Serious Games Help Agilists Rack Up The High Scores

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Founder, GameChange LLC
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Introducing myself

• Career goals
  – Help people use serious games to address innovation challenges.
  – Help software professionals become better innovators, not just inventors.

• Career
  – Senior Consultant, Cutter Consortium
  – Senior Analyst, Forrester Research
    • Authored the Forrester Wave on Application Life-Cycle Management (ALM)
  – Oracle, Adobe, Xythos (now Blackboard), various start-ups
    • Shipped a lot of products

• Areas of expertise:
  – Software development methods (Lean, Agile, etc.)
  – Application lifecycle management
  – Requirements
  – Serious Games

• Personal:
  – Washington, DC
  – Native Californian
  – 600 board games in my basement
Serious games are an Agile practice

Keynote about using games to solve problems

Team collaboration game
Serious games are an Agile practice

Product Owner game

DevOps game
We need focused, creative disruption

<table>
<thead>
<tr>
<th>AGILE PROS</th>
<th>Taking on new practices (continuous delivery, Agile at scale, etc.) involves a wider circle beyond the team.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>We haven’t necessarily figured out the best way to collaborate with customers.</td>
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<tr>
<td>DOING OK</td>
<td>We need to figure out how to collaborate with non-Agile partners (UX, Ops, etc.).</td>
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<td></td>
<td>We need to institutionalize continuous improvement more firmly.</td>
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<tr>
<td>JUST STARTING</td>
<td>We need to convince people of the value of the Agile experiment.</td>
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<td>We need ways to overcome institutional inertia.</td>
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</table>
Even the best Agilists need a fresh perspective
If you know this exercise already, just sit it out
NEW DEER
NEW

DOOR
You May Already Know One Serious Game
A serious game is a game played for reasons other than just entertainment. A serious game replaces the normal rules, explicit or tacit, that govern interactions. A serious game is brief, rule-governed exercise that generates discussion and data.
Serious games have been around for a while
Advantages of serious games

- **Disruptive**: Change normal dynamics
- **Structured**: Replace with different rules
- **Brief**: Can finish in a short time
- **Results-driven**: There's a concrete, often measurable outcome
- **Participatory**: Everyone can play
Why serious games work

• The magic circle (Huizinga)
  – By entering, we grant permission to play by someone else’s rules
  – By entering, we are seeking a different experience

• Intrinsic motivation (Pink)
  – Humans like to solve puzzles for their own sakes
And people enjoy them
It’s all about the conversation

• Dynamics
  – The conversation during the game is important

• De-brief
  – The conversation after the game
    • What did we learn?
    • What do we do now?
A few common Agile challenges

- Adopting Agile practices and principles
- Gaining customer insights
- Improving continuously
Adopting Agile practices and principles

Gaining customer insights

Improving continuously
Barriers to Agile adoption

• Praxis makes perfect
  – You can’t learn Agile from a book
• New approaches generate resistance
  – “Excuse me, Professor Brainiac...”
• Learning principles is hard
  – “Wax on, wax off...”
• Why is self-organization better than the alternative?
Dice Of Debt

• Why is it important to lower technical debt?
• When should you do it?
• How do you escape short-term thinking about technical debt?
Adopting Agile practices and principles

Gaining customer insights

Improving continuously
Common challenges

• The customer isn’t clear
• We’re not listening
• The customer is negotiating with us
• The customer is an alien species
• The conversation is inherently difficult
LET’S PLAY

• What are the most important features of your mobile phone?
• Rate them according to this all-too-familiar scale:
  — High
  — Medium
  — Low
Now let’s approach the same question from a different perspective...
What made the second exercise better than the first?

We had a conversation with more context.

The medium compelled us to make harder choices.
What Is The Minimum Viable Product?

• Can we figure it out on our own?
• Can the customer tell us clearly and succinctly?
• Do we understand the value of it?
• How do we know when we’ve arrived at it?
Product Box Will Help Define It

• Product Box
  – Reveals the minimum viable product (MVP)
  – Replaces the giant wish list
  – Let the customer distill the solution down to its essentials
  – A lot harder than it might look, at first glance
Adopting Agile practices and principles

Gaining customer insights

Improving continuously
Problem of choosing, not choice

- DevOps
- UX design
- Prototyping
- KPIs
- Scaled Agile
- Continuous delivery
- Analytics
- New tools
- Story-mapping
- Technical debt reduction
- Kanban
- Continuous integration
- Mob programming
- Lean
The data we need to decide is where...

- Provide missing data
- Validate existing data
- Simplify data analysis
Give the future a test drive

- Simulations help...
  - Gauge the possible success of new approaches
  - Suggest options that you had not considered
  - Help prepare for “black swans”
Agile Portfolio Management

• What does a team-centric approach mean, from a portfolio perspective?
Why serious games are an effective solution

- Engaging
  - People willing to supply data
- Light-weight
  - Not a big investment
- Customizable
  - Change to fit hypothesis
- Replayable
  - Collect enough data get meaningful results
WHAT’S NEXT?
You have a lot of options.

Many, many more.

Including custom-built games.
The investment can be big or small

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<th>Description</th>
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<tr>
<td>Nothing</td>
<td></td>
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<tr>
<td>Basic office supplies</td>
<td></td>
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<tr>
<td>Custom boards, dice, cards, and other components</td>
<td></td>
</tr>
<tr>
<td>Minor computer/video game production</td>
<td></td>
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<tr>
<td>Major computer/video game production</td>
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Don’t be shy to ask for help.

- Game selection
- Custom game design
- Preparation
- De-brief
• A guide to serious games, including organizations that have used them, the problems they address, and the types of games you might choose
  – http://www.seriousgamesatwork.org

• A repository of Agile games
  – http://www.tastycupcakes.org

• Dice Of Debt (free to download)

• A few books describing some of the games we discussed
  – Hohmann, Innovation Games
  – Gray et al., Gamestorming
  – Herman et al., Wargaming For Leaders

• Recent Cutter publications about/including serious games
  – “Serious Games As Tools For Innovation”
  – “Collecting And Testing Contextual Knowledge Requires A Toolkit Approach”

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