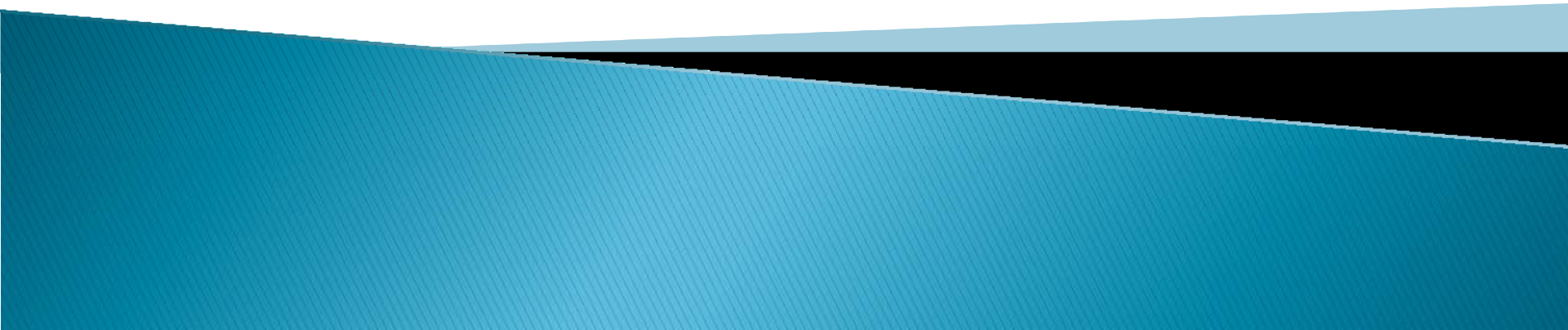
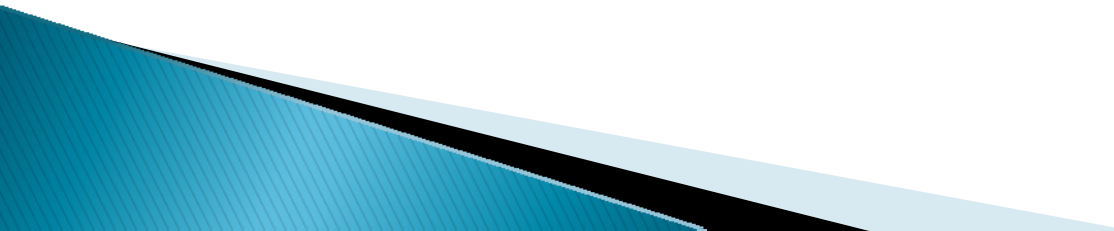


Project Management for E-Learning

Guiding Principles that work
Ruel L.A. Ellis



Outline

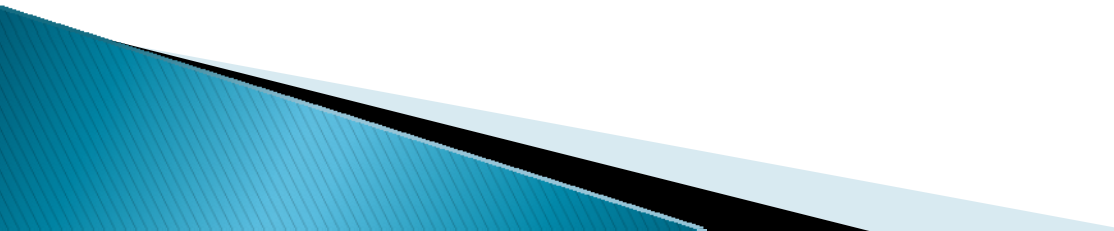
- ▶ Why E-Learning
 - ▶ Rationale for E-Learning
 - ▶ Why E-Learning Projects Fail
 - ▶ Project Management Philosophy
 - ▶ Stage 1: Defining the Project
 - ▶ Stage 2: Planning the E-Learning Project
 - ▶ Stage 3: Managing the E-Learning Project
 - ▶ Stage 4: Reviewing the E-Learning Project
 - ▶ Specific E-Learning Project issues
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Why E-Learning

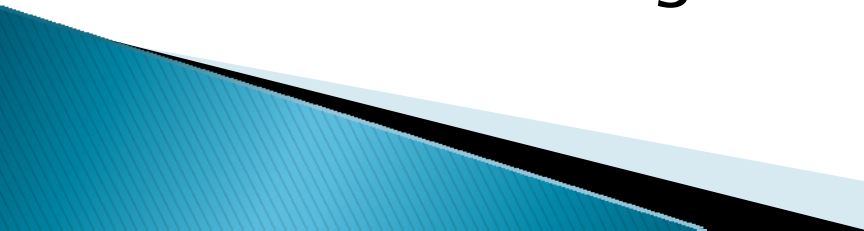
- ▶ *“E-Learning is the use of Web and Internet technologies to create experiences that educate our fellow human beings.”*

