't use a hammer to crack a nut"



Consider the appropriate delivery media.

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Multimedia

- should serve a clear instructional purpose
- is useful for different learner styles
- can add significant value if used well
- Can your infrastructure support it? client technology; bandwidth, etc

- Text
- Graphics
- Animation
- Video
- Audio

Determine level of instructor support

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can and are happy independently and Some students autonomously to work

Many students have ad hoc instructor questions for the

learner/instructor ("lonely learner" require frequent Some students syndrome) supportive interaction

"High touch"

"Low touch"

"No touch"

Decide level of interaction

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- Humans are social creatures requiring social connection and emotional engagement in all activities
- Tools

Synchronous or asynchronous

Discussion

Collaborative learning

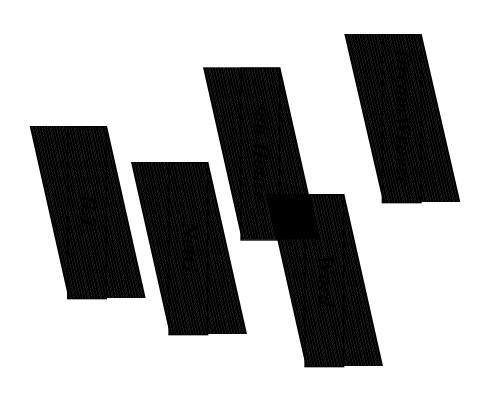
- when they are actively involved in it. Learners will only feel fully engaged in the learning process
- Instruction therefore has to be developed that it is interactive.
- Need to provide opportunities to apply and/or practise knowledge, skills, and attitudes



Content Management: the problem

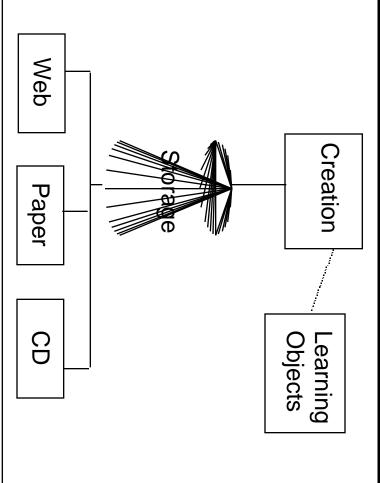
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- Lots of content in legacy systems (Word, Dreamweaver, NetG, Ninth House, etc)
- Need to "re-purpose" ie "re-use" in different format, eg ILT (paper-based content) to Web
- Needs to be interoperable ie "reusable" within different systems



Content Management: the solution

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Learning Objects

- Each LO satisfies one learning objective
- Modular, free-standing and transportable among applications (cf Lego)
- Formatting-free so that it can be re-purposed within a different visual schema

Standards

- ADLI (Advanced Distributed Learning Initiative) SCORM (Shareable Courseware Object Reference Model)
- IMS (Instructional Management System) Global Learning Consortium
- AICC (Aviation Industry CBT Committee)
- IEEE
- www.learnativity.com

Delivery Management Process

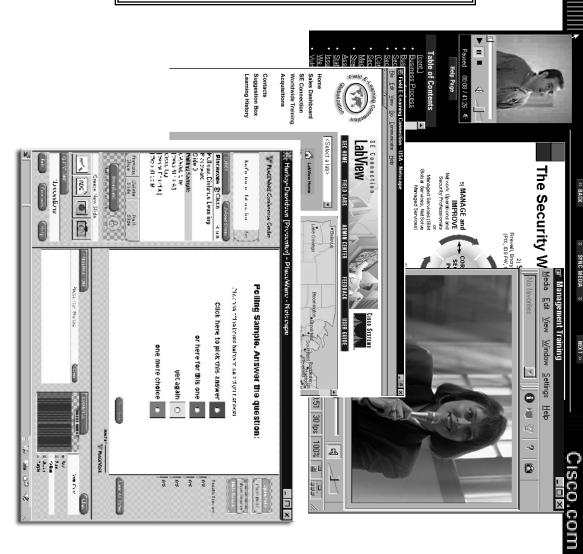
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Services API to/from Management Learning Content Presentation Management Distribution Services Delivery Interaction Results Services Management Content Import from Management Management Services Delivery API to Content on Demand **Blended Solutions** Delivery Systems Virtual Classroom Collaboration Simulations Virtual Labs Mentoring

