Principles of Distributed Agile Development

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Figure 1. Seattle Mariners at Spring Training, 2010.

Abstract

Agile teams embrace change, companies today have agile teams running the software development process. The communication within the particular team is of utmost importance however how the agile team communicates with other agile teams is one of the most critical parts of developing a software. Team effectiveness depends upon trust between the small agile teams not only within the company environment but also between teams across different geographical locations, time zones and cultures [2]. As John Maxwell said "Team work makes the dream work", this same principle applies for agile teams within an organization.

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1 Introduction

"ADITYA FILL THIS UP"

2 Team Work

Most companies today consist of project teams ranging from two to several hundred people. These teams are further split into groups and each group is then responsible for developing a part of the system. The teams can be grouped into three categories viz. Isolated Scrum Teams, Distributed Scrum Of Scrums and Totally Integrated Scrums[1]. The isolated teams are usually on site teams and communication between them is usually by in-person meetings and "elevator meetings".The main communication problem occurs when the teams are distributed overseas since teams will portray differences in work styles, in the worst case outsourced teams may not use Scrum and be productive using the waterfall approach. This issue needs to be addressed, and all teams should in fact use the same methodology and stick to it.
To form a group of professional individuals, the critical management task is to find a right balance of technical skills, experience and personalities. However, for a group to be actually productive and successful, the group should be cohesive and have team spirit[5]. Each group member should motivate others and should be loyal to each other. When problems arise or when sudden changes are required, the group as a whole and not individually should be able to adapt to the changes and overcome the problems.
The idea of teamwork encapsulates a set of values that encourage listening and responding constructively to views expressed by others, giving others the benefit of the doubt,providing support, and recognizing the interests and achievements of others[4]. The subsequent subsections highlight what is important when Agile Teams have to work together.

2.1 Selecting Team Members

The main responsibility of the manager of a project is to create a cohesive group of teams and organize them so they can work together effectively. Companies due to budget constraints and lack of specific skills, outsource teams from different regions and managers do not have the complete say in the process of team selection. The problem arises when individuals are motivated by their own work and who have their own ideas about how technical problems should be solved. The manager should select teams and their members based on having similar complementary personalities and not rely solely on technical capabilities. Individuals who are interaction-oriented help facilitate communication within the team and are the key in holding the sanity of the entire team together[5].

When building a team, each participant's potential contribution to the process has to be evaluated.The ideal team member is a part of the team and identifies himself/herself with the team's goals, represents colleagues and has the time to participate through the entire process[3].

The key factors to select the team members are education, training, application domain, technology experience, communication ability, adaptability and problem solving skills[5].

2.2 Team Organization

The way the team is organized affects decision making process, the way in which information is exchanged and the interaction between the development teams and the project stakeholders. For a big project with many interconnected teams a system architect is required who is usually a senior engineer. The critical decisions should be made by the system architect, project manager and all the team members. To make the most effective use of skilled programmers, the teams should be built around an individual chief highly skilled programmer. In the end, all these teams should work together in harmony to put forth a deliverable product.

2.2.1 Plan Together

The teams should work together towards a common vision and road map, and collaborate on ways to achieve the objectives. All Agile Teams should participate in a common approach to estimating work. This provides a meaningful way to help decision-making authorities guide the course of action based on economics.

2.2.2 Integrate and Demo Together

2.2.3 Deploy and Release Together

2.2.4 Learn Together

2.3 Team Communication

2.4 Keeping the team energized and productive

2.5 Visualizing and documenting the team's efforts throughout the process: Design and Architecture

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