Change Facilitation in the Technology Evolution of New Training Delivery Modalities

Learning Objectives

Use methods for vision, strategy, and communication through implementation.

Empower broad-based action in change initiatives and generate short-term wins.

Devise and gain acceptance for strategies to consolidate gains and define success.
Change Facilitation in the Technology Evolution of New Training Delivery Modalities

Description
This case study examines how Hewlett-Packard training practitioners leveraged a multiphase implementation process through application of Kotter’s change model, the Information Technology Service Management model, and an Adaptive Enterprise architecture model. Application of key model elements within the cultural identity of the organization drove development of strategy maps and evaluation processes for deploying new models of delivering emerging technology training. The successful implementation of pilot programs became the foundation for institutionalizing the new model for training delivery.

Session Delivery Methods
This session will consist of a short lecture that will outline the content of a white paper provided to the participants. Following the discussion of the white paper, the participants will be broken down into smaller groups. The groups will be provided with a case study and tools based upon the white paper discussion. The group will use the tools to analyze the case study. Following the discussion, each of the groups will publish their ideas and findings to the entire session group. The goal of the session is to present a grounded theory approach to change management that through adoption will lead to implementation of new training delivery modalities.

Speaker Bio
Working in the training and development environment since 1988, Philip’s experiences include K-12, higher education and corporate training and development. Currently he is an Education Consultant for Hewlett-Packard Education Services focusing on HP BladeSystems and ProLiant products. He has worked in delivery and infrastructure design of UNIX, HP OpenView, and Microsoft instructor led and distance education courses.
The Impact of Technology

1980s
- Automating the back office
- Emphasis: Stability, Reliability

1990s
- Automating the front office
- Emphasis: Speed

Today
- Automating the IT infrastructure's ability to adapt to every business decision
- Emphasis: + Stable, + Reliable, + Scalable, + Virtual, + ROI & TCE

Relationship to Training?

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Enabling Training Virtualization

The Change Based Adaptive Enterprise

Institutionalize

- Support, benchmark, quality audit, certification
- Test, activate, run, & operate solution
- Education & communication
- Develop transition plan

Recognize

- Management assessment
- Business case development
- Program & project management setup
- Process & organizational design

Synthesize

- Service delivery assurance
- Service design & deployment

Organize

- Service operations
- Service development & deployment

Services delivery assurance

Business process and strategy

Network

Application

Server

Storage

Replace

Redeploy
**Recognize:**
Elements
- Sense of urgency
- Creating a guiding coalition
Service Management
- Service design and management
Adaptive Enterprise
- Management assessment
- Business case development

**Organize:**
Elements
- Developing a vision and strategy
- Communication of the change vision
Service Management
- Business alignment
Adaptive Enterprise
- program and project management
- process design and organizational requirements
- management architecture

**Synthesize:**
Elements
- Empower to clear obstacles
- Secure short-term wins
Service Management
- Service development and deployment
Adaptive Enterprise
- Education and communication phases

**Institutionalize:**
Elements
- Consolidate and keep moving
- Anchor the change
Service Management
- Service Operations
Adaptive Enterprise
- Test, activate, run & operate solution
- Support benchmark, quality audit, certification
ITSM Process Based Approach

- What is the Vision?
- High level Business Objectives
- Where are we Now?
- Assessments
- Where do we want to be?
- Measurable Targets
- How do we get Where we want to be?
- Process Improvements
- How do we check Milestones being reached?
- Measurements and Metrics

Case Study Application
Change Facilitation in the Technology Evolution of New Training Delivery Modalities


*Abstract:* Evolving technology challenges emerging trends in the e-learning field to identify and implement delivery methodologies meeting accelerating student needs. This case study examines how Hewlett-Packard training practitioners leveraged a multiphase implementation process through application of Kotter’s change model, Information Technology Service Management model and Adaptive Enterprise architecture model. Application of key model elements within the cultural identity of the organization drove development of strategy maps and evaluation processes for deploying new models of delivering emerging technology training. The successful implementation of pilot programs became the foundation for institutionalizing the new model for training delivery, resulting in billions of dollars in cost savings for Hewlett-Packard.

