## Introduction

As was learned in lectures, it's nearly impossible to deliver a finished project on budget, within scope and on time, so certain sacrifices had to be made.

It's clear that staying on budget is the aspect of the simulation that offers the most reward but it is exceedingly difficult to do, so I personally looked to overachieve on the scope of the project by delivering a Multifunction printer instead of a High-Speed printer where applicable and looked to deliver the project as early as possible in most of the scenarios.

From multiple runs of the simulation I was able to gather an understanding of the variables and their effects regarding the schedule and budget.

## Scenario B

Scenario B is hampered by one major issue in Week 5, when aggressive recruiting from a rival company leads to a loss of team members and due to heavy competition for hires, I'm incapable of finding replacements. In general, this issue means you lose half your team.

My aim for this simulation was to exceed the management target of a High-Speed printer which greatly helps the final score and to complete the project on time, as due to the loss of team members it's rather difficult to finish ahead of schedule. The budget is rather difficult to control for this scenario as you need to compensate for your loss of productivity between Week 5 and Week 8, due to the inability to recruit new team members during this time.

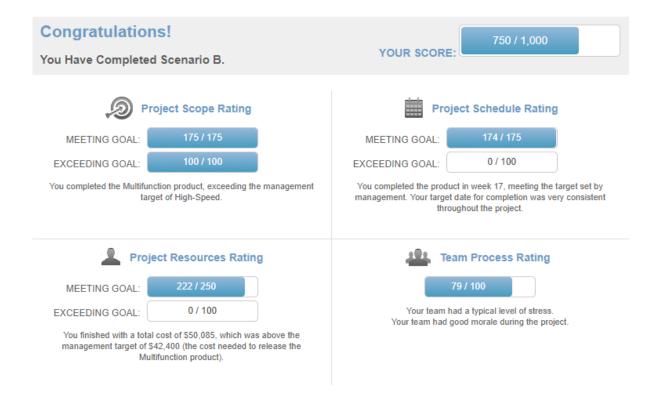
For my best run, in the first week I thought that I would need 3 Medium- High skilled employees, with 2 hours one on one coaching, 1.5 hours daily round up and 2 hours of status reviews. I set the number of prototypes to three, in an attempt to limit the number of problems later encountered when the team numbers reduce, as these problems would further slow the progress. Throughout the project, overtime was encouraged and outsourcing was extensive as the weekly budget was quite high and it was the safest way to keep the budget down.

When dealing with the loss of team members, I decided to increase the skill level of the remaining employees to High in the hope of offsetting the lack of numbers and it worked in the sense that schedule stayed just under the management schedule. This lasted for 4 weeks and after that I reduced the skill level and increased team numbers as required till the end of the simulation. While the goal was at first Week 14, the team was incapable of meeting the target and I pushed the deadline back and the project finished in Week 17 and \$14,000 over budget. Final score 750/1000.

Throughout the simulation I was slightly over budget and while my schedule was fairly consistent it was slightly behind till the last few weeks which resulted in a budget spike due to adding members to compensate and finish the project on time.

With regard to meetings, the team seemed to want constant updates on the status of the project which indicated that they need to know how each aspect was developing and as far as one on one coaching they seemed rather competent and happy that they could achieve the goals.

This scenario was the least demanding simulation and consequently my demands of the team reflected this, so the team never really encountered much stress throughout except for what was typical of a project of this scope, their morale was also good come the end of the project.



## Scenario C

Scenario C is concerned with the issues of management coming in and wanting the product early due to an announcement from a competitor that their product would be released 5 weeks early.

I achieved a high score in my first few run-throughs, so my experimentation was centred around the same strategy, I found budget nearly impossible to keep control of and stay ahead of schedule at the same time, especially considering that the problem encountered was the project deadline moving forward 5 weeks. This is the reason I adjusted my schedule to finish even earlier, so that my team would be prepared, this isn't really applicable to real-life as I wouldn't be aware of such a situation ahead of time but I had to adapt to circumstances and delivering a finished product ahead of schedule is always a beneficial outcome.

For my best run, in the first week I thought that I would need 5 High skilled employees, with 4 hours one on one coaching, 1.5 hours daily round up and 2 hours of status reviews. The team should make one prototype to limit later problems. Throughout the project, overtime was encouraged and outsourcing was extensive as Week 8 was the completion goal and the weekly budget was quite high.

