Hard Choice: A game for balancing strategy for agility

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Abstract

This poster presents the educational Hard Choices board game that simulates design decision process to communicate the concepts of design strategies in the face of uncertainty. At the end of the game, players experience the implications of investing effort to gain an advantage or paying a price to take shortcuts during software development in the race to become market leader. The game has been played in academic and industrial contexts, in several countries around the world, and is available to the community under a creative commons license.

1. Objectives

Having a common understanding of the structure of a software system is essential for guiding the development effort, meeting customer needs, focusing improvement efforts, and maintaining the software over its lifetime. Having disciplined project management that assures working software that delivers its intended customer needs while having the agility to respond to change are critical for success. Yet, how to use architecture-centric practices with agile software development techniques isn’t obvious when it comes to large scale projects.

The purpose of this game is to give participants a better understanding of the strategies they employ during software development and the implications of investing effort to gain an advantage or paying a price to take shortcuts as observed in balancing agility and architecture centric techniques [1]. In particular the expected learning outcomes are:

- How to discuss technical debt and investments in a project and business context
- How to assess changing conditions relative to technical debt, costs, short and long-term
- How individual and collective strategies change as projects progress
- How to expose students, who might not have practical experience, to the required tradeoffs and dynamic nature of real-world software development

2. Playing the game

The game may be played by 2 to 4 people. It takes about 15-20 minutes to play through a round. Players compete against each other and race to the finish, the player with the most points at the end of the games wins. The Hard Choices game board represents the activities of a software development release. In the quest to become the market leader, the players are competing against competitors to release the product to the market place. The game material consists of the board that can be printed on legal size, 1 die, and tokens to represent players. The game is supplemented by a facilitator’s guide, strategies for varying the game, the board, all of which is available under CC license [2].

3. References