

***Performance Analysis with Cause Analysis  
Application of HPT Model for Identifying the Gap  
in eLearning Delivery***

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## **Problem Statement**

eLearning delivery capability for the organization is being impacted by new client requirements that all Web-based training be 100% in Flash. This has created performance and organizational issues in trying to maintain quality, learning effectiveness, and integrity of instructional design, while at the same time reducing costs delivery lifecycle time. Challenges are linked to:

- The work in terms of the process for how it gets done,
- To the worker in terms of the required skill sets, roles and accountabilities, and
- The workplace in terms of the environment and tools available to produce the required deliverables.

The purpose of this *performance analysis* is to identify a set of performance requirements and compare them to the organization's objectives and capabilities. The purpose of the *cause analysis* is to determine the root causes of the gaps between the desired and actual levels of performance.

This document stops short of intervention selection and design, and change management required to implement the interventions. Indeed, a formal needs assessment will proceed intervention planning, in conjunction with evaluation to validate the chosen intervention(s) and verify the desired performance outcomes are achieved.

## ***Performance Analysis***

A performance analysis was conducted for purposes of determining the desired state, actual state, organizational and environmental influences affecting performance. The techniques used are summarized in the table below.

## Performance/Cause Analysis

Purpose	Technique
Desired State	Needs Analysis: using internal and client interviews
Actual State	Extant Data: review project financials and summative evaluation Knowledge Task Analysis: assessment of individual skillsets required to use the tools and complete the tasks Procedural Task Analysis: review of rapid prototyping process and benchmark of competitors Systems Task Analysis: review of problem solving skills used to manage scope and meet client expectations
Organization	Organizational Scan: analysis to determine where the organization is at and where they are headed to ensure alignment with stated goals for eLearning delivery
Environment	Needs Analysis: verification of resources and tools to support work level expectations for job design, work flow and job responsibilities

### Desired State

As stated above, the *direction* is to create the organizational development and culture change required for the company to become more competitive in the design and delivery of eLearning performance interventions. Based upon interviews conducted with key clients and internal functional groups responsible for delivering Web-based training, a picture of the desired performance state was created. The *drivers* are: adoption of Flash technology as the desired platform for delivering Web-based training in order to meet new client expectations; changes to the process to streamline workflow and reduce the number of people working (touch points) on a single project; and close the skills gap for using new tools and technology in order to create greater accountability and personal ownership for each project.

The vision for the desired performance is the application of the model used in making a movie. This requires a single focal point in the director (producer) who has a complete vision for what the finished product will look like and how it will function. This means the producer must be versed in

instructional design for electronic media, creative design, and technical development using Flash. This individual will then lead and mentor a small, dedicated team of two to three people for editorial, interactive design, and programming. This metaphor fits well with the Flash authoring environment, which provides multiple levels of interactivity in individual frames along a timeline.

### **Actual State**

Over the past year and a half, the Web-based training (WBT) courses delivered have been in HTML format with Flash objects utilized to provide appropriate levels of interactivity. Efficiencies were created leading to repeatable process allowing a one hour WBT course to be produced for \$25K. Moving to Flash early this year required specialized skill sets and increased labor driving the cost for a one hour WBT course to \$75K. A series of WBT courses, however, were produced during the same time frame in Flash for \$30K per hour using a dedicated team of an eLearning Manager (instructional design, editorial, creative, and programming skillsets), a Flash programmer, and a production artist. Because there is only one eLearning Manager, this success has not been reproducible over a large number of projects. Interestingly, this is the model in place with the smaller 'boutique' eLearning companies benchmarked, which is also one of the factors that allows them to keep their costs low.

### **Organization**

An organizational scan was conducted by reviewing the organizational strategic plan for eLearning and eLearning Services Brief. A Center of Excellence (COE) was created to focus on training interventions and organizational development. This effort is supported by the performance group, which had

## Performance/Cause Analysis

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previously developed a rapid prototyping model for delivering eLearning.