William Horton (2001)

Rationale for E-Learning

- ▶ Powerful and engaging interactive e-learning experiences are possible
 - ▶ Course materials are available on a Just-in-Time basis, not hindered by geography
 - ▶ Knowledge or information is can be current
 - ▶ Material easier to update than printed documents
 - ▶ Has a wide reach to hundreds or thousands of learners
- 

Top 5-Reasons Why E-Learning Projects Fail

- ▶ Failure to play the physical architecture required to support e-learning
 - ▶ Failure to recognize the magnitude of the technology component
 - ▶ Failure to document and share documented e-learning projects
 - ▶ Projects dominated by Multimedia stars, creating schedule slips, and not standardizing tools or techniques
 - ▶ Lack of Managerial support
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Project Management Philosophy

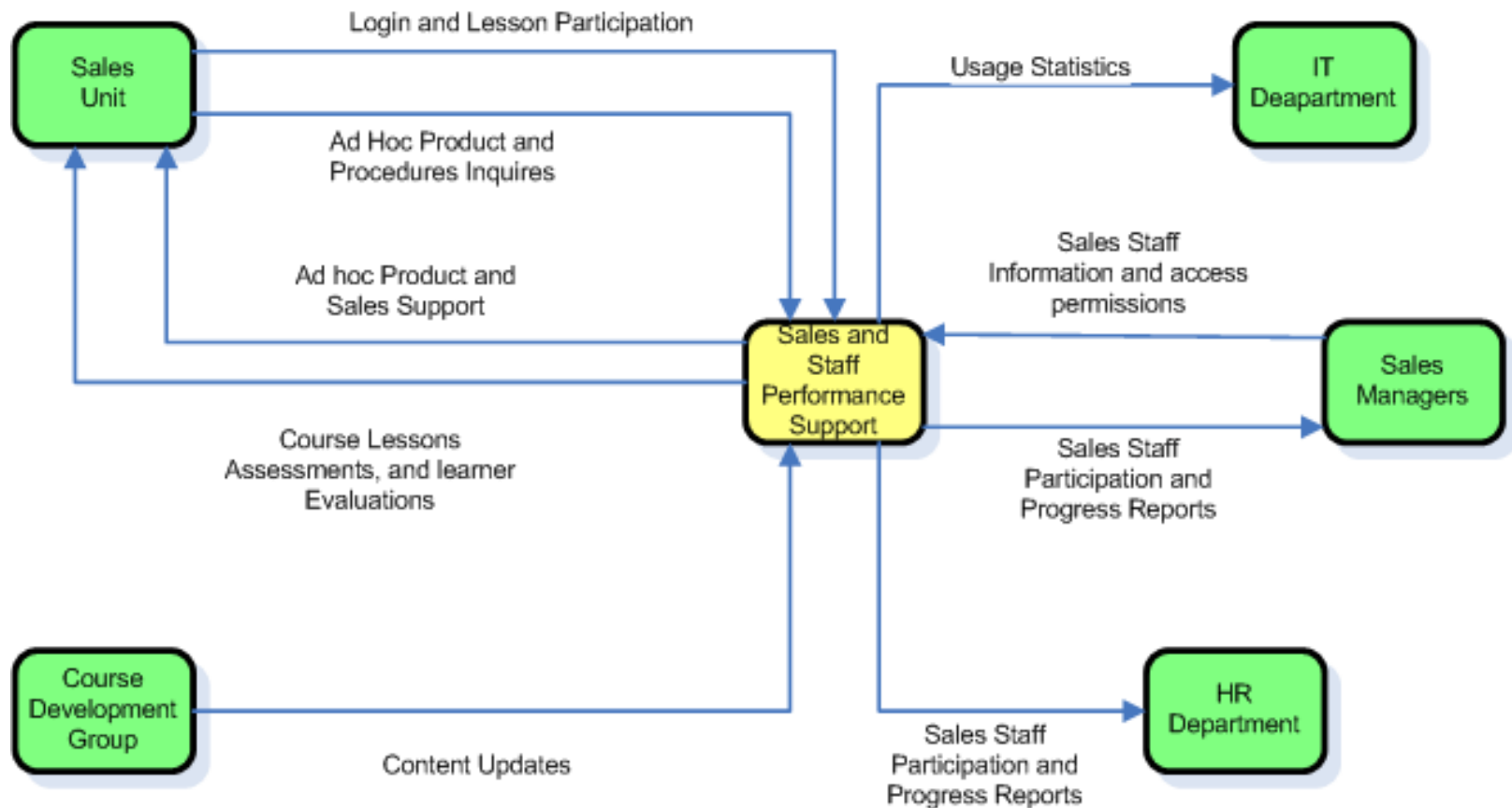
Project Management Stages	Steps in E-Learning Projects
Define	1. Concept: What problem does the project address? 2. Product Definition sessions: How might it look? Who will built it?
Plan	3. Initial cycle planning: Schedule delivery cycles and interim delivery sessions
Manage	4. Development Cycles and interim delivery sessions: Creation and time-boxed delivery of e-learning features, revised cycle-plans and reprioritizing of features 5. Product appearance: Final delivery session 6. Product rollout: Deployment of e-learning product in the working environment
Review	7. Project retrospective: Formal review of project successes and lessons learned, review of <i>the e-learning process</i>