Over the past three years, Hewlett-Packard worked to implement new virtual delivery tools for technical training. The training tools with new delivery modalities found use in customer, partner and internal employee training extending the training reach outside the walls of traditional delivery capabilities. Construction of virtual collaboration tools began over twelve years ago to encompass virtual classrooms accompanied by virtual information technology labs to enable training reach of a traditional delivering instructor to limitless locations. The extensions of these technologies create opportunities for extending traditional education and training delivery models. The evolution from “linear” to “scale” occurred and now extends to “simulation” and “prototypes of the real thing” (Paul, 2000, Two on simulation and scenarios, ¶ 2). This technical evolution presents challenges for corporate and educational organizations as technology implementations prove challenging and costly (Friedman, 2005, ¶ 2-3).

Virtual collaboration tools provide training participants a view of remotely conducted chalk-talk or whiteboard discussions of technical topics as well as slides accompanied by traditional training room presentation materials. These collaboration tools also provide for capturing of participant questions, demonstrations of software through application sharing, and participant interaction through chat tools (Brouillette & Malanson, 2004). Supplementing the virtual collaboration tools are virtual lab or remote equipment environments. Virtual labs provide training participants with access to equipment hardware and software for hands-on exercises. These exercises reinforce the concepts covered as objectives in the training course. Remote lab capabilities provide participants access to equipment regardless of their location. Training organizations also implement private or internal network versions of these remote lab environments. These secure resources provide organizational participants with the ability to work independently or in teams on cutting-edge technologies to support product deployment and customer implementations increasing collaboration in product development saving billions of dollars in costs (Schrage, 2004; Brouillette & Malanson, 2004).

Change facilitation implementing new delivery models for training presents challenges both in infrastructure and deployment of tools. In this global technology company, transformation of corporate educational deliveries for customers reaches the institutionalized phase of change. Change facilitation progresses as the learning experiences and change models for the first phase of implementation providing a backdrop for global deployment of an implementation model. This change model utilizes two Information Technology change models, and Kotter’s model for organizational change, “perhaps the most compelling formula for successful organizational change management” (Phalen, 2005).

The first of the information technology change approaches is the Information Technology Service Management model, consisting of the stages of: Business – IT Alignment, Service Design and Management, Service Development and Deployment, Service Operations, and Service Delivery Assurance (Information Technology Service Management, 2006). Business alignment focuses on the assessment of the current business model, IT strategy and architecture, customer management, and service planning (IT Business Alignment, 2006). Service design and management addresses “security, availability, capacity, and organizational financial planning” (Service Design and Management, 2006). The focus of service development and deployment establishes an environment for
product creation and evaluation before providing tools to the organization (Service Development and Deployment, 2006). The service operations phase focuses on service desk and help desk operational support addressing “operations management, problem management, and incident and service request management (Service Operations, 2006). Service delivery assurance is the measurement and assessment phase specifically containing change management as a component as well as the management of “service levels and configuration management” (Service Delivery Assurance, 2006).

The second IT change model is the Adaptive Enterprise Model consisting of the stages:

1) Management assessment
2) Business case development
3) Program and project management setup
4) Process and organizational design
5) Management architecture design
6) Develop transition plan
7) Education and communication
8) Test – activate – run and operate
9) Support – benchmark – quality audit - certification

(Adaptive Enterprise, 2006)

Training infrastructure designed for variation is the key strength of the Adaptive Enterprise model (Ramanathan, 2005). Kotter’s change model and the Information Technology Service Management (ITSM) model provide visibility in communicating variance between “functionality” and assessed performance of the change model (Hoogervorst, 2004).

Challenge

The challenge for a technology company is implementation of these tools to extend globally the delivery capability to reach customers seeking alternative methods of training. The following case study examines the change processes for an implementation using Kotter, ITSM and Adaptive Enterprise change models. During the first implementation of the change initiative four thematic change phases appeared consistent with the categories of Kotter’s change model. Those phases were to recognize, organize, synthesize and institutionalize. The recognition phase focused on establishing a sense of urgency and creation of a coalition of supporters for the change initiative. The Organization phase consisted of the creation of a vision and strategy and communication of that strategy. Following recognition and organization, the synthesis of the change elements led to empowering organizational participants through training and communication initiatives. The synthesis phase also included the deployment of several proof-of-concept training deliveries utilizing the tools identified above. The last stage of institutionalization resulted in consolidating success, deploying further training deliveries using the proven capabilities adopting new delivery practices as part of the culture of the organization. The following discussion reviews each of the phases within Kotter’s model applying the ITSM and Adaptive Enterprise models to support a broader implementation of the new delivery capabilities.

