

START

Creating Online Courses:

Your Roadmap-step-by-step
plan for creating eLearning



END

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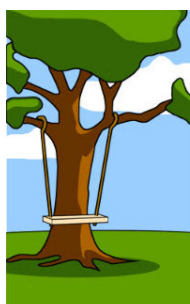
For almost every initiative, before professionals produce their final product/service, they create an outline or mock-up. Architects produce blueprints, engineers come up with engineering specifications and concept designs, software developers produce prototypes and writers create templates.

So, why are these interim artifacts necessary? Well, without them, it's hard for anyone – the project sponsors, the professionals, their subcontractors, or their clients – to visualize what's required (in terms of time, effort, steps, or desired results) to produce the final deliverable.

Why are we here?



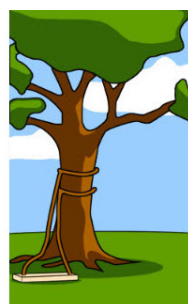
How the
customer
explains it.



How the
Project
Manager
Understood it.



How the
Engineer
Designed it.



How the
Technician
Built It.



How the
Customer
really
wanted it.

Developing an eLearning course is no different – it too requires a roadmap.

Why a roadmap?

Because, if you don't know where you're going, how will you know you've arrived? As Instructional Designers (IDs) and Learning Development Professionals (LDPs) looking to create an online course, it's vital that you produce a roadmap first, before initiating the final design and development of the course. Without it, it's likely that the course you finally end up creating might not match the learning objectives you initially set out to accomplish.

Your eLearning Roadmap – 10,000-foot Level View

At a very high-level, a road map must include three critical elements of the course:

1. *What learners will see:* This is the visual design and user interface aspects of the course. It gives your audience a glimpse into what the course looks like, and how they (learners) will interact with various components of the course.
2. *What learners will learn:* This is the information design aspect of the course. It deals with the topics, subject matter, and other content related to the course, and how you plan to present it.
3. *What learners will do:* This component of the roadmap deals with various activities and interactions that the course will contain to help learners apply the information they see and learn in the course. It is this aspect of roadmap design that'll confirm whether successful knowledge transference – the ultimate objective of any eLearning course – has occurred.

There's a lot more involved than just three simple steps, in creating a successful roadmap. Another characteristic of a roadmap is that it isn't sequential – it is an integrated set of actions that supplement each other to deliver course objectives.

For instance, the "What will they do?" part of the roadmap must evaluate what types of exercises, tests, quizzes, Case Studies, simulations, and other hands-on activity to include in the course. Those decisions, in turn, must compliment what the learning objectives are (What will they learn, and how?).

Before You Start – Is Training a Solution?

The foremost role of IDs and LDPs is to deliver value-adding training/learning solutions to an audience.

However, training might not always be the best way to add value to solving an existing problem. For example, low productivity might not always be a function of an untrained workforce. Older technology, inferior supplier-provided inputs and components, inefficient factory layout, and outdated production processes might be the underlying cause.

Before you start building your roadmap – make sure the problem lies in lack of training, and that training is the solution. In our example above, if older technology is the issue, and management invests in retraining the entire workforce – the problems will continue to persist long after you've trained the last worker!

Your eLearning Roadmap – Ground Level View

Creating effective roadmaps for eLearning training courses is based on the underlying methodologies used to design, develop, launch, and evaluate the course. There are various industry-standard learning design methodologies and approaches such as:

- ADDIE (Analyze, Design, Development, Implement, Evaluate)
- SAM (Successive Approximation Model)
- AGILE
- SCRUM

When building your roadmap, it's important to remember that, regardless of which methodology or project management approach you embrace, there are a few generic components common to most methodologies:

- Analysis
- Design
- Development
- Implementation
- Evaluation

The terminologies might be different in each approach, but the underlying aims and objectives are the same/similar. So, let's take a closer look at what your eLearning roadmap must contain to address each of the components noted above.

Model of Training Process



In the segments below, we'll briefly cover the general principles and steps for each component of the roadmap. These are methodology-neutral (so you may choose any methodology, but the general principles for Analysis, Design, etc. remain consistent). As mentioned earlier, there may be some methodology-specific nuances and sequencing pre-requisites of these steps but, in general, they serve the same function on the roadmap.

1. Analysis

You may recall, from earlier discussions in this Guide, that training might not necessarily be the solution to an existing challenge? Well, how do IDs and LDPs determine if training is (or isn't) required?

The answer lies in a detailed analysis. When doing a learning needs analysis, the roadmap must address:

- a. **The Need:** Whether training is the solution to fill an existing knowledge gap?
- b. **The Audience:** If it is, who needs it?
- c. **The Topics and Subjects:** What kind of training is most beneficial to address the challenges (needs addressed in a) above) faced by that specific audience?

Some pertinent questions to address during the Analysis stage include:

- What background and existing skills do learners possess?
- What do they wish to learn?
- Are there existing learning materials or courses available – if so, what limitations they possess?
- What specific learning objectives should the course accomplish?
- What subjects or topics will help them accomplish those learning objectives?

