INFORMATION SCIENCE PUBLISHING



701 E. Chocolate Avenue, Suite 200, Hershey PA 17033, USA Tel: 717/533-8845; Fax 717/533-8661; URL-http://www.idea-group.com

ITB13522

This chapter appears in the book, Games and Simulations in Online Learning: Research & Development Frameworks edited by David Gibson © 2007, Idea Group Inc.

Chapter XVI

Designing Online Games Assessment as "Information Trails"

Christian Sebastian Loh, Southern Illinois University Carbondale, USA

Abstract

Online retailers make successful use of sophisticated online tracking mechanisms to profile their customers in order to understand their buying habits. Online multiplayer games make use of similar technologies to keep track of gamers' activities, for better management of in-game resources and to settle disputes. However, educators looking to online games as a learning tool lack a similarly powerful strategy to help them reconstruct users' gaming decisions in order to understand the learners and make effective use of games as a teaching/learning tool. Moreover, it is necessary to develop an assessment component for online games to measure its effectiveness, or the return of investment. This chapter outlined a strategy to design the much-needed assessment into online games as "information trails."

Copyright © 2007, Idea Group Inc. Copying or distributing in print or electronic forms without written permission of Idea Group Inc. is prohibited.

Introduction

Follow the White Rabbit. ~ Trinity, *The Matrix* (1999)

The anonymity during the early days of the Internet prompted cartoonist Peter Steiner (1993) to pen, "On the Internet, nobody knows you are a dog." Today, the Internet is far more advanced and far less anonymous than it once was. For example, because Web users expect certain conveniences, like the "Back" and "History" functions, when surfing the World Wide Web (WWW), Web browsers must be sophisticated enough to keep track of the user's online activities. As people click on the Web links to "jump" from one Web page to another, they inevitably leave behind a series of online "footprints" detailing their actions and movements. When harvested from the Web servers, such information becomes the evidence of users' interaction with the WWW services.

The pervasiveness of computing devices, the increasing ownership of personal computers, the near ubiquity of the Internet, and the prevalent use of *cookie* technology have made it easy for Web sites to "remember" and correctly identify every returning visitor (Coleman, 1999). Instead of "blanket marketing" to the once faceless, nameless online customers, retailers can now "target" their online marketing efforts by uniquely profiling each customer based on their browsing behaviors when using the company Web site. The online advertising industry has indicated that they will mine even "more information about individuals" in time to come (Glasner, 2005a). Even though privacy and ethics are legitimate issues, because such information is already being collected of everyone who uses the Internet, the purpose of this chapter is to recommend harnessing the technology rightly for use in education.

The following section presents an overview of online tracking technology, followed by a discussion about online games and education. This is followed by the conceptual framework for the information trail and how the information trail may be designed into games for assessment. Last but not least, a case study using an existing online game is described before the final concluding remarks.

Online Tracking Technology

Tracking Customers in Online Commerce

Peter Drucker (1994) once predicted that an age of "Knowledge Economy" is coming when *knowledge* will become a much sought after and tradable commodity. In today's world, personal data obtained from Web sites' "user registration" (e.g. demographic data, e-mail addresses), Web server logs (e.g. browsers used and IP addresses at time of login), cookies (e.g. categories of merchandise favored, referrer Web sites), and user feedback (e.g. from usability and satisfaction surveys) have all become acceptable sources of revenue. Even virtual game items and monies, such as Linden dollars (currency used in an online game

Copyright © 2007, Idea Group Inc. Copying or distributing in print or electronic forms without written permission of Idea Group Inc. is prohibited.

24 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/designing-online-games-assessment/18782

Related Content

Political Agenda: Designing a Cognitive Game for Political Perspective Taking

Matthew W. Easterday, Yanna Krupnikov, Colin Fitzpatrick, Salwa Barhumiand Alexis Hope (2017). *International Journal of Gaming and Computer-Mediated Simulations (pp. 41-66).*

www.irma-international.org/article/political-agenda/191244

Using an Educational Online Game to Stimulate Learning

Louise Sauvé (2010). Gaming for Classroom-Based Learning: Digital Role Playing as a Motivator of Study (pp. 138-158).

www.irma-international.org/chapter/using-educational-online-game-stimulate/42692

Digital Divide: Comparing the Impact of Digital and Non-Digital Platforms on Player Behaviors and Game Impact

Geoff Kaufmanand Mary Flanagan (2017). *Transforming Gaming and Computer Simulation Technologies across Industries (pp. 94-101).*

www.irma-international.org/chapter/digital-divide/172362

An ARM Framework for F2P Mobile Games

Marisardo Bezerra de Medeiros Filho, Farley Fernandes, Felipe Matheus Caladoand André Menezes Marques Neves (2023). *Research Anthology on Game Design, Development, Usage, and Social Impact (pp. 286-306).*

www.irma-international.org/chapter/an-arm-framework-for-f2p-mobile-games/315492

Toward a Theory of Game-Media Literacy: Playing and Building as Reading and Writing

Idit Harel Caperton (2010). *International Journal of Gaming and Computer-Mediated Simulations (pp. 1-16).*

www.irma-international.org/article/toward-theory-game-media-literacy/40935