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Speed Is King:
Rapid Creation and Deployment of
Enterprise E-Learning Solutions

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Speed Is King: Rapid Creation and Deployment of Enterprise E-Learning Solutions

In the current accelerated corporate environments, rapid deployment of learning and information translates into seized market opportunities and bottom-line returns. Hesitation or slow deployment of learning leads to missed opportunities and forfeiture of market share to competitors.

Unfortunately, many organizations have not developed the internal acumen necessary for rapid learning development or deployment. To be successful, organizations must have certain elements in place. This white paper explains the techniques and procedures needed to ensure the quick delivery of the right instruction in the right time frame. These techniques and procedures include the following:

- Planning for the development and deployment of rapid e-learning
- Establishing techniques for the creation of rapid e-learning
- Deploying the e-learning to the right people at the right time

To accelerate the development of your internal rapid e-learning processes, this white paper describes how to successfully create and implement rapid e-learning.

The need for speed

In every industry, rapid deployment of enterprise-wide learning is making an impact.

- Siemens Medical Solutions of Siemens AG with headquarters in Malvern, Pennsylvania, and Erlangen, Germany, is one of the world's largest suppliers to the health care industry. They needed to support communication and collaboration between development teams in Germany and China. The goal was to reduce costs and improve team efficiency. With Macromedia Breeze, they were able to transmit pictures and sounds in both directions by using the existing data lines—economically and without problems. They shared CAD drawings as well as Microsoft PowerPoint presentations and utilized Breeze at every workstation that had a web browser and Internet access. The savings are estimated to be more than $85,000.

- 3Dlabs, Inc., a leading innovator in the field of graphics accelerators, uses rapid e-learning to quickly educate prospects on the wide range of innovative graphics accelerators they have available. 3Dlabs has reduced the time required to roll out training presentations from four weeks to one week. 3Dlabs has educated more than 7000 prospects and industry leaders in under two days.

- The Arizona Hospital and Healthcare Association (AzHHA) is an organization of hospitals and health systems dedicated to providing leadership on issues affecting the delivery, quality, accessibility, and cost-effectiveness of health care. AzHHA strives to provide cost-effective training to its members and saved over $800 per person in travel costs by using rapid e-learning. They recovered their initial investment in the rapid e-learning software within a year.

- Cable & Wireless, one of the world's leading international communications companies providing voice, data, and IP services to business and residential customers, wanted to provide quick, accurate information to its employees in a short period of time. Using Breeze, Cable & Wireless provided that training and saved between six weeks and four months in development time.

- Safety-Kleen Systems, Inc., is the leading parts cleaner, industrial waste management, and oil recycling and re-refining company in North America, with approximately 5000 employees in 200 service and recycling centers across the United States, Canada, and Puerto Rico. The company's Professional Training Group was able to reduce training development costs by $600,000 while generating a fivefold increase in e-learning course production. Additionally, it now takes only minutes to complete projects that previously took an entire day.

- The National University of Singapore, a comprehensive university offering a broad-based curriculum underscored by multidisciplinary courses and cross-faculty enrichment, needed a delivery platform to reach its 23,000 undergraduate and 9000 graduate students spread across 11 facilities. Their rapid e-learning solution gives students access to necessary information. Studies show that 59% of the students interact with the Breeze presentation two to five times.

For more information on Macromedia case studies, see the Showcase area of the Macromedia website (www.macromedia.com/cfusion/showcase/index.cfm).

If an organization can rapidly detect learning needs and subsequently develop and deploy the necessary instructional material, it can quickly do the following:

- Outmaneuver competitors
- Reduce waste and inefficiency
- Assimilate new employees into the organization
- Satisfy customers
- Sell more product
- React to market forces

Planning

Effective e-learning begins with effective planning. The planning process consists of several considerations:

- Avoiding technology glitches
- Assembling the correct tools
- Defining roles and responsibilities
- Creating checklists

Rapidly developing and deploying e-learning does not mean development without forethought. The most effective rapid development efforts begin with planning. It is like preparing for a car race: racing car pit crews do not walk in on race day and figure out what needs to be done as the car pulls into the pit stop. Before the race ever begins, the crew rehearses, assembles the correct tools, and clearly defines individual roles and responsibilities. Your rapid e-learning development team needs to do the same.

