Microlearning, MOOCs and Gamification

Using Lessons from Learning to Sustain Engagement During Projects
When’s the last time you wrote on one of these?
DIY movement

- From “I made a cake” to “I made my sneakers”
- Maker communities
- Home Depot approach
Microlearning Implications for PMs

- How do we provide the right level of access to data about our projects and make sure the appropriate messages are spread?
- How do we appropriately package what we’re trying to represent?
- How can you break out when you need to without scheduling formal sessions?
- How can this expand our approach with clients?
Microlearning Basic Concepts

- Empowerment
- Self-direction
- Independence
- Brevity
Microlearning Defined (by MIT)

“...we developed a concept of Integrated Micro-Learning (IML)7 based on the principle of making use of the use of media...

- It is open, flexible and modular and - at the same time - allows the use of learning management functions.
- It enables concomitant learning embedded in workflows together with the development of knowledge architectures.
- Short learning sequences are initiated according to the use of media and the client
- Settings („push-approach“). Small units are delivered automatically based on a slip box system. Each learning step is put forward by a Microstep Manager®.”
Why MicroLearning?

12 minutes
The average attention span in 1998

5 minutes
The average attention span in 2008

"Chunking" information into bite-sized pieces means it can be leveraged across many groups

Microlearning rapidly creates essential learning resources for each part of the employee lifecycle

8%
more millennials prefer learning opportunities to cash bonuses than years past

59%
of millennials say training is important when deciding if they want to take a job

Knowledge can change in the blink of an eye

Focus on breaking content up into “chunks”

Start with a high-level objective
List the steps you’ll take to build to get there
Rearrange the thinking to break up the content
Create distinct chunks of media that can be rearranged
Microlearning Application
Microlearning Application
Microlearning Concept

$10,000 Annual budget
MOOC Implications for PMs

- Benefits of organizational learning
  - Envisions outcomes
  - Harness relevant technologies
  - Maintain focus and combat complacency
  - Promote knowledge transfer and succession planning
  - Adapt message for each audience
- Promote unified messaging and understanding
- Storyboard projects and lessons learned
  - Prevent organizational amnesia
  - Promote growth organically
MOOCs Defined

- Massive Open Online Courses
- Just-in-time education
  - Learning is divided into chunks
  - Learning happens at the student’s own pace

“The courses raise questions about the future of teaching, the value of a degree, and the effect technology will have on how colleges operate.”

- The Chronicle of Higher Education
MOOC Basic Concepts
student body

Who’s taking massive open online courses? The provider edX recently released data, of 2.95 million students taking 300 courses, to answer that question.

education, by highest degree

- PhD: 7%
- Master's: 31%
- Bachelor's: 34%
- Associate's: 5%
- High School: 17%
- Junior High: 3%
- Elementary/None: 0%
- Other: 3%

residence

- North America: 35%
- Europe: 18%
- Commonwealth of Independent States (former Soviet Republics): 2%
- Asia: 26%
- Africa: 7%
- Oceania: 2%

average age

- Male: 71%
- Female: 29%

26
Gamification Implications for PMs

- The world revolves around the players
  - Consider your audience
- Continuous feedback loops keep players engaged
- Consider the cadence of your project
  - Boss fights usually occur at the end of one level, and are followed by periods of rest
- Cooperation trumps competition
- Motivation is tricky
Video: Extra Credits “Gamification: How the Principles of Play Apply to Real Life”
Gamification Basic Concepts

Types of Fun

• Hard fun
  • Challenge, mastery, accomplishment

• Easy fun
  • Exploration, role-playing, storytelling

• Serious fun
  • Reward-based (get smarter, make something, etc.)

• People fun
  • Encourages bonding
Gamification in Action

The Bay Game

Welcome to The Bay Game, a participatory simulation designed to help players understand and manage the ecological, economic, and social challenges associated with complex natural systems.

The Bay Game is based on the Chesapeake Bay watershed. In recent decades, this magnificent natural resource has experienced a significant decline in productivity and water quality caused by overfishing, agricultural practices, and urban development.

Players are tasked with improving the Bay's ecological health without sacrificing human well-being. Key learning objectives include the identification of critical leverage points and the need to work collaboratively to achieve individual and collective goals.

Figure 4. Development Regulator

Development Regulations (2011-12)

- Greenfield Development Tax: $600 / acre
- Infill Development Incentive: $400 / acre
- Sustainable Development Incentive: $1,100 / acre
- Development Nutrient Runoff Tax: $380.00 / lb

Waterworks Regulations (2011-12)

- Nutrient TMDL: 6 mg/L
- Municipal Nutrient Load Tax: $2.00 / lb
- Denitrification Incentive: $250,000 / year
- Ostara Incentive: $150,000 / year

4:10 remaining
Submit Decisions

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Gamification in Action

Big Easy Budget Game

Mayor for a day: Game challenges New Orleans residents to balance the budget

You're mayor for a day. How would you spend the city's tax dollars?
Recap

- Microlearning: Students vs. Institutions Charting the Course
- MOOC’s: Distributed Learning for the Masses
- Gamification: Harnessing Feedback on Your Project

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