

Scrum-Sprints with Online Bulletin Boards for student projects and as a Qualitative Intro to Project Management

Abstract

Scrum sprints use team “self-organization” for small-group projects, and eliminate the need for a formal “project manager” and unwieldy traditional project management tools. Developed originally in the mid-1990s as part of an agile software-development framework, scrum sprints have gained traction as a practical project management tool during entrepreneurial start-up weekends, and in other diverse small group project settings. This experiential exercise will walk attendees through the creation of small team-projects using a free online collaborative bulletin board tool, and seek feedback on improving the exercise for future implementations. Student feedback from prior classroom exercises will be shared with attendees.

Keywords - Scrum Sprints, Operations Management, Student Exercise

Introduction

Many business students *hate* operations management and require convincing of its necessity and importance in business degree curricula. Many business students also hate “group projects”, (particularly in this case, we are thinking about the subset who despise both operations management and group projects). Despite the ever-growing evidence from advisory boards and corporate partners that most organizations place high value on the soft-skills that are developed by students via successful and realistic group project exercises, students see group projects as tedious mechanisms to accomplish primary course-related learning outcomes, when those learning outcomes might be achieved more easily on an individual basis. During this session, I will walk attendees through the basic set-up of an exercise that I use in my online and on-campus operations management class, to facilitate group projects and to introduce qualitative project management concepts to students.

During the exercise, I introduce students to a relatively new qualitative project management methodology, *scrum sprints*, and acclimate students to group project expectations in my class. The exercise also is a springboard to discuss formal quantitative project management tools later in the course. The timing of the initial exercise has a submission requirement just prior to introducing formal quantitative project management course content, in my particular course. The exercise uses a free online collaborative bulletin-board tool that can be implemented in a variety of business classes, by students, to organize a variety of group projects. The online bulletin board tool is flexible, but can be structured to accommodate the scrum sprint project management framework.

Theoretical Foundation / Teaching Implications

As a project management tool, *scrum sprints* have gained widespread acceptance in a variety of applications, as a less-cumbersome project management methodology that can be implemented without need for a formal “project management” organizational structure, and without a formal quantitative project planning and execution tool. Particularly, the power of *scrum sprints* as a project management tool derives from its flexible nature in new-process or new-product development, where clear “next steps” might be vague and ill-defined, and where project requirements might change on short-notice. Often, various team members’ necessary/needed skills or responsibilities might shift, as the direction of the project shifts. Additionally, when scrum sprint tools are applied to ‘side-hustle’ entrepreneurial activities, team members’ available time that might be dedicated to team objectives can vary widely in inverse proportion to other real-world work and life responsibilities; this necessitates use of a flexible project management tool that allows for the realignment or reallocation of team members’ time and skills to various project tasks.

In classroom settings for student group projects, scrum sprints can be utilized to create shared responsibility and accountability for individual and team project tasks, without the need for a single “group leader”, or a “rotating team leader” role. These challenges, along with the potential for dreaded ‘social loafer’ team members, often become some of the sticking points associated with students’ poor attitudes about meaningful group projects.

As a student project management tool, scrum sprints, in combination with a free online collaborative bulletin board tool, provide a good framework for sharing and updating information about task completion and next steps. Tasks can be assigned to individual team

members, or subsets of team members, either up-front or as other project tasks are completed, or as new tasks are identified. For geographically dispersed students, non-traditional students with family commitments, or for ‘busy students’ who might overcommit themselves to work or personal obligations, updates about project tasks can be shared virtually online without the need for over-frequent conference calls or face-to-face group meetings.

Short meetings are used sparingly as-needed, in conjunction with the online collaborative bulletin board tool, to update team members on progress on project tasks, to approve ‘final results’ of key tasks, to discuss road-bumps or delays, to make potential changes to assigned responsibilities, or possibly to change the direction of the project or the tasks required for the project, etc.

Learning Objectives

1. Introduction to group projects in my operations management class.

a) form groups during an initial short-duration and low-stakes group assignment, prior to a more sophisticated and complex 2nd ‘high-stakes’ group project, with teams comprised of the same team members

b) confirm the instructor’s expectations for successful team accomplishment

c) norm the teamwork, quality, and workload expectations among team members, and

d) develop working communications channels among team members for accomplishing team and individual tasks.

2. Introduction of new concepts, including:

- a) a qualitative and flexible project management tool, *scrum sprints*,
- b) a new free collaborative online bulletin board tool, (e.g. Linoit or NoteApp) to implement the scrum sprint project framework (or possibly implement other collaborative teamwork methodologies), and
- c) a rotating operations management topic associated with the course, such as poka-yoke, two-bin Kanban systems, or heijunka.

Exercise Overview

The first group project used for this exercise is short (relatively speaking), with the exact topic varying from semester to semester. Students form groups with instructor guidance, and have about three weeks to accomplish the primary learning outcomes. Historically, student groups were assigned to investigate an operations management concept, (such as a lean systems tool: poka-yoke, Kanban systems, heijunka, etc.), and then provide a short report showing examples of the concept in their everyday lives. The primary objective was for groups to form and norm, and develop working relationships, collaboration schemes, and communications mechanisms for sharing information and updating each other about task accomplishments or speed-bumps. Particularly for online group projects, preferred communications protocols varied widely among typically non-trad and/or military students, who were usually dispersed geographically around the planet. Comfort level or practical availability of different communications tools or technologies varied widely among those online students, but also somewhat with traditional on-campus students. The first group project was designed to establish a working rhythm for each group, with a low-stakes assignment. The *scrum sprint* idea evolved recently, due to the wide variety of successful and less-than-fully-successful approaches that student groups used to

accomplish their group work. The first group project now also includes an introduction to the *scrum sprint* framework, to provide a qualitative introduction to team management and project management, and to provide student teams with a possible organization and team structure for the students' 2nd more complex and higher-stakes group project.

Session Description

Attendees should be encouraged to bring a tablet or laptop computer with them, to participate in the exercise to its full intended extent.

1) Session attendees will briefly learn about:

- scrum sprints as a qualitative project management tool,
- free online bulletin board tools that can be used to frame the scrum sprint methodology,
- the exercise I have utilized in my operations management course, and
- student feedback from my in-class use of the exercise.

2) Session attendees will then:

- form small groups and set-up individual online bulletin board accounts,
- structure a short scrum-sprint project on the online collaborative bulletin board,
- as time permits, share their projects with the other session attendees, for review and comment, and
- provide feedback to me about potential improvements to the exercise, for future use and research.

===== References =====

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