Avoid technology glitches

Technology glitches slow down rapid e-learning efforts before they ever get started. Do a "technology rehearsal" by checking the technical aspects of your e-learning solution before it is needed. Know the following:

- Browser versions on desktops or laptops
- Versions of plug-ins
- Status of speakers on workstations
- Firewall and other security restrictions
- Bandwidth limitations
- Learning management system (LMS) compatibility
- Other information technology (IT) restrictions

Remember that none of these items is static. Put a monitoring process in place so your rapid deployment efforts don't get caught off guard by a technology upgrade. Stay in constant contact with your IT department so you know when changes occur or are scheduled to occur. If you are not careful, an upgrade can wreak havoc on your efforts to quickly deliver e-learning.

In addition to technology-related rehearsals, work with the people delivering the instruction. If you are going to use subject matter experts (SMEs) to provide insight or voice-overs, make sure they rehearse. Make sure developers or trainers are comfortable with the tools they will use and with the process for designing instruction for delivery online within a short time period. Take time before the need is urgent and run your instructors and SMEs through some drills. Have them do the following:

- Obtain a good headphone and microphone set (USB microphones tend to work best)
- Perform a headphone and microphone check
- Check for background noise in the area they are going to record
- Check the workstation for software compatibility issues and required plug-ins
- Practice delivery speed and voice intonation for audio
- Become familiar with the e-learning development software and how it works
- Practice developing a lesson in a short period of time

Practice makes trainers and SMEs more comfortable and promotes the best performance when the pressure is on.

Finally, learners need a rehearsal. Even though you check all the desktop software, browsers, and speakers, you never know how individuals may configure their workstations or laptops. Send out some e-learning lessons and gather feedback to make sure the e-learning works technically and instructionally for all the learners. Rehearsal with the technology, trainers, and learners ensures that e-learning can be delivered and viewed quickly when needed.

Assemble the correct tools

Nobody can do rapid deployment of e-learning with complicated, hard-to-use software programs. To rapidly deploy a learning message, the tools need to be simple and easy to use—not only for the learners, but also for developers, trainers, and SMEs. Effective tools for quick development and deployment of e-learning have the following characteristics:

- Leverage office automation software skills and products (such as PowerPoint)
- Use ubiquitous plug-ins (like Macromedia Flash Player or Adobe Acrobat)
- Include an audio option
- Use prebuilt templates for questions
- Allow both synchronous and asynchronous delivery
- Are easy to use and edit
- Allow for the sharing of applications among multiple learners
- Include a text chat feature
- Allow for multiple presenters
- Are easily scalable

The following illustration shows the use of a prebuilt template within Breeze. The developer simply follows the directions on the screen and creates the multiple-choice question, distracters, and feedback for correct and incorrect answers.
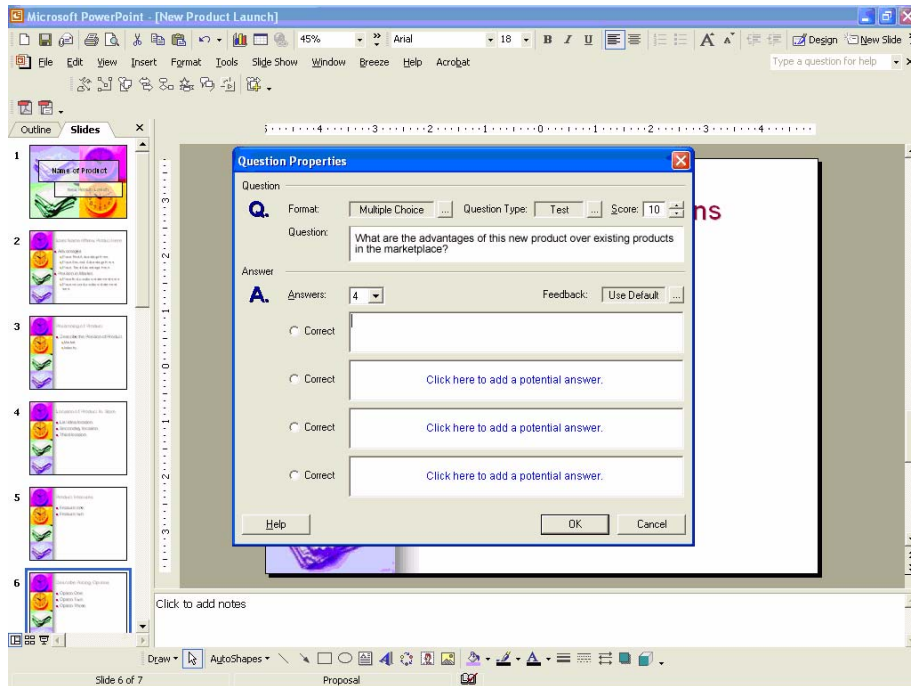
Breeze has built-in templates for creating various types of questions.