Stage 1: Defining the Project

- ▶ Defining the problem
- ▶ Needs analysis; define objectives
- ▶ Defining Product Scope and Project Scope
 - Using Context Diagrams

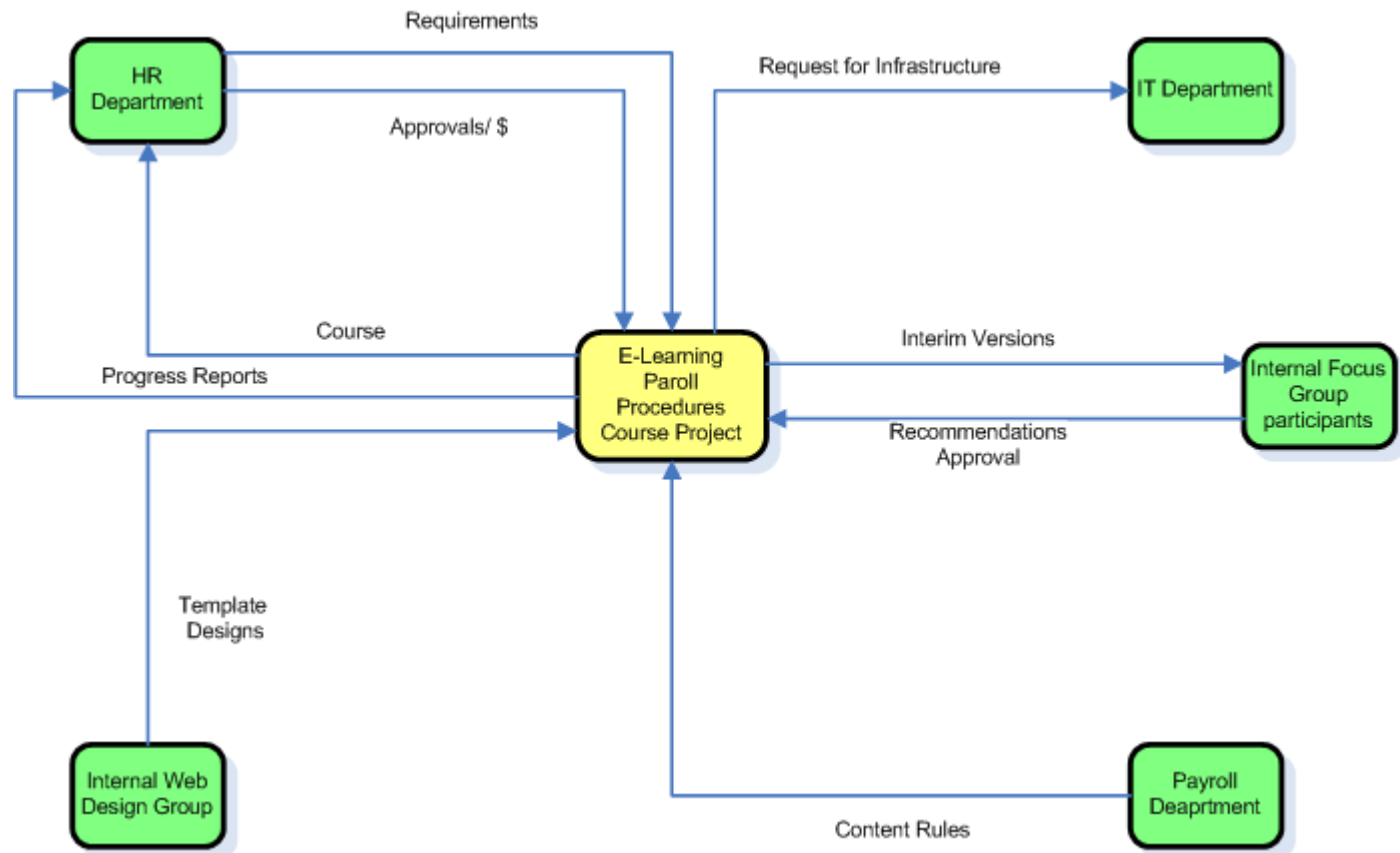
Product Context Diagram

Shows what is delivered to who



Process Context Diagram

Shows the Interface of the Project Team to the rest of the organization



Role of Risk Management

- ▶ Anticipate Hazards
- ▶ Assess risk to the project;

$$\text{Risk Index} = \frac{(\text{Likelihood of Occurrence}) \times (\text{Overall Impact})}{(\text{Degree of Control})}$$

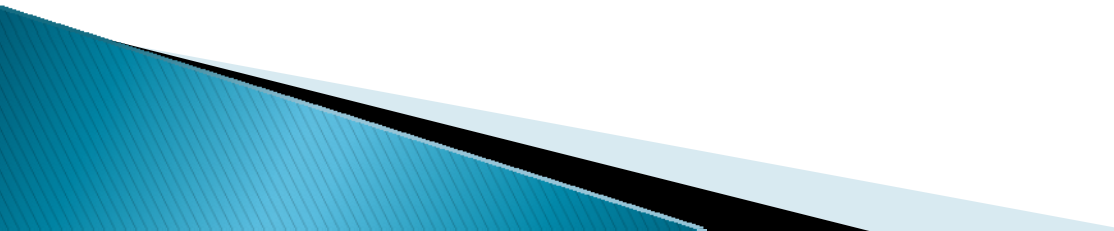
- ▶ Assign Priorities to Risk
- ▶ Manage Risk
- ▶ Determine cost of Risk

Planning Tools

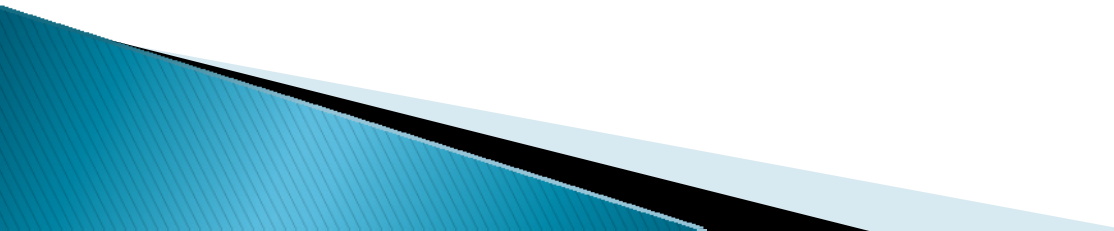
Worksheet 3-3. Risk scoring and prioritization.