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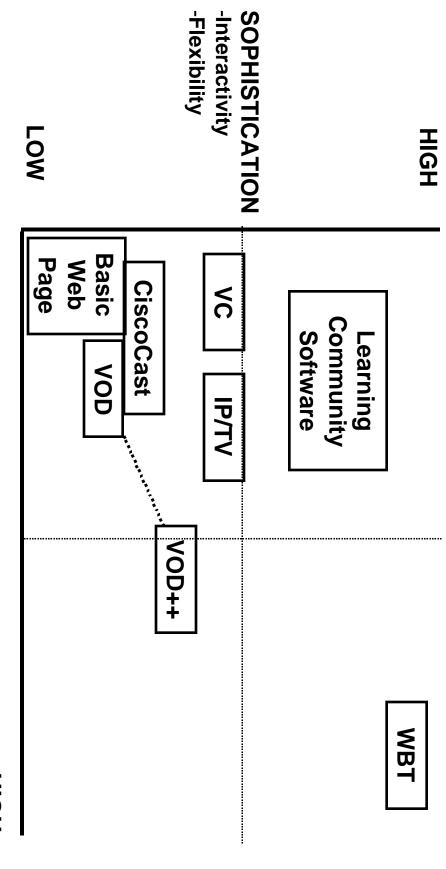
Delivery of E-Learning

- Training
- Knowledge Sharing
- Collaboration
- Communication



Options Matrix

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COST/TIME

HGH

NB Not including capital expenditure

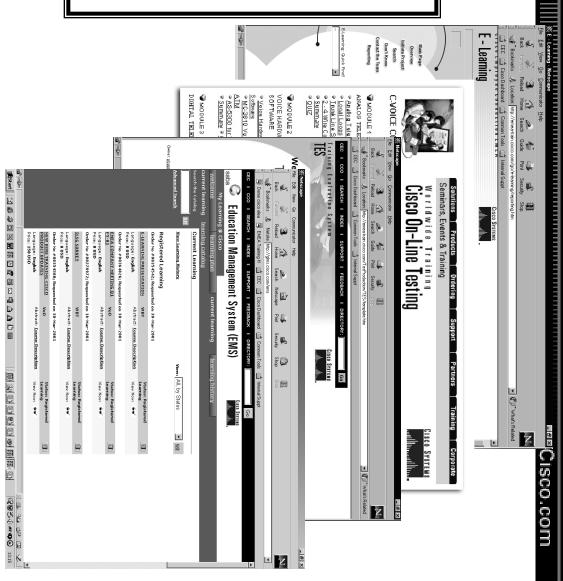
Learning Management

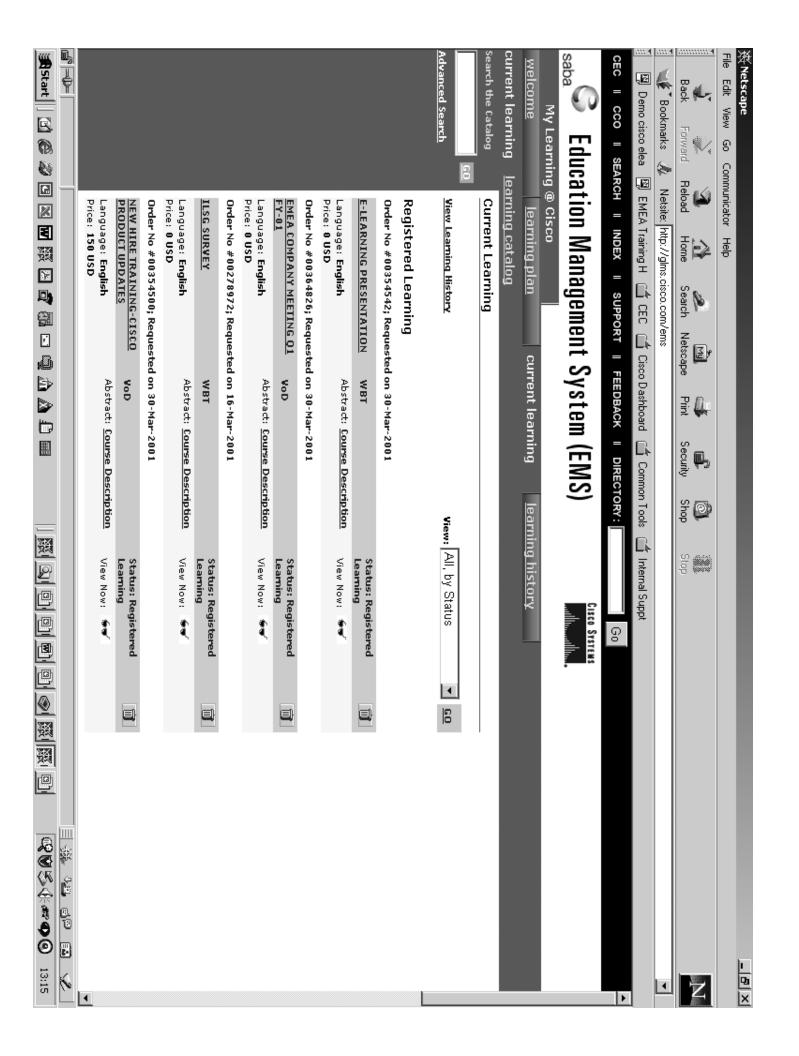
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Rresentation_ID Learning History Performance Transactions Prescriptive Curriculum Reporting © 2000, Cisco Systems, Inc. E-Commerce earch/Browse Cisco.com Resource Learning Services API to HR (PeopleSoft) Feedback to Business Ops Survey/Metrics Catalog <u>₽</u> Delivery to/from