Define roles and responsibilities

When e-learning needs to be created and deployed rapidly, there is not time to decide who does what. Well before the need for the e-learning intervention becomes critical, determine who performs the following tasks:

- Managing the development and delivery process
- Assigning the SME or trainer
- Working with the SME or trainer
- Contacting the IT department
- Proofreading the instruction for content, grammar, and spelling
- Signing off on the content
- Communicating the urgency of the e-learning to the intended audience (president, vice president, CEO, sales manager, compliance or safety officer)
- Determining the shelf life of the content
- Uploading the final version of the lesson

Create checklists

An excellent way to facilitate the planning of rapid e-learning is to develop checklists. Checklists outline the planning steps, and keep organizations from continually "reinventing the wheel." Use the information above as a foundation for developing checklists. Here are the checklists you'll need:

- Technology
- Instructor/Developer
- SME
- Quality Assurance

Creating the content

After the planning process is complete, the next step is the creation of content.

To successfully create rapid e-learning content, you need to take certain approaches to organizing, creating, and editing the content. These approaches streamline the development process and cut hours and even days from the time the need is identified to the actual delivery of the solution. You need to do the following:

- Become a librarian: create an asset library
- Develop templates for each lesson type
- Be a "reality show" editor
- "Chunk" the instruction
- Edit preexisting content for reuse

Become a librarian: create an asset library

One of the first requirements for developing rapid e-learning is to have assets readily available. Assets are the multimedia elements that are included in online lessons for clarity and aesthetics. Your organization should create a library of assets that can be quickly inserted into a lesson. Here are some of the assets that your organization may need:

- Clip art graphics
- Still digital photographs
- Small video clips
- Audio clips
- Clips of software functionality (use Macromedia Captivate to create these clips)
- Other previously recorded lessons (use the pieces of earlier lessons that are applicable to the new lesson)
- Photographs of the trainers or SME to add to the lesson
- Prebuilt generic animations (use Macromedia Flash or Macromedia Fireworks to create these animations)

The developer can then access these assets as needed when creating the lesson. You also need to make sure you have a solid, well-defined asset management program in place so that the assets can be easily retrieved. You might want to consider placing the assets in some type of content management system (CMS). This will allow you to search the assets in the following ways:

- By file type (WAV, SWF, TIFF, and so on)
- By theme (medical, safety, manufacturing, or others)
- By creator
- By file size
- By date of creation

Rapid search and retrieval of assets is important for rapid development. The speed of development doesn't mean the e-learning can't contain robust media elements. A large, categorized library of assets allows the team to add media-rich instructional elements quickly and easily.