Risk	Likelihood 1-3	Impact 1-3	Control 1-3	Risk Index 1-9
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Other Planning Issues

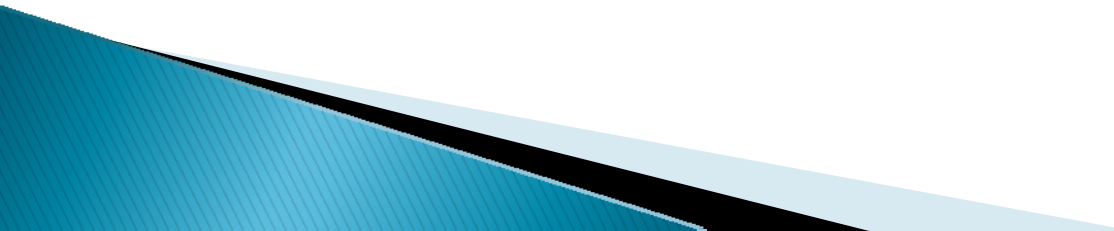
- ▶ Using Change Management:
 - As it relates to process changes arising out of the e-learning implementation
 - ▶ Defining an Collaborative Environment:
 - An environment designed to enable and encourage collaboration
 - ▶ Defining Progress Communication Plan:
 - A listing of all project stakeholders, their information requirements and the frequency of providing information
- 

Stage 2: Planning the E-Learning Project

- ▶ Project Milestones; determined by:
 - Enumerating deliverables and their included activities
 - Logical sequencing
 - Duration estimation, based upon resource availability
 - Setting time boxed delivery cycles
- 