Recognize

Within the recognition phase, two primary processes lead to successful change. Establishing a sense of urgency and creating a guiding coalition were the key success factors at initiating a change response. Within the Adaptive Enterprise model, this phase includes the specific tasks of management assessment accompanied by business case development. As key success factors for the business plan, the business case identified needs such as virtual collaboration tools, increased network bandwidth, the prevalence of desktop computers and an expanding corporate apatite for e-learning solutions as critical for decision making. The ITSM model at this point includes the process of service design and management as assessment measures addressing security, availability, capacity and organizational financial planning as measures for strategy maps or scorecards reflecting organizational change success.

The first step in management assessment was recognition that current events were part of an industry trend. The second step was tapping into an organically developed belief that the remote delivery capability was a possibility needing a few technologies to implement (Robins & Rang, 2005). The third was an organically developed series of remote deliveries deployed to meet the needs of organizational participants in training on expensive expansive hardware (Brouillette & Malanson, 2004). With evolving technologies, the sense of urgency evolved through communicating to organizational managers and expenditure control authorities the explosive costs necessary to maintain equipment for deliveries. Conveying a sense of urgency by focusing on benefits for the organization, customer, quality of equipment, and expense control drove the first key successful deliveries.
Discovery of the urgent key issues drove the creation of the guiding coalition. The coalition comprised of members most interested in the improvements made in implementing the changes leading to successful communication, resulted in best practices for change implementation (Hutchison, 2001, Moving with the organization, ¶ 8). Cost control measures identified the key managers, equipment simplification drew infrastructure and technology team members, delivery customizations drew operations team members, and curriculum delivery drew the delivering trainers or instructors. The coalition then became an advisory board who advanced the sense of urgency throughout the organization. The coalition also provided feedback in identification of the variables to consider in the advancement of the project.

Completion of the recognition phase established two primary processes leading to successful change. The first process was the establishment of a sense of urgency and the key factors for successful change. The second was the creation of a guiding coalition or advisory board. The implementation of these two processes led next to the development of a vision for delivery and the plan for communication of that new delivery model. This change phase also completed the management assessment and business case development process and initial service and design criteria.

Organize
The process of organization consisted of developing a vision and strategy and communication of the change vision. Developing a vision evolved from the feedback from the coalition or advisory board. The individuals responsible for oversight of the key success factors provided feedback as to the nature structure of what elements were necessary for change. This anchored the change process within the ITSM Business Alignment phase and established the criteria for evaluating architecture, customer management and service planning. Within each advisory board members area of expertise, there were identified organizational practices which would need revision as the change initiative proceeded. These process changes identified the structure and evolved as the strategy for change. The importance of developing the advisory board or coalition was the ownership of the change elements. Each individual presented the processes needing updating, the process for updates, when they would be updated, as well as an organizational cost for making the change. That cost in most circumstances was not funds required to make a change but the impact that change would have on organizational participants as the program changes continued. With a vision created from the sense of urgency, and a strategy from the advisory board, the next task was the communication of change vision to organization participants and customers. The completion of this phase provided the task specifics for program and project management, process design and organizational requirements and the management architecture driven by the Adaptive Enterprise model.

Communication of the change vision used as many different methods of communication as possible driven by the management architecture and project management configuration. The first step was to identify the types of messages, the second the target audience, the third was to clearly identify the desired action to be taken by each message recipient. Organizational participants received email, voice mail and updates in regularly scheduled meetings. Customers received information from their sales and engineering support professionals. Updates provided to key stake holders on the advisory board in regular update meetings provided feedback on success achieved to that point.

The key to communication success of the change vision was to target the message to the appropriate receiving group. Additionally the advisory board received summary of all communication activities taking place. The advisory board provided additional guidance in tuning the message as well as advancing the message thru the organization thru information channels.

Synthesize
When reaching the synthesis phase the change initiative focused on empowering broader based action by organizational participants as well as generating short-term wins. In empowering broader action the organizational change facilitator worked with the advisory board to move the pilot programs to an adopt-and-go initiative. Within this training organization, the curriculum is broken down into topic areas and distributed among several teams. These individual curriculum teams identify delivery practices, design curriculum and delivery support resources. Consistent with the Adaptive Enterprise development and education phases the initial delivery proof-of-concept courses were conducted using only one topic area, and within one curriculum team.

