Innovation & Enterprise Agility Advisory Service Executive Update Vol. 2, No. 11

# Update

# Web 2.0 and Learning 2.0 Leading to Innovation 2.0

by Lance Dublin, Senior Consultant, Cutter Consortium

In today's world of increased competition, tightening finances, and fewer windows of opportunity, the need for innovation has never been greater. There is no time for the slow and thoughtful evolution of ideas. In order to respond to quickly changing market conditions and volatile environmental factors, what is required are dramatically new ideas, out-of-the-box thinking, and game-changing solutions.

### **WEB 2.0**

We now live in a Web 2.0 world, as first defined by Tim O'Reilly in 2004. The Internet has changed from a content-centered, centralized, and static medium to a user-centered, scalable, and dynamic platform, spanning all connected devices large and small. Web 2.0 experts talk about collaboration as a competitive advantage, the democratization of content, and the theory of "prosumption." In their book *Wikinomics: How Mass Collaboration Changes Everything*, Don Tapscott and Anthony D. Williams appropriately refer to the new Web 2.0 tools and technologies as "weapons of mass collaboration."

Collaboration, learning, and innovation are tightly linked together. Innovation flourishes in environments that are highly collaborative. High degrees of collaboration lead to accelerated learning and accelerated learning, in turn, is a catalyst for innovation. In this *Executive Update*, we explore ways in which Web 2.0 tools are contributing to "Learning 2.0" and how this collaboration is generating a new world of innovation.

### **LEARNING 2.0**

The Web 2.0 world is giving us powerful new options to collaborate, extend, enhance, and enable learning in an accelerated mode. In the Learning 1.0 world, collaboration was limited and the focus was on the delivery and management of online courses and the replication of instructor-led experiences over the Internet. In the Learning 2.0 world, which leverages the array of Web 2.0 tools, technologies, and approaches — including social software such as blogs, wikis, podcasts, videocasts, games, simulations, virtual worlds, and social networks — collaboration is an underlying principle, and the focus of learning is on the rapid creation, deployment, and evolution of a wide range of accelerated and powerful learning experiences.

### **Faster Learning**

Time seems in shorter supply than ever. Organizations are operating 24/7/365. Corporations are trying to reduce time to market. Customers often know more than their suppliers. Information is outdated as soon as it's published. In this environment, the traditional approach to designing, developing, and delivering learning is just too slow.

New Web 2.0 tools and technologies now make it possible for every employee, as well as designated subject matter experts, to design, develop, and deliver learning programs within hours rather than days and weeks. The outdated formal instructional design process is being replaced, and the role of instructional designers is being disintermediated.

For example, rapid e-learning refers to a category of these tools that allows for the fast-and-easy combining of a PowerPoint presentation or a Word document with an audio track and then the publishing of the finished program to a Flash file, decreasing development time dramatically. For audio-based programs, podcasting makes it easy to record an audio file and then distribute it over the Internet using syndication feeds for playback on mobile devices and PCs. For video-based programs, videocasting or video on demand follow the same

concept, but with a video file. And a new wave of "knowledge-casting" applications are becoming available that make it possible to quickly create and playback programs that combine audio, video, and text into one program using Internet-based applications.

### **Mobile Learning**

We have become a highly mobile society, taking our work, entertainment, and communications tools with us wherever we go. With the explosion of mobile devices, from ultra-laptops to handheld computers to e-books to smartphones, we are now able to also take our learning tools with us so that they are available when we need them and accessible from wherever we are located. The term "m-learning" is often defined as the delivery of training (i.e., lessons, information, and resources) by means of mobile devices. However, I don't believe the greatest benefit comes from trying to redesign formal courses to run on mobile devices. What is most powerful today is the ability to deliver truly just-in-time, justfor-me, and just-enough information and learning to the learner at the point and place of need. This enables us to provide effective on-the-job performance support and to accelerate the learning process.