Stage 2: Planning the E-Learning Project

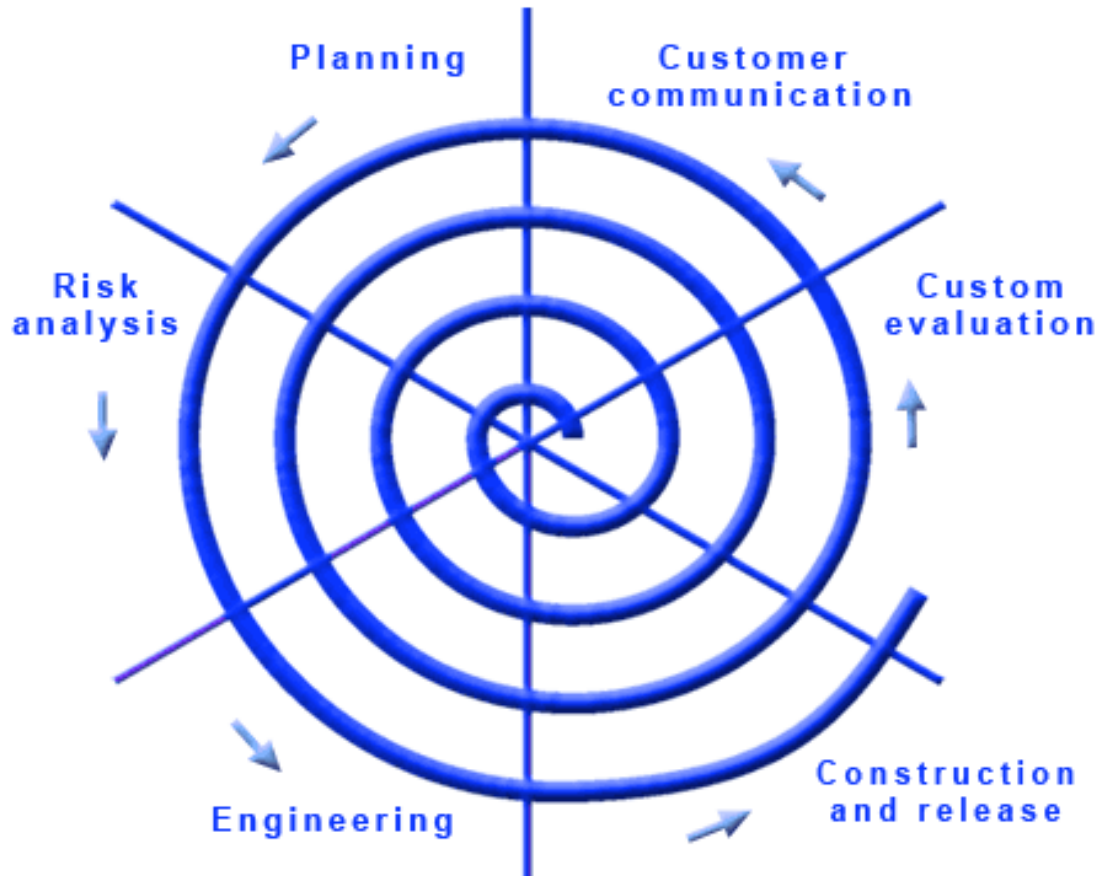
▶ Activity Sequencing

- *Mandatory Dependencies*; based upon logical priorities
 - *Discretionary Dependencies*; planner has control
 - *External Dependencies*; constrained by external resource availability
 - *Cycle Review Dependences*; determined by identified deliverables during a cycle
- 

Stage 2: Planning the E-Learning Project

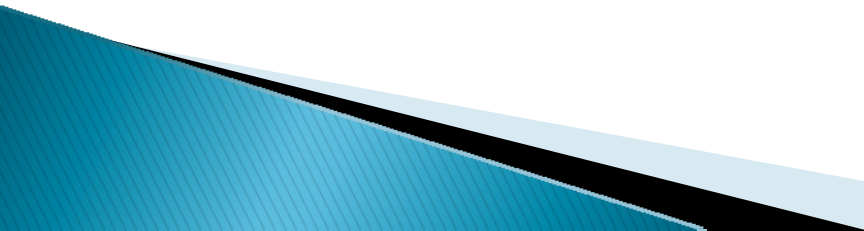
- ▶ Estimating Duration;
 - for each activity identified
- ▶ Time-boxed Delivery Cycle;
 - to ensure on-time delivery and interim reviews

