Gamification? Can it increase the quantity and quality of software?

Paul Flanagan,
Wednesday, April 25, 2012
11:00 – 11:45 AM

"The global hub for educating, informing, and connecting Information Age leaders."

- Technology drives tactics
- Data determines relationships*

- Information Technology matters
  - By inference software matters.

- Historically, technology had a very strong upsides, but now technology is characterized by "triumphs" and "tensions."

*Source: Brynjolfsson, E., Innovating with Business Data, retrieved from http://www.technologyreview.com/video/?vid=664 on April 12, 2011.

What is Gamification?

- Gamification is the application of game mechanics to nongame environments to motivate people and change behavior.*
  - Badges, points, levels of achievements.
  - Social aspects
  - Fun
- 4 main goals in gaming:
  - To acquire badges, points, levels of achievement
  - To bond with other gamers socially
  - To create/to do meaningful work and contribute to the society of the game
  - To defend themselves, their territory, their abilities

Burke, B., (24 January 2011) Gamification Primer: Life Becomes a Game, Gartner,
Hall, A., (December 2011) DON'T ADD GAMES—ADD GAME SCIENCE., Corporate Meetings & Incentives

"The global hub for educating, informing, and connecting Information Age leaders."
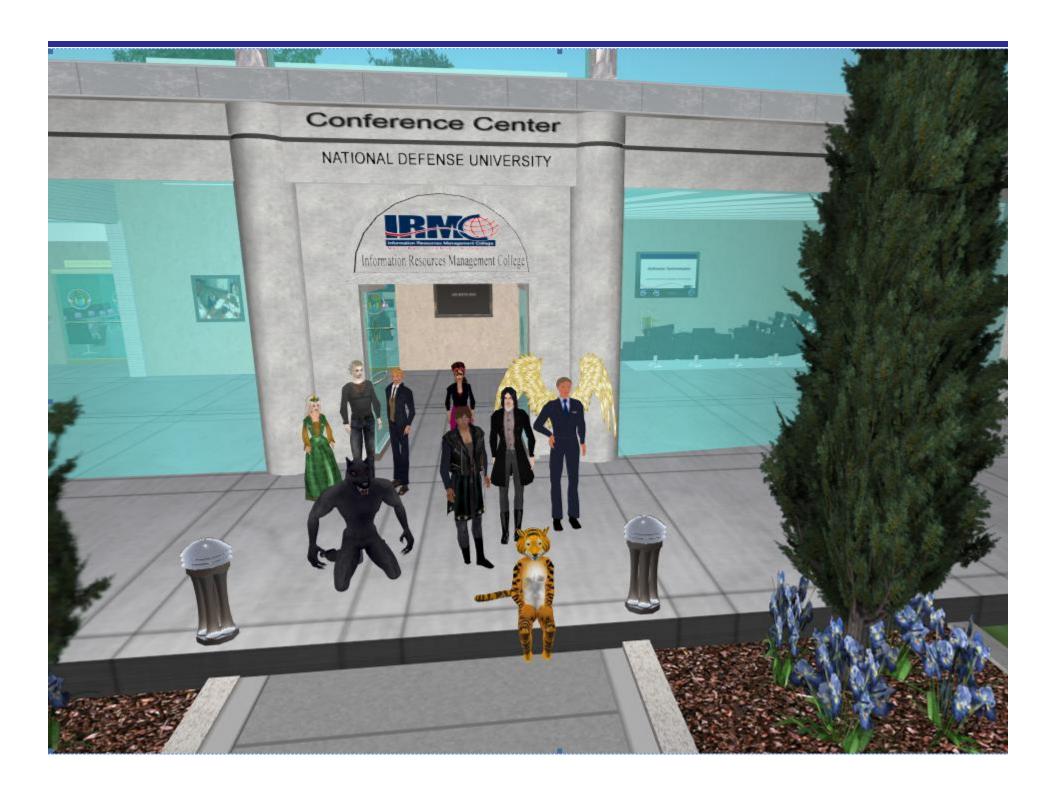
3

Who is doing Gamification?

- iCollege
  - Visits to Second Life, debates in Second Life.
- Michelin – teaches "enterprise architecture*"
- Nike +
  - http://store.nike.com/us/en_us/?l=shop,pwp,c-1+100701/hf-4294965468+12003
- Quest to Learn(Q2L) Education Initiative
  - Uses "gamification" to teach students in grades 6-8 as opposed to a textbook education
  - www.q2l.org
- Khan Academy
  - www.khanacademy.org

Rozwell, C., (29 September 2008), Case Study: Michelin Uses Vitual Environment to teach Complex Material, Gartner
Saunderson, R., (Nov/Dec 2011), Making Learning Fun., Training.

"The global hub for educating, informing, and connecting Information Age leaders."

Who is doing Gamification?

- Doctors and scientists have just begun to break ground on using gamification to train interns, restructure proteins, and help solve medical mysteries

  - Foldit-- www.wired.com/medtech/genetics/magazine/17-05/ff_protein?currentPage=all

  - Second Life-- http://www.frontierservicedesign.com/hospital-employees-train-via-virtual-reality-in-second-life

- Education
  - Even if the current economy, there are technical jobs left unfilled for want of qualified candidates.
    - web developers, business applications programmers, and social applications developers may benefit more from training than formal education.
- IT Services
  - Help desks and network administrators are areas where gamification techniques could prove useful.
- Businesses and Marketing
  - Promoting a product or franchise using games/ "pointification" encourages customers by giving them "points" or "perks" when they become a frequent customer.

Rozwell, C., (29 September 2008), Case Study: Michelin Uses Vitual Environment to teach Complex Material, Gartner

- Education needs to use more Information Technology (gamification).

  - Many universities, high-schools, and other educational facilities are beginning to employ the concepts of gamification to motivate and teach in new and innovative ways

- The Information Technology used in the classroom should be the technology used in the workplace.

- Metrics should be gathered on student performance, instructor performance, and stakeholder performance. Results should be used as feedback to improve the current system.

- Most importantly, the spirit and original goal of the game cannot be lost.

- When employed, gamification should have a purpose other than to extrinsically reward people; they should develop an intrinsic motivation for participating.

- "Bringing our businesses into sync with these truths won't be easy. Unlearning old ideas is difficult, undoing old habits even harder. And I'd be less than sanguine about the prospects of closing the motivational gap anytime soon, if it weren't for this: science confirms what we already know in our hearts."

Pink, D., (2009) Drive, The Surprising Truth about What Motivates Us, Riverhead Book, New York, NY. Page 145.

Questions and Comments

"The global hub for educating, informing, and connecting Information Age leaders."