Overall, there is a recognized need to continue to adopt new technologies, while driving down costs and reducing time to delivery.

The instrument used was a questionnaire, part of which has been reproduced below.

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What are the organization's strategies for eLearning?

- Products and services:
- Customers and markets:
- Competitive advantages:
- Product and market priorities:

How is eLearning strategy aligned with the Training Center of Excellence (COE)?

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### **Environment**

The environment plays a key role in supporting adoption of new processes, procedures and technology. In addition, the environment influences and is influenced by the corporate culture. As stated as one of the drivers, changes to customer specifications and response by outside competitors have had a strong influence on the organizational environment. A needs analysis was conducted to better understand the work environment in terms of verification of resources and tools to support work level expectations for job design, work flow and job responsibilities. Likewise the work is influenced in terms of workflow, processes and procedures, and responsibilities in the current verses desired state. Finally, individual performance support at the worker level plays a key role in terms of knowledge, skills, motivation and expectations.

A review of the formative evaluation report on the rapid prototyping model for eLearning using Lectora showed that the culture of the organization was not ready to redefine the roles primarily in terms of the training manager and writer. In essence they were never fully comfortable using the Lectora authoring tools and felt it was a distraction. Roles and responsibilities were not fully spelled out. The result was an initial loss of productivity and drop in morale, as individuals required more time with much of the content requiring rework to meet quality standards. This was not the case in the Training COE, where instructional designers were previously versed in using authoring tools such as Lectora and Authorware.

### **Performance Gap**

The difference between the desired performance state and the current state is primarily related to the environment in terms of:

- Resources and tools
- Policies and recruitment, hiring, feedback, consequences
- Procedures
- Responsibilities
- Skills
- Expectations
- Capacity or ability

### **Cause Analysis**

The cause of the performance gaps identified in the performance analysis can be mapped using Gilbert’s Behavior Engineering Model (BEM).

	Information	Instrumentation	Motivation
Environmental Support	Data Information Feedback	Work Environment Support Resources Tools	Consequences Incentives Rewards
Repertory of Behaviors	Skills Knowledge	Individual Capacity	Motivation Expectations

#### **Data, Information, and Feedback**

Part of the performance gap stems from a lack of clearly identified roles and responsibilities. This becomes key to forming smaller teams in which a single individual has multiple responsibilities for delivering on client expectations.

#### **Environment Support, Resources and Tools**

Training in Flash is required as is access to support services and related tools (e.g., plug-ins). Access to user groups and conferences help to develop and share best practices.

#### **Consequences, Incentives, or Rewards**

Performance incentives do not tie to individual accountability statements. Many performers in the training group are uncomfortable with acquiring technical skills, or in providing direction for developing media interactions. There are no rewards encouraging people to acquire new skills.

#### **Skills and Knowledge**

Training team requires additional skills and knowledge in designing and developing effective eLearning content interactions that enhance learning (e.g.,

simulation, discovery, problem solving), as opposed to media interactions (e.g., gratuitous use of animation, rollovers, and pop-ups.)

### **Individual Capacity**

Capacity is something just now being explored in terms of reducing duplication and aligning strengths between the two performance / training organizations. The performance group, for instance, may focus on non-eLearning interventions, whereas the Training COE may become specialized in Web-based training. The fact is that both groups should not be expected to do all types of interactions with equal levels of proficiency.

### **Motivation and Expectations**

The training groups are spread in many different directions with individuals often times feeling they are unable to do their best work. Motivation could be improved by having clear expectations. This is the least of the six factors related to cause as presumably if employees have the right skills, information, tools, resources, capacity, and rewards, they will be motivated to perform.

### **Summary of Causes**

- Roles and responsibilities not clearly defined
- Software, training, and support not readily available
- Adoption of change not tied to individual performance objectives
- Lack of skills and knowledge on how to design effective WBT
- Prioritization and assignment of primary responsibility for delivering WBT
- Feelings of frustration leading to lack of motivation