Stage 2: Planning the Project

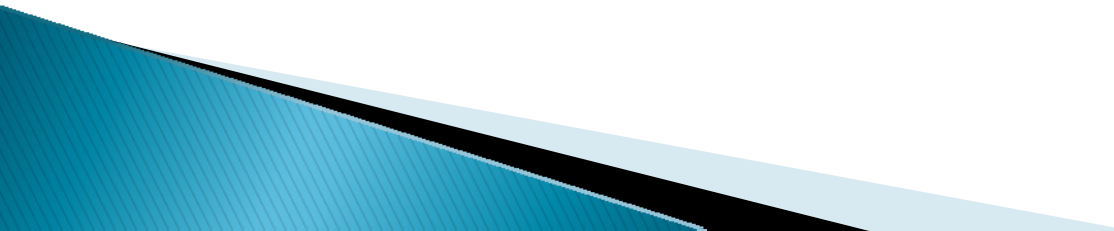


- Select the most complex activities to be performed first
- Ensures that at the review activity, unaccomplished tasks are planned for the next cycle.

Stage 3: Managing the Project

- ▶ Shifting paradigm from “*command and control*” to “*collaboration*”
 - Ongoing self evaluation of the team
 - Preach the metaphor of the final product
 - Make customers aware of the Cost/Time/Quality relationship
 - Ensure participation of all groups at the interim review meetings
 - Formalize the collaborative process
 - Involve the customer throughout the process
 - Include collaboration sections in the project review document
- 

Stage 3: PM Tools

- ▶ *Product Context Diagram*; overview of e-learning product
 - ▶ *Project Context Diagram*; project team interactions with other parties
 - ▶ *Priority Matrix*; relative priorities of cost/time/quality
 - ▶ *Risk Management Assessment*; identification of current and potential threats
 - ▶ *Change Management Procedures*; protocols to be used in expediting decisions
 - ▶ *Progress Communication Plan*; specified reporting cycles and defined reports for different stakeholders
- 

Stage 3: PM Tools

Worksheet 5-1. Internal resources for developing and implementing e-learning project management tools and techniques.

Tool or Technique	Who Can Help?	Date to Contact	Contacted (U)
Content Diagramming			
Priority Matrix			
Risk Management			
Change Management			
Estimating			
Project Management Software			
Course Authoring Software			
Learning Management Systems			
Content Management Systems			
E-Learning Professional Organizations			
Joint Application Development (JAD) (and Interim Review Session)			

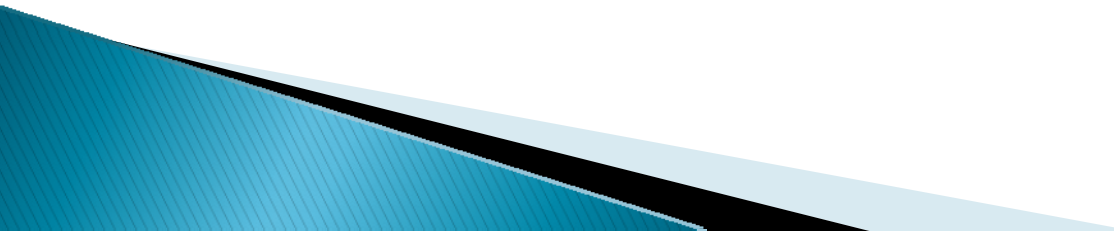
Stage 4: Reviewing the Project

- ▶ The purpose of the Project review is to:
 - Provide closure and documentation to the delivered e-Learning Project
 - Advance organization knowledge about the best techniques for managing e-Learning Projects

Stage 4: Reviewing the Project

- ▶ Project Team building
 - Survey the project team to establish the teams' opinion of issues pertaining to the project which are to be reported
 - ▶ Reevaluating Deliverables
 - Comparing the e-Learning product to the wish list identified during planning
 - ▶ Best Practices
 - Adds to the organizations knowledge bank about e-Learning Projects
 - ▶ Creating and Maintaining a Risk Database
 - Records of ways to mitigate identified risks for e-Learning Projects
- 

E-Learning Specific Issues

- ▶ Project Selection and Initiation
 - ▶ Roles and Responsibilities
 - ▶ Learning Content Management Systems (LCMS)
 - ▶ Launch Preparation
 - ▶ E-Learning Statement of Works
 - ▶ Specific Deliverables
 - ▶ Overall Project Management Considerations
- 