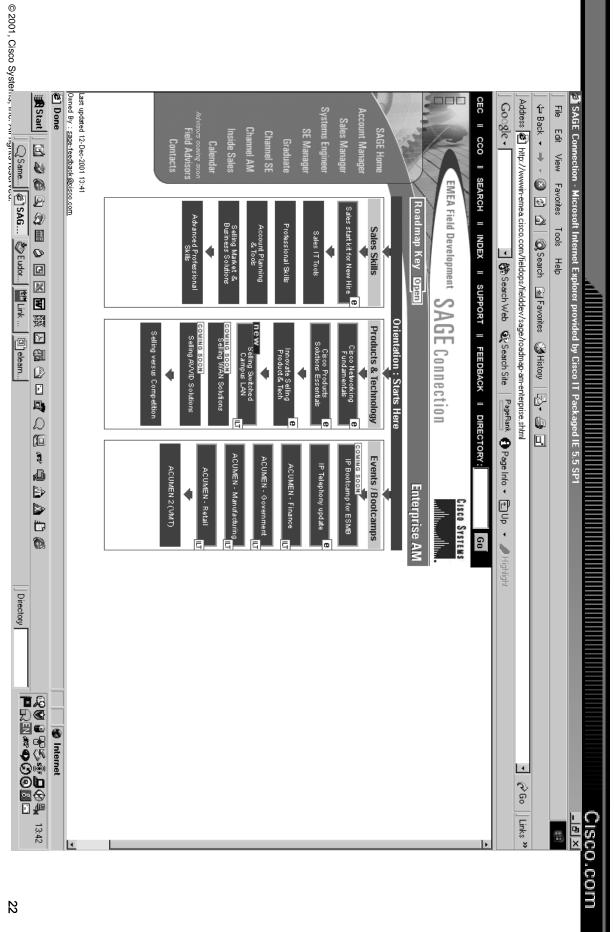
Management of Learning

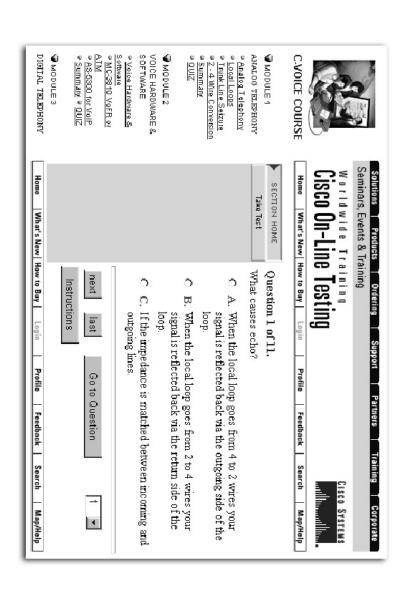
- Cataloguing Content
- Competency Roadmaps
- Registration
- Tracking
- Testing
- Reporting
- **Evaluation**