Develop templates for each lesson type

There is nothing worse than staring at a blank computer screen trying to develop content with a looming deadline. To avoid this "blank screen" frustration, develop prebuilt lesson templates for different types of lessons needed within the organization. Templates help developers focus on content because they don't have to worry about format. Templates provide the developers with step-by-step instructions for what to create. Prebuild templates for common lesson delivery types such as these:

- New product launches
- Safety bulletins
- Competitor information
- Equipment training
- Policies and procedures training

You may also want to create templates for teaching different types of information. These templates ensure instructional integrity. If you base your templates on sound instructional design principles, they will greatly increase the effectiveness of a rapidly created lesson. Develop templates to teach jargon/terminology, concepts, rules, procedures, principles, and problem solving.
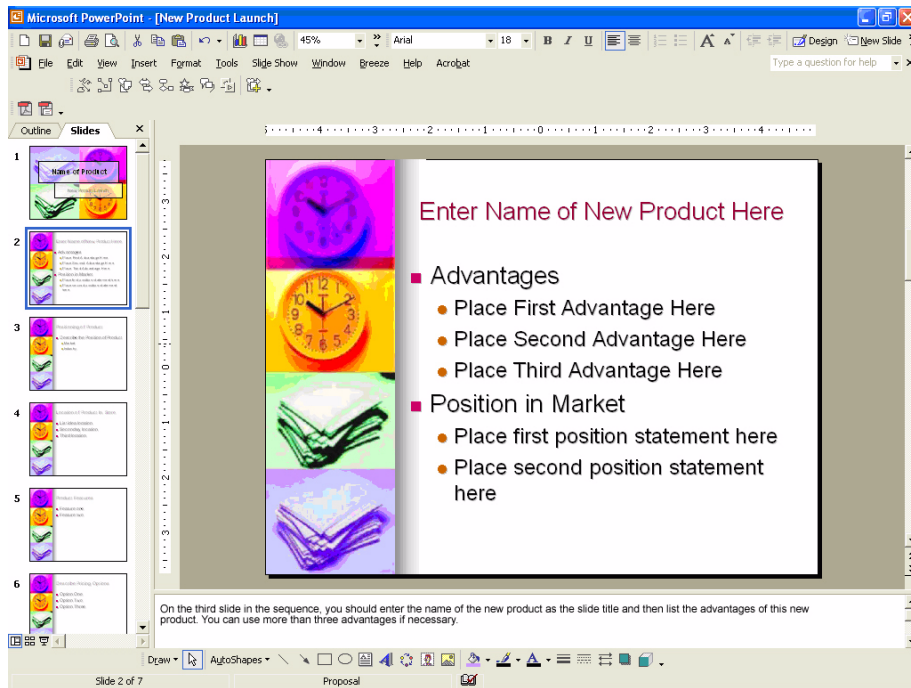
Create templates that can be easily completed by the SME or trainer.

If the instruction will be synchronous, real-time information provided by an SME or trainer, then you should prebuild the following items:

- Scripts
- An outline to present a policy, protocol, or procedure
- An outline for demonstrating new software features
- Generic questions to ask learners
- Talking points for addressing competitor actions

In addition to providing templates, you may also want to provide sample lessons that can be reviewed before the content and instruction are developed. Typically designers, trainers, and the SME can glean a great deal of information from reviewing similar online lesson types.

Be a "reality show" editor

In a reality TV show, hundreds and hundreds of hours of footage are reduced to a one- or two-hour episode. Editors carefully review the footage and determine what to air and what to leave on the cutting room floor. Reality show creators shoot more video than they could ever use and then edit like crazy to create an engaging show. Do the same with rapid e-learning.

If you don't have time to provide the SME with a detailed script, create a few slides with one question per slide. Then have the SME answer the question through the audio portion of Breeze, matching it to the slide. After the SME finishes, edit the parts that are hard to follow or don't make sense and release ("air") the sound bites or portions of the answer that are clear. You can easily accomplish this through the audio editing function.

The process should work like this:

1. Create slides that contain one question each.
2. Give the SME a headset with a microphone.
3. Ask the SME to simply answer the question on each page.
4. After the SME finishes and has saved the information, edit it.
5. Provide the edited piece to the SME to review.
6. Release the answers to the questions through Breeze.