Project Selection and Project Initiation

E-Learning Project Selection Criteria

Highly visible and achievable

Has a *true champion*

Has measurable objectives

Is based on a stable knowledge area

Relies on established course management tools

Has a readily available and committed SME

Roles and Responsibilities

Role	Responsibility
Project Sponsor	Obtaining funding for the project Assisting in decisions regarding project scope and risk activities
Project Manager	Assigns work and prioritizes available resources Keeps all stakeholders informed as to the state of the project
Project Team	Individuals who perform the activities required to complete the project Report all activities to the Project Manager
Business Customer	The manager of the area to benefit from the e-Learning product Provides the SMEs for the project team
SMEs	Help establish the learning objectives Advises as regards the appropriateness of the learning objectives Being available and participative

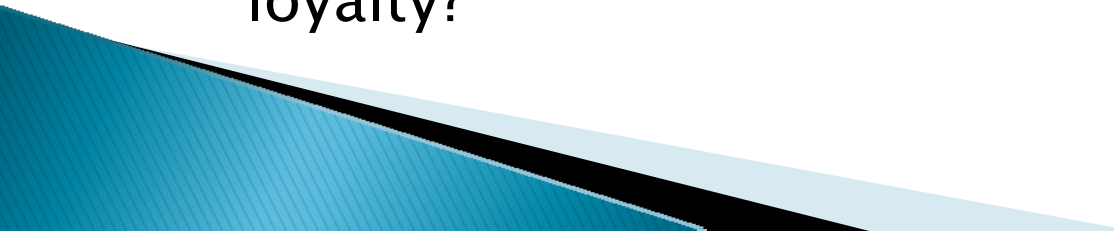
Learning Content Management Systems

LMS Function	What you need to do
Server as a repository	Establish a centralized location for all e-Learning content Implementation of distribution and update procedures
Creating, reusing and sharing	Check -in check-out procedures Sharing of common elements, e.g.. Templates, style sheets
Provide security	Control updating and distribution of materials to production
Defining learning objects for reuse	Keep content elements modular Ensures consistency and ease of updating
Provides metadata information	Tag and document all e-learning elements Makes files searchable
Automate assembly and distribution	Simplifies the customization of e-learning systems as different versions are created
Maintaining updated e-learning schedules	Centralized calendar for expiration dates of e-learning systems with limited shelf life
Conforms to standards	Ensure that established standards are used Simplifies migration to other LCMSs

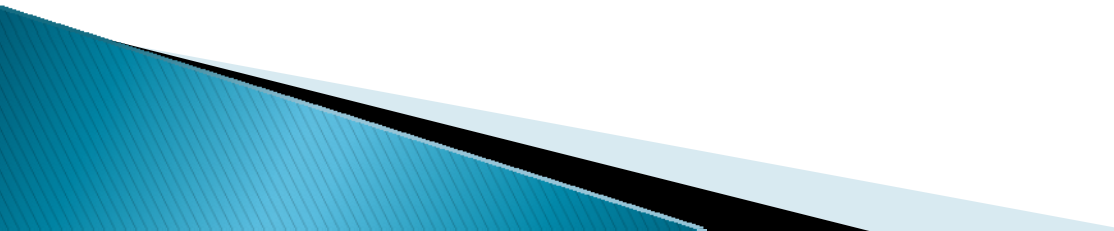
Launch Preparation

- ▶ Use focus groups
 - Gather information about the requirements of the final product quickly
- ▶ Recruiting Customers
 - Consisting of the SMEs, the business representative, and a sample of e-learners

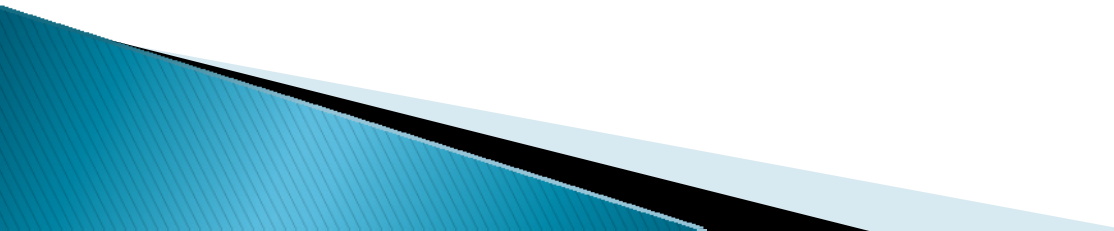
The E-Learning Statement of Work

- ▶ Restate project Instructional Design
 - Who is the primary e-learning audience?
 - What are the stated learning objectives?
 - What are the methods of assessing the course?
 - ▶ Context Diagram for the E-Learning Product
 - Establishes the entities and system interaction
 - Who and what needs what and their contribution
 - ▶ Internal Training Vs. External Marketing
 - Are specific OJT issues being addressed?
 - Is the e-learning designed to cultivate customer loyalty?
- 