### **Immersive Learning**

We have long known that games are an effective way to support and accelerate learning. They are a universal part of the human experience, from when we were kids and made up our own rules to playing adult games with formal rules. All that has really changed is the technologies that enable, extend, and enhance them. From serious games to massively multiplayer online games (MMOGs) to sophisticated computer simulations to virtual worlds, it is now possible to create and deploy truly immersive learning environments that accelerate learning and — through this rapid-cycle learning — innovation.

### **Social Learning**

Albert Bandura, a leading proponent of social learning (whereby people learn through observing others' behavior, attitudes, and outcomes of those behaviors), insightfully wrote:

Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behaviour is learned observationally through modelling; from observing others one forms an idea of how new behaviours are performed, and on later occasions this coded information (cognition) serves as a guide for action.<sup>3</sup>

The explosion of social networks like MySpace, Facebook, LinkedIn, and Plaxo connect friends, business partners, or other individuals together using a variety of tools. Once connected, they share and exchange, dialogue and debate, question and explain, and learn and innovate.

Corporations are jumping on the social learning bandwagon as well in order to increase customer loyalty and foster collaboration to drive innovation. Dell is a good example. It sponsors Direct2Dell, a blog about Dell products, services, and customers; StudioDell, which uses interactive tools to communicate with users concerning existing and emerging Dell technologies; and IdeaStorm, a community site that allows Dell customers to share and discuss ideas on products and services.

### **Nonformal Learning**

When you step back and look at this array of new options and tools, it's clear that this is not the world of teachers, planned curricula, structured courses, and formal learning. Some experts use the phrase "informal learning" to umbrella these Learning 2.0 services and technologies. However, I disagree with this designation.

For me, informal learning refers to all the learning that happens randomly and without planning or fore-thought; it is the opposite of formal learning. It occurs from trial and error, everyday interactions, and conversations, observations, and experimentation; it happens when you bump into a colleague in the hallway or receive an unexpected e-mail, when you observe something as you drive to work, or when you overhear a conversation; it occurs when your Internet search leads you to resources and information far removed from your expected path. Informal learning is indeed valuable and should be encouraged. But since it can not be directed or leveraged by itself, it can not drive innovation.

The *Executive Update* is a publication of the Innovation & Enterprise Agility Advisory Service. ©2008 by Cutter Consortium. All rights reserved. Unauthorized reproduction in any form, including photocopying, faxing, image scanning, and downloading electronic copies, is against the law. Reprints make an excellent training tool. For information about reprints and/or back issues of Cutter Consortium publications, call +1 781 648 8700 or e-mail service@cutter.com.

Vol. 2, No. 11 ©2008 Cutter Consortium

EXECUTIVE UPDATE 3

In my opinion, the underlying principle of Learning 2.0 — what makes it fundamentally different and why it is critical to driving innovation — is the ability to design and deliver accelerated and immersive learning activities and experiences that are truly nonformal. Where formal learning is structured and rigid and informal learning is random and unpredictable, nonformal learning combines clear intention with the support of this new array of powerful and effective nonformal tools, technologies, and approaches.

### **INNOVATION 2.0**

We are at the beginning of a new world of innovation. The Web 2.0 world is changing how we enable, extend, and enhance collaboration; the Learning 2.0 world is changing how we enable, extend, and enhance learning. Now is the time for business leaders to remove any technological, organizational, and cultural barriers to enabling, extending, and enhancing these new worlds of intense collaboration and accelerated learning; it is the time to ensure the technology infrastructure is in place and tools are ready to open the floodgates to innovation on a scale and at a speed that we have never known before.

### **ENDNOTES**

O'Reilly, Tim. "What Is Web 2.0." O'Reilly Media, 30 September 2005 (www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html).

<sup>2</sup>Tapscott, Don, and Anthony D. Williams. *Wikinomics: How Mass Collaboration Changes Everything*. Portfolio Hardcover, 2006, p. 247.

<sup>3</sup>Bandura, Albert. Social Learning Theory. Prentice Hall, 1976.

<sup>4</sup>See http://en.community.dell.com/blogs/direct2dell.

<sup>5</sup>See www.dell.com/studiodell.

6See www.ideastorm.com.

