# Agile Essay Research

# Successfully Scaling the Agile Methodology

## Criticism of Agile

Scalability is a common Criticism of the Agile methodology.

Two Primary Scaling issues:

- Large scope, complex projects
- 2 Large development teams

## Complex projects

- Requirement changes
- 2 Lack of precise initial designs
- Mixing of Agile and Non-Agile teams

## Large Teams

- As teams grow larger, communication becomes more difficult
- 2 Lack of disciplined self-organisation
- Scrum meetings become increasingly impractical

## Possible Solutions

- Scrum of Scrums
- 2 Lean Governance
- Multiple Backlogs

## Scrum of Scrums

One of the most common solutions for implementing the Agile methodology in larger groups.

- Development divided among agile teams, each team has an dedicated Ambassador
- The ambassadors from each team convene their own Scrum, communicating the progress of their own teams and discussing issues

## Lean Development Governance

A framework for governing lean software development, created by Scott Ambler and Per Kroll of IBM.

Core principles of Lean Governance that can increase success when scaling agile development:

- Risk-Based Milestones Choosing high-value features to develop each sprint while aiming to reduce risk involved
- Align Team Structure with Architecture Team structure will heavily influence program structure
- Staged Program Delivery Each project in a program should choose their release dates and either meet them or skip them

# Multiple Backlogs

A solution used by Nokia, utilising four levels of backlogs, along with a Scrum of Scrums.

#### Program Level:

- Program Content Backlog Top Level Requirements
- Program Backlogs User stories for each release of the program

#### Team Level:

- Scrum Team Backlogs User stories for each individual team
- Sprint Backlogs The tasks for each sprint

Relied on experienced managers to maintain long-term vision and ensure team cohesion.

## Remaining Issues

Many scalability concerns that are not necessarily addressed by these suggestions.

In practice, some compromises may have to be made:

- Lower expectations for change
- Oreate basic architecture frameworks to provide a base to work off

# Agile Essay Research Presentation

FruitBats

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## How to Start?

First of all I'm going to talk about the most common ways of making a project more pleasant to work on as well as more precise. For this part Mike Cohn's book *Agile estimating and planning* will help a lot. [?] His book does not only include explanations, but also pretty funny examples, which I may include.

## What's Next?

While writing and discussing about importance of planning and estimating I will briefly talk about some estimating techniques [16] [21] and different plannings, which are release planning and iteration planning [?].

## Agile Game Development

Continuing planning and estimating topics I will try and talk about that from game development side. Therefore, I'll include some experiments that show why a specific technique is more precise than any other [14][12].

## Planning Poker

I will eventually mention planning poker not only as a precise estimating technique, but also as a very exciting and emotionally engaging [24]. Thus, it will increase the engagement level in the release planning process. Planning poker also solves some problems, which are quite an issue if one doesn't know how to deal with it [13].

frame title Ryan

#### Agile software testing in a large-scale project

Focuses on implementing agile testing for a large government military project. It shows a cut by an order of magnitude the time required to fix defects, defect longevity, and defect-management overhead.

The agile process required a new mind-set at personal and organizational levels.

# Communication between Developers and Testers in Distributed Continuous Agile Testing

Four main types of communication between tester and developer;

- Handover through issue tracker system
- Formal meetings
- Written communication
- Coordination by mutual adjustment

Early participation of the testers is very important to the success of the handover between testers and developers accomplished by attending planning, standups and review meetings.

Communication is not sufficiently effective through written communication and it must be augmented by informal communication.

#### Games User Research (GUR) for Indie Studios

For playtesting you must use your relevant target audience for the findings to confidently be applied to the game. Using a persona to match correct testers will make it easier to find the ones matching your target audience.

Having accurate data for not only the gameplay but also user facial expressions sound and actions outside of the game lets you more accurately messure what is enjoyable.

Developers being present at playtests to witness the players experience makes the devs more motivated to fix issues imediately and note what the player found enjoyable to provide similar experiences in the future

#### Using prototypes in early pervasive game development

This disscussed using "real" players and professional test players. Players who belong to the target group of the game usually provide more relevant data and are useful for understanding the players attitudes, opinions, and behavior. Using professional test players (e.g., colleagues) for testing enables faster iteration, and is also beneficial when new ideas are needed. If the prototype is very incomplete, it can be difficult for outsiders to understand, so it is useful to have both kinds of test players in the same project.

#### I have no words and I must design

Game design is ultimately a process of iterative refinement, continuous adjustment during testing, until, budget, schedule and management willing, we have a polished product that does indeed work beautifully, wonderfully, superbly. But your chances of getting that beautiful, wonderful, superb game will be much higher if you intentionality begin by thinking about the experiences you want your players to have, understand what makes a game, and understand what pleasures people find in them.

frametitleLouis

## Question

1 Can learning be incorporated into production?

2 How fit is agile for learning?

3 Could it be better?

## Can learning be incorporated into production?

- Yes but not without its flaws
  - ▶ 'Ability to learn while working' itself is a vital quality to employers (Jussi Kasurinen et al., 2017)
  - Requires motivation
- Common issues that arise in group work include
  - Pressure
  - Scope
  - Issues in task setting

# How fit is agile for learning?

- Focus on communication and interactions enables peer learning
- Iteration focuses on progress rather than goal
- Active task setting promotes autonomy
  - Autonomy considered a key factor in improving motivation (E. Deci and R. Ryan, 2012)

## Could it be better?

- Consider adding 'what I want to learn today' to standups
  - Review and self-reflection has proven educational benefits (S. Edmunds & G. Brown, 2010)
- Promote 'working in pairs'
  - Some game companies suggest this helps learning and troubleshooting (M. Tran & R. Biddle, 2008)
  - ▶ Promotes active orientation—learning for teaching—which benefits learning (C. Benware and E. Deci, 1984)

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