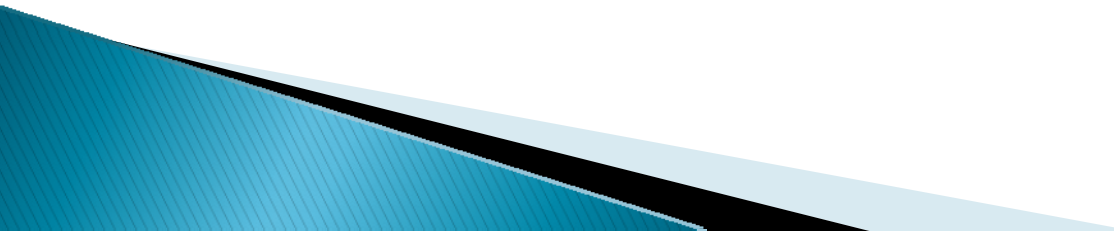
E-Learning Statement of Work

- ▶ IT Infrastructure Requirements
 - Can existing servers host the e-learning product?
 - Would an ISP or ASP be necessary?
 - ▶ Performance Criteria
 - Number of anticipated learners
 - ▶ Projected Hardware and Bandwidth Capability of Learners
 - How will users access the e-learning product
- 

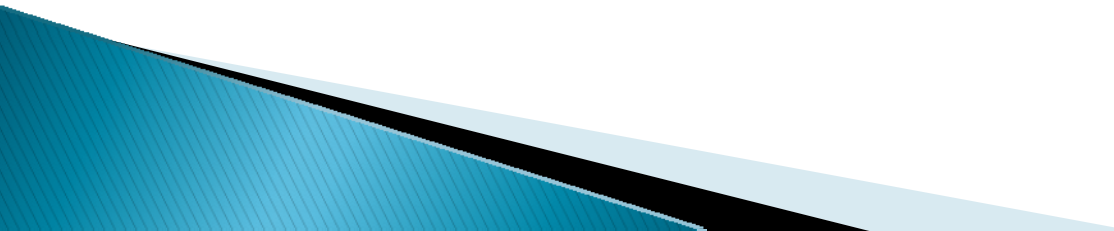
E-Learning Statement of Work

- ▶ Web Browser Compatibility Requirements
 - Limit to a single version or make product backward compatible
 - ▶ Bookmarking, Scoring and Tracking Requirements
 - Necessary? Attractive conveniences?
 - ▶ LMS Requirements
 - Does the company already have one? Is Sharable Content Object Reference Model (SCROM) standard needed?
- 

E-Learning Statement of Work

- ▶ Accessibility Requirements
 - Will the e-learning product be used by the disabled?
 - ▶ Requirements for ongoing support
 - Who will keep the content up-to-date?
 - What documentation is required?
 - What are the IT security requirements?
 - ▶ Style Guide and Template
 - Who will provide the storyboards?
 - Are there specific branding requirements?
- 

Specific Deliverables

- ▶ Number of Lesson Modules, Templates and HTML Pages Required:
 - Classify pages into categories based upon their degree of complexity (Graphics, media content, database queries)
 - ▶ Media Content
 - Estimate typical media elements (Text, graphics, interactive sequences, audio, video)
 - ▶ Product Testing Scripts
 - Determine the types of tests,(navigation, external links, database queries, user volume)
 - ▶ Navigation Rules
 - Clicking through lessons (HTML) or navigation based on learner performance?
- 

Overall Project Management Considerations

- ▶ Roles and Responsibilities
 - Who will approve products readiness, changes to specifications, and be included in the status reports?
 - ▶ Risk Management
 - Determine which risks require preventative action
 - Develop steps to take should they occur
 - ▶ Relative Priorities of Time, Cost, Quality/Scope
 - Delivery cycles juggled based on requirements, resource availability, cost constraints
 - ▶ Number of Delivery Cycles
 - Delivery date 3 to 6 months from project launch
 - 2 or 3 interim cycle reviews, or
 - Reviews every 6 to 8 weeks (larger projects)
- 

Conclusion

- ▶ The development of E-Learning Products require an expansion of the traditional Project Management model
 - ▶ Successful development of an E-Learning Project necessitates that reviews be carried out at frequent intervals
 - ▶ Review teams should consist of the Project Team, The SMEs, The Customer and the Learners
- 