### **ABOUT THE AUTHOR**

Lance Dublin is a Senior Consultant with Cutter's Agile Product & Project Management practice. He has been an advocate for innovative approaches to learning and change throughout his career. He went from designing a week-long "Experiment in Free Form Education" program in high school to cofounding one of the nation's first fully accredited "University Without Walls." Then recognizing the impact of the intersection of people, business, and learning, he founded and built Dublin Consulting, a company that became a leader in improving individual and organizational performance and implementing large-scale change.

Mr. Dublin specializes in strategy development, program design, and implementation for corporate learning programs and organizational change management. He brings to his work more than 30 years' experience in adult education and training, communication and change management, and organizational design and development. Mr. Dublin was Founder and CEO of Dublin Group from its formation in 1983 until he sold the company in 1998. Under his leadership, this company became recognized for its innovative solutions to improving individual and organizational performance and effective approaches to successfully implementing large-scale change initiatives. Prior to this, Mr. Dublin was the founder, Dean, and later Provost of Antioch University/West, an innovative accredited bachelor's and master's degree program serving 1,000 students in the Western US states and Hawaii.

Mr. Dublin is a regular speaker and keynote presenter at regional, national, and international conferences. In addition, he is the author of numerous published articles, coauthor of the capstone book in ASTD's e-learning series, "Implementing e-Learning," and a contributor to *The ASTD Handbook of Training Design and Delivery*, Elliot Masie's *Learning Rants*, *Raves*, and *Reflections*, and Marc Rosenberg's *Beyond E-Learning*. He can be reached at ldublin@cutter.com.

www.cutter.com Vol. 2, No. 11

## Workshop Developers/ Presenters

Every workshop is led by one of Cutter Consortium's expert Senior Consultants — experienced IT professionals who have honed their skills and developed their methodologies over years in the field, at companies like yours.

Verna Allee

Sanjiv Augustine

**Rob Austin** 

**Christopher Avery** 

Sam Bayer

Kent Beck

E.M. Bennatan

**Bob Benson** 

Tom Bugnitz

David J. Caruso

Ken Collier

**Rachel Davies** 

Tom DeMarco

Sid Henkin

Jim Highsmith

Wendell Jones

Jeff Kaplan

Joshua Kerievsky

Bartoz Kiepuszewski

Tim Lister

Michael Mah

Terry Merriman

Larissa Moss

Ken Orr

Carl Pritchard

Ken Rau

Thomas Redman

Suzanne Robertson

Mike Rosen

Michael Schmitz

**David Spann** 

**Rob Thomsett** 

John Tibbetts

Jim Watson

Karl Wiig

Bob Wysocki

### **Cutter Consortium**

37 Broadway, Suite 1 Arlington, MA 02474-5552, USA

Tel: +1 781 648 8700 Fax: +1 781 648 1950 Web: www.cutter.com E-mail: sales@cutter.com





In these times of intense pressure to make every development dollar and every development minute count, the maxim *you are only as strong as your weakest link* has never rung truer.

Moving your development organization up the productivity curve will improve the ROI of every one of your projects. Just trace this back and you'll discover the ROI in training is immense. And with training and workshops designed and delivered by Cutter Consortium's Senior Consultants, you can add to that equation the peace of mind you get from being trained by the best of the best.

Cutter Consortium offers inhouse training solutions from IT project management techniques to software development methodologies, improving data quality, architecting Web services applications, aligning business and IT objectives, and more.

# Workshop Topics

- Agile Development Methodologies
- Agile Project Management
- Business-IT Alignment
- CIO Dashboards
- Data Quality
- Data Warehousing
- Enterprise Architecture
- Estimation Techniques
- Extreme ProgrammingIT Strategic Planning
- Knowledge ManagementMetrics/Benchmarking
- Outsourcing
- Requirements Management
- Risk Management
- Software Development Practices
- Teamwork and Leadership
- Web 2.0 Technologies

For details about the courses offered in each of these areas, contact Dennis Crowley at +1 781 641 5125 or dcrowley@cutter.com, or visit www.cutter.com.