The next phase of the change initiative was to synthesize the results and learning into a success story complete with implementation guidelines, or cookbook. This cookbook reflects the education and communication phases of the Adaptive Enterprise model and becomes a model and strategy map for expanding the virtual delivery of courses into other curriculum teams. With the core of the training organization (infrastructure, operations, support, customer response and billing) enabled through the advisory board to communicate key success factors,
adoption was accelerated. This phase also includes the ITSM phase of service development and deployment. Within this phase assessment tools determine in the product lifecycle if development is successful and what learning experiences were realized by the organization. By shortening the development and deployment phase and keeping “prototyping” linked with operational deployment there were greater numbers of innovations achieved by the development teams (Paul, 2000, Two on simulation and scenarios, ¶ 5).

The curriculum teams quickly established short term wins by fielding a pilot course in their curriculum using the new delivery tools. Individual delivering instructors were then given time to virtualize deliveries of courseware. This process of virtualizing a delivery involved the instructor reviewing the content delivered in light of the tools used for delivery. The instructor then developed requisite missing materials for successful delivery in the new virtual medium. Within the synthesis phase, curriculum teams and instructors were equipped to further the change initiative through empowering of a broader based action by organizational participants. This continued to foster positive product creation and evaluation before deployment to the organization. Through this empowerment, the organizational change facilitator and advisory board advanced the initiative accomplishing a broader action, with increased feedback to provide to stakeholders as to the project development and initial deployment successes.

Institutionalize

The last phase of the change process was institutionalizing the processes to consolidate gains and anchor the new approaches in the culture. In implementing the change initiative to drive institutionalization, the change facilitator established an adopt-and-go goal at the onset. Within the culture of the organization, the adopt-and-go practice establishes a process of moving from proof-of-concept or established methodology to wider implementation. By planning in the beginning for successful change, the change facilitator communicated to the advisory board what success within the organization would look like at change completion. The Adaptive Enterprise model provides the design criteria to identify the requirements for testing, activation and operations. Additionally support benchmarks and operational certification criteria are established. The advisory board equipped with the knowledge of the end state recognized the signs of success through adoption and quickly applied new practices evolving from change to established procedures. As the change process moved from pilot to institutionalization, the model and strategy proved instrumental in communicating change processes and incorporation of practices into culture. The ITSM model provides guidance in communicating support and organizational responsiveness issues to specialized teams of individuals. These teams have developed communication competencies to address specific issues associated with institutionalization processes (Coley-Smith, 2004).

In considering organizational cultural elements, one key point to consider in this implementation is the consistency of implementation with the organizational cultural environment. Through the vision and strategy developed with the advisory board in maintaining organizational cultural elements. Specifically there were processes that were too cumbersome to change because of information technology requirements, database design for learning managements systems, existing vendor contracts or other constraining elements of the organizational culture. Drawing on the Adaptive Enterprise model, the organization looked from the inside-out to elements of the computer technology company as a whole (Robins & Rang, 2005). In the work conducted earlier in the project by the advisory board, these constraining elements identified major cultural challenges driving institutionalization. With these elements identified early in the change strategy, organization participants were able to adopt and implement quickly because of consistency with existing organizational practices.

Conclusion

Technology change provides a growing challenge for organizations to implement new tools to extend education and training delivery capability to reach customers. Utilization of Kotter’s change model, the Adaptive Enterprise model and ITSM provide a multiphase process for implementation and project management providing strategy, process and management architecture to engage all program stakeholders. Overcoming resistance to change and reluctance from organizational participants begins with ITSM Service Delivery Assurance. Identification and construction of strategy maps and scorecards creates an inclusive environment influencing design of change according to the elements of the Adaptive Enterprise model.

The implication of this technology change model begins with the implementation of the change initiative through the four thematic change phases. Within each phase, the Adaptive enterprise model engaged the organization in reaching from the inside to the outside resources within the technology company. The ITSM model provided a backdrop for measurement and evaluation as well as a top-to-bottom model for change structure. Engaging the customer in the development and growth of this delivery model adds further value as other organizations experience success and growth with customers as collaborative partners (Schrage, 2004, ¶ 2). As a
backdrop, the four change phases were to recognize, organize, synthesize and institutionalize. The recognition phase focused on establishing a sense of urgency and creation of a coalition of supporters for the change initiative. The Organization phase consisted of the creation of a vision and strategy as well as the communication of that strategy. Following recognition and organization, the synthesis of the change elements led to empowering organizational participants through training and communication initiatives. The synthesis phase also included the deployment of several proof-of-concept training deliveries utilizing the tools identified above. The last stage of institutionalization resulted in consolidating success, deploying further training deliveries using the proven capabilities and making the new delivery practices part of the culture of the organization at a global level.

References