2. Design

The design aspect of your roadmap delivers the blueprint (high-level plan) that course development teams (graphic designers, web developers, coders, content writers, videographers) must follow. Major elements covered by the design include:

- a. A plan for organizing the course
- b. The look-and-feel of the user interface, menus, course navigation, screens, help text
- c. How to present assessments and quizzes to learners
- d. Specifications for modules, lessons, activities, etc.
- e. Delivery method – e.g. interactive, synchronous, asynchronous, self-study, group activities

Critical activities during the Design phase include:

- Designing learning objectives
- Presenting an appropriate module, lesson, and activity-level sequencing
- What media to use (video, podcast, slides)
- How to deliver the course (in-person video calls, pre-recorded segments, group chats)
- What assessments to include, grading criteria, levels of communication and feedback

3. Development

This where the design (from step #2 above) turns into reality. When developing an eLearning course, your roadmaps must consider the development of the most appropriate types of content to meet stated learning objectives. This phase, therefore, doesn't just stop at developing the core course (menu structures, screens, web pages, etc.), but also supporting components, including videos, podcasts, animated graphics, PDFs, Infographics, etc.

Other high-level objectives of a development roadmap include:

- a. Ensuring the right mix of skills exist within the development team
- b. Equipping the development team with required resources (computers, software tools, workspace)
- c. Arranging access to appropriate subject matter experts (SMEs) to guide and advise the development team
- d. Planning realistic timelines for each task
- e. Assigning roles and responsibilities to team members with the right skills and experience

Key activities that form the Development process include:

- Developing a Storyboard: This will "stitch together" all pedagogical elements of the course, and define their interactions (e.g.: Clicking the blue "play video" button on Screen M01 launches file "Assembly Instructions.MOV" in pop-up Screen P21 while displaying text from file "How To Assemble.docx" on Screen M01)
- Developing the course content: E.g.: Writing all instructions that "How To Assemble.docx" will contain
- Developing supporting content: E.g.: Producing, editing and formatting the video that goes into file "Assembly Instructions.MOV")
- Doping transcripts: Writing and recording scripts for any audio narrations
- Developing a testing plan: To be used when conducting testing of the developed components, as well as the final course, before releasing it for implementation

The Development roadmap for the eLearning project also includes aspects of project management – time management, managing teams, quality management, and watching the budget.

4. Implementation

Implementation is where IDs deliver (launch) the course for consumption by the target audience. The roadmap may include various approaches to implementation. There could first be a "soft" launch, with the limited rollout. L&D teams then use feedback from that stage to finetune shortcomings and close gaps, before "going live" with the final version.

Important objectives of an implementation roadmap include:

- a. Decisions around what platforms to implement the course (Self-hosted, Marketplace, LMS, Cloud)
- b. What types of implementation metrics (response times, page refresh times, planned time to complete versus actual completion time; download times) to capture and analyze
- c. Training for the implementation team
- d. Decisions around the appropriate staffing of support desks and help-lines (How many support associates? What types of support? Timings? Tiering and severity of issues)

The following are key tasks within the implementation phase:

- Packaging all elements of the fully tested course
- Deploying the course into the learning management system (LMS) or training environment (in-house servers, corporate intranet, external cloud)
- Providing relevant actors (trainers, learners, administrators, HR managers) access to various components of the course (e.g.: Learners access relevant course materials; Trainers have access to assessment tools; HR teams have access to data analytics and reporting)
- Monitoring feedback from all stakeholders and acting upon comments/suggestions for improvement or enhancements

Typically, an eLearning course roadmap may encompass developing and implementing several iterations of a course, including implementation of emergency updates if serious flaws exist within a course.

5. Evaluation

Evaluation must be constant across all stages of the roadmap. However, the three critical components for each stage of the evaluation process include:

- a. Metrics to use to evaluate a specific segment of the course
- b. Methods to collect objective (numerical) or subjective (judgmental) feedback for the evaluation of those metrics
- c. Approach to evaluate and interpret the data collected

Key questions addressed as part of your Evaluation roadmap include:

- Did the course meet all its objectives?
- If not, what areas had shortfalls, and how will you address them?
- How do you measure the transfer of learned knowledge into on-job performance improvement?
- Can you quantify (e.g. in terms of dollars) the benefit of the course to the department, organization?
- What feedback did various stakeholders provide (Sponsors, Trainers,

Learners, Support Team, Development Team, HR managers)?

- Were major issues/challenges encountered during implementation?
- How was the quality of each component of the course (quality of audio and video, clarity of instructional content, ease of navigation)?
- How do you measure learner "success" (Subjective and objective grading criteria: Quiz and assignment scores; Participation; Group interaction)?
- Are there plans to address any highlighted shortfalls in the next iteration?
- How can you enhance overall learner experiences in future releases?

Recap

A roadmap is an essential component of any eLearning course. Commencing the development of a course without one can lead to disaster. There may be time and cost overruns and, more importantly, the completed course may not achieve the instructional objectives you set out to accomplish.

Typically, roadmaps center around a specific instructional design methodology chosen to create the eLearning course. **However, all roadmaps must address five critical aspects of course creation: Analysis, Design, Development, Implementation, and Evaluation.**