Role specific routemaps

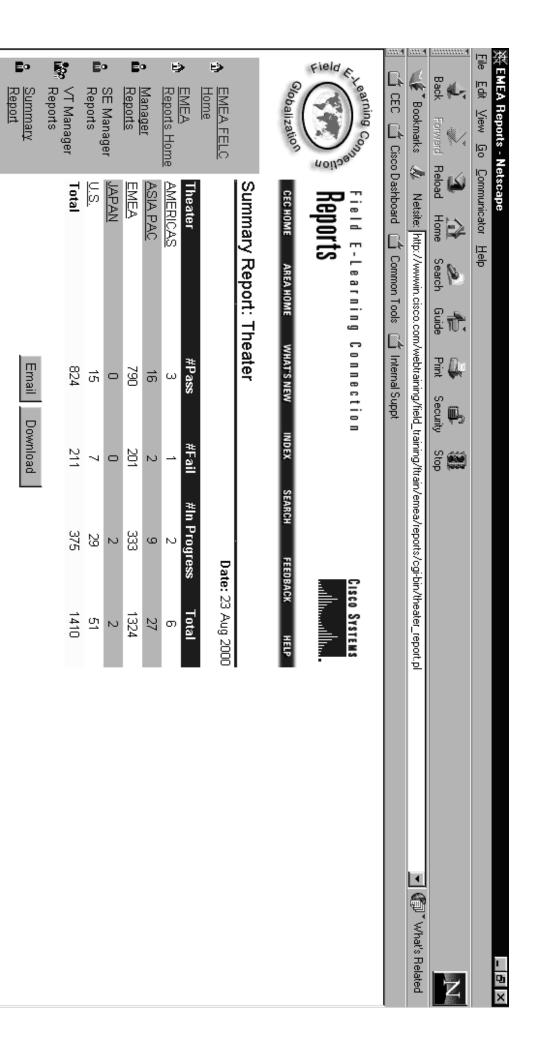




Diagnostic/ Pre-Testing

Formative and Summative Testing

Post-Testing





AREA HOME

WHAT'S NEW

INDEX

SEARCH

FEEDBACK

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E-Learning Strategy Process

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Business Alignmen Value to Discipline New Competencies Requirements Timeframes Operations **Financials** Metrics Gap Analysis E-Learning Strategy Requirements Repository Feedback from **LM Services Programs** Initiatives Services Management To Content

Detailed Development Process

4 stage process for linking her initiatives with business goals and prioritising them according to impact and ease of implementation.

This brings together Internet Capabilities Assessments, Net Readiness, ROI and ECN to provide a robust and shared portfolio of projects to get e-HR implemented.

Objective setting

Opportunity identification

Assessment and application value matrix

Implementation and cost benefit planning

1. Business Goals

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- 2. Specific Objectives
- 3. Initiative Generation
- 4. Rationalise and Group Initiatives
- 5. Impact & Ease Measures
- 6. Prioritisation
- 7. Review AVM
- 8. Road Map
- 9. ROI and ECN analysis

Internet Capabilities Assessment





Where your organization will be within 12 months based on current plans and committed budgets Where your organization is now in using Internet capabilities to transform your business processes

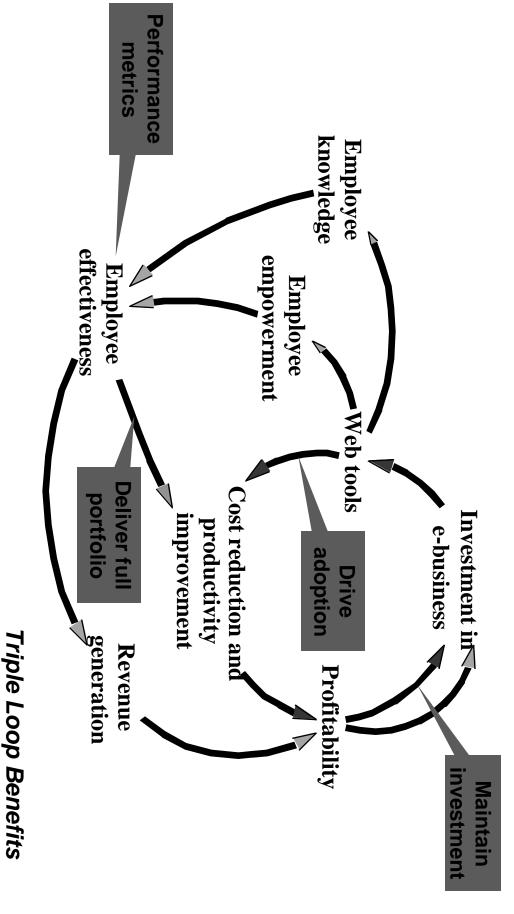
The extent to which your organization is using its current Internet capabilities. This indicates how

