Management Update: Application Simulation Offers Many Benefits in E-Learning

Application simulation can aid major software deployments by improving user training and knowledge retention, and by saving money.

Application simulation isn’t new, but advances in its technology represent a new way for enterprises to provide software training to users. Application simulations originated with the advent of “screencam” products (for example, Lotus ScreenCam), which recorded all activity on a desktop for a certain period of time. They were useful for building demonstrations, but not for developing simulations. Current application simulation tools enable selective recording and quick editing in the development of robust, multimodal simulations.

Overview

Application simulation tools essentially enable an author to record users’ actions as they use software. The recording is edited with an authoring tool, and a simulation is created concerning what the user could and should be doing when using the software. Most vendors offer multiple modes to help users gain proficiency:

- Passive mode: A demonstration with no user input.
- Contextual mode: Use the simulation and get assistance when needed.
- Active mode: A solo mode in which the user navigates the simulation with no prompting or assistance.

Many other e-learning simulation types are available (see “E-Learning Simulation Goes Mainstream,” TU-17-6876).

Adoption Is Accelerating
Application simulation is beginning to attract the attention of IS organizations worldwide. Application simulation software should interest customer relationship management (CRM) and enterprise resource planning (ERP) software project and deployment teams, as well as any other enterprise group with the need to deploy and train associates to use a major software application.

The adoption of application simulation software is accelerating — Gartner estimates it’s in an early “mainstream” phase — and several reasons exist.

- Many software project teams are tired of paying significant fees to their software providers for slow-deploying, classroom-based courses.
- Those teams also realize that the “basic” courses often are insufficient for their needs.
- Due to compressed schedules and last-minute configuration changes, the training may be outdated before it happens.
- Many IS organizations are facing expenses related to traditional training, such as parallel-environments maintenance and setup, change management (which affects the training curriculum), alignment, and updates related to current processes and course changes.
- Application simulation can help to reduce or eliminate many of such costs, because the training rarely uses live software.

**Application Simulation Tools**

Application simulation tools most often replace live, hands-on exercises. In addition, for enterprises that had traditionally used Macromedia Flash, application simulation tools can significantly reduce the time required to create a simulation. A partial list of application simulation vendors and products includes:

- Click2learn, ToolBook II (www.click2learn.com)
- Knowledge Products, OnDemand Personal Navigator (www.ondemandgk.com)
- Knowledge Impact, Firefly (www.knowledgeimpact.com)
- eHelp, RoboDemo (www.ehelp.com)
- IBM, Simulation Producer (www.ibm.com)
- RWD Technologies, Info Pak Simulator (www.rwd.com)
- SAP, iTutor (www.sap.com)
- Siebel Systems, Simbuilder (www.siebel.com)
- x.hlp, Adaptive Learning Suite (www.xhlp.com)
Top Five Application Simulation Benefits

The chief application simulation benefits are:

- Users “pretend” to use the real application: Users’ fear of failure (that is, they might “break the system” if they do something wrong) is minimized (cultural factor) because they aren’t using the “live” application.

- Reduced IT staff and project manager support time: IS staffs no longer have to enter “dummy data” into the production software system (which, once done, requires maintenance and tracking).

- Real-time, interactive user help: Multiple learning modes help user proficiency by showing, coaching (for example, “show me how”) and enabling the user to try active mode without help or coaching from the simulation.

- Multiple scenarios can be deployed, thus enhancing user skills: An abundance of training doesn’t teach users how to use software applications for their specific business needs. Application simulation tools, however, enable customized simulations to be built for specific software instruction, for a particular department or application.

- Tracking overall progress: It’s critical to understand the status of the overall training during new software application rollouts. By having application simulations linked to a learning management system (LMS), management can track progress by location, department and user. Optionally, user feedback also can be collected and used to improve future training initiatives.

Advice for Enterprises

Application simulation tools are most helpful when you have assessed your software rollout plans.

Differences may exist in the various modes that application simulation tools can create. For example, most of the tools develop simulations that offer a fully automated run-through with no user input (passive mode), a run-through with some assistance from the simulation (contextual mode) or a fully active mode in which the user receives no assistance from the simulation.

Pricing models vary for application simulation software. The current model costs $500 to $8,000 for a developer license, from which free runtime simulations can be developed. One Gartner client recently saved $270,000 by avoiding vendors that charged for runtime, instead choosing a vendor that charges only for the authoring tool.

Other vendors, such as Siebel Systems, are bundling LMS-Lite with their tools so that completion and assessment tracking can be performed. In many cases, vendors that bundle LMS-Lite charge as much for the solution as LMS vendors do for a fully developed LMS, which often has more-robust capabilities than LMS-Lite.

Gartner suggests that you don’t purchase any application simulation tools that require a per-user fee — that is an outdated pricing model. Evaluate the solutions that application simulation vendors provide (tool plus LMS-Lite), as opposed to simply buying an application simulation tool and integrating it with an LMS. If you don’t have an LMS, make LMS-Lite part of the procurement, or
initiate plans to obtain a full LMS. This will eliminate manual tracking of “who did what” with the simulations.

Application simulation tools should be used primarily for IT application training. They aren’t meant to be an all-encompassing set of e-learning authoring tools — other important tools are available to use for general authoring.

**Tactical Guideline**

- When preparing for a major software application deployment, consider using application simulations as a replacement for, or in conjunction with, classroom training sessions.

**Bottom Line**

- Application simulations are a proven way to quickly deploy application software training to multiple users.
- Pricing models vary.
- Before you sign a contract, carefully evaluate providers and their application simulation modes and functionality.

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For related Inside Gartner articles, see:

- “Management Update: When You Should Consider Smart Enterprise Suites for E-Learning,” (IGG-07022003-03)
- “Management Update: Gartner’s Smart Enterprise Suite Magic Quadrant for 2003,” (IGG-03192003-01)
- “Management Update: Gartner’s 2003 Learning Management System Magic Quadrant,” (IGG-02262003-01)
- “Management Update: Gartner’s 2003 E-Learning Content Magic Quadrant,” (IGG-02192003-04)