Ask the SME a series of questions; edit the poor responses or misquotes; then publish the information as an instructional piece.

Chunk the instruction

An effective method for developing content rapidly is to "chunk" the instruction into easily understood pieces. Keep in mind that the instruction you provide must be understood and learned rapidly. It does no good to rapidly deploy ineffective materials. An instructionally sound method of organizing material is to provide chunks of information. Chunking can be done in a variety of ways:

- Top 10 lists (or top 5 or top 3—you get the picture)
- Questions and answers
- Tips and techniques
- Sequential steps
- Chronological order ("First you do this . . . then . . . and finally. . . .")

Don't forget visual organizers. The visual elements in the following list can quickly assemble information and ideas and show relationships and linkages that are hard to describe with just text:

- Pie charts
- Bar charts
- Organizational charts
- Workflow diagrams
- Line charts
- Matrix charts
- Line drawings
- Maps

Use diagrams as visual organizers.

These visual elements increase learner retention and shorten the time it takes to explain a difficult concept. A picture is worth a thousand words.

Edit preexisting content for reuse

Most organizations have already painstakingly created some percentage of their e-learning. They can leverage these existing e-learning lessons to rapidly develop new e-learning.

Breeze allows you to take a previously recorded presentation and edit it to meet new learning needs. To create a new lesson from an existing lesson, you can do the following:

- Edit the audio track
- Create new audio
- Delete slides
- Create and add new slides
- Add new links

To do this, keep both the original files used to create the Breeze session and the "live" session so you can edit what you need.

Deploying the e-learning

The final element of rapid e-learning is "deployment"—that is, learner usage. It doesn't do any good to have a process in place for developing rapid e-learning if the learners don't know the e-learning exists. You need a deployment strategy.

Gain attention with the lesson title

Attract learners with a targeted lesson title. Be straightforward and explicit when naming your e-learning lesson. A title like "How to Successfully Sell" is not as effective as "Five Tips for Overcoming Objections Related to Price." The second title describes how many learning points exist, outlines the specific topic to be addressed, and will immediately appeal to a salesperson constantly fielding questions or concerns relating to product price. The first title is too broad and will not catch the salesperson's attention.

Your titles for rapid e-learning need to do the following:

- Reference the specific topic to be addressed in the lesson
- Provide an indication of the number of points covered in the lesson
- Appeal to the immediate needs of the learners
- Describe exactly what is covered in the lesson

Make the learning convenient

Learners are busy. They are working at their primary task and have little time for learning even if the need is urgent. For this reason, make the lesson as easily accessible as possible. If you simply send an e-mail message telling the learners to go the internal Sales website and check out the lesson that was just released, you will have a low hit rate. To make it as easy as possible for the learner to access the e-learning lesson, use these approaches:

- Provide a link in the body of the e-mail invitation.
- Describe why taking this course immediately is important to both the learner and the corporation.
- Provide a complete-by date. Many people are motivated when confronted with a date rather than a vague time period like "complete within two weeks."
- Develop a system for identifying lessons that need to be taken immediately versus lessons that can be taken when convenient. This could be a key word in the subject line of the e-mail message or a color-coding system.

Use links for flexibility

When creating the e-learning for a new policy or procedure, or for the release of a new job aid or other important document within the organization, embed a hyperlink to that document within the lesson. This allows the learner to view the document without having to navigate out of the lesson.

Breeze allows you to embed the following kinds of hyperlinks:

- Links to web pages
- Links to electronic documents
- E-mail addresses
- Links to other presentations

Including the link means you are not forcing learners to search for the information. It also means that you can wrap some training and instruction around the new document or form that you are releasing. Learners will first learn about the document or form from the e-learning lesson.

Summary

Rapid e-learning addresses a number of critical issues within an organization. If done correctly, it can provide a powerful competitive advantage. To do rapid e-learning correctly, develop a plan that includes the following:

- Up-front preparation
- Readily available templates and multimedia assets
- Effective instructional design
- Methods for motivating e-learners

About the author

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