extensively you are taking advantage of the capabilities you have

- Provides objective assessment against Cisco research into best practice in e-HR.
- Allows regional/divisional comparisons
- 17 questions self assessment now and 12months plus future vision.
- Used by Cisco for annual self assessment to John Chambers

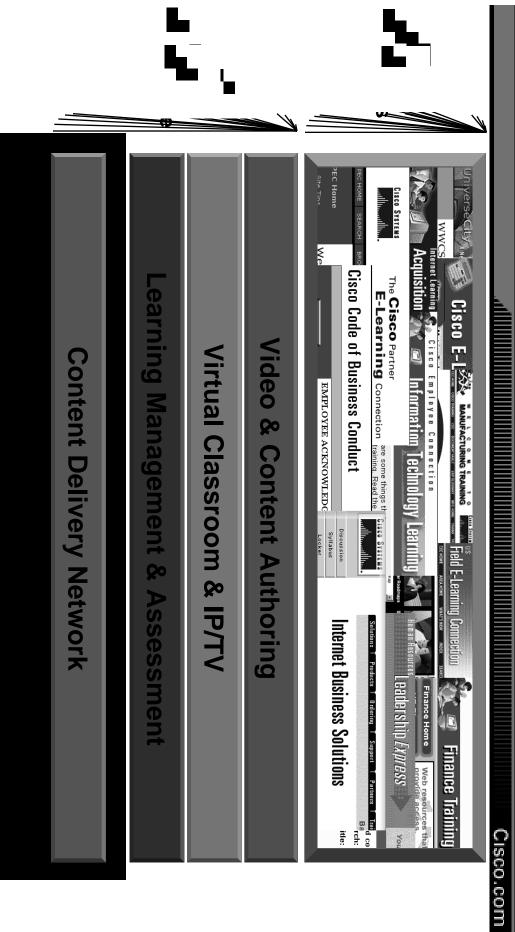
Benefits Can Be Enormous

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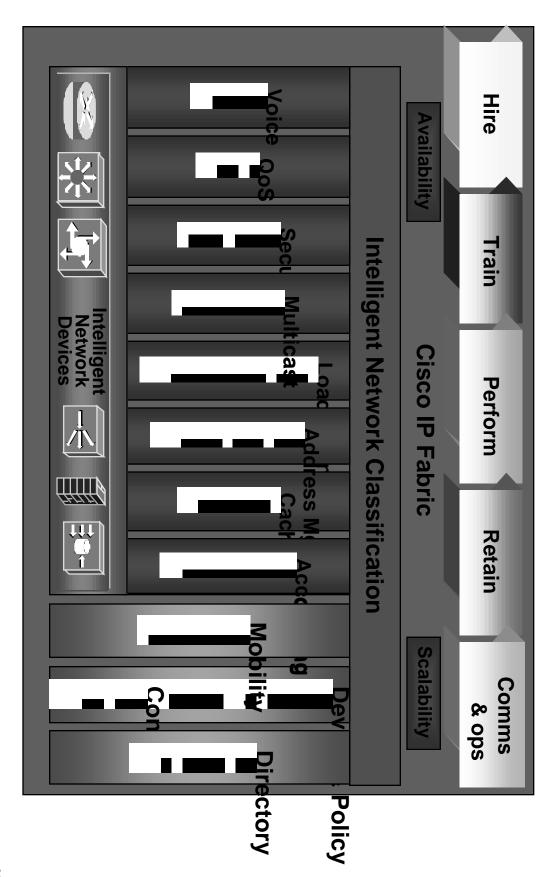
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Network / Architecture / Learning



Cisco E-Business Solution Architecture

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What Cisco can offer

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the past few years has given us a unique perspective which we can share. Our experience in implementing e-Learning over

- e-Learning in practice and our experiences
- doing Knowledge of what other companies are
- eLearning Infrastructure needs and design
- Cisco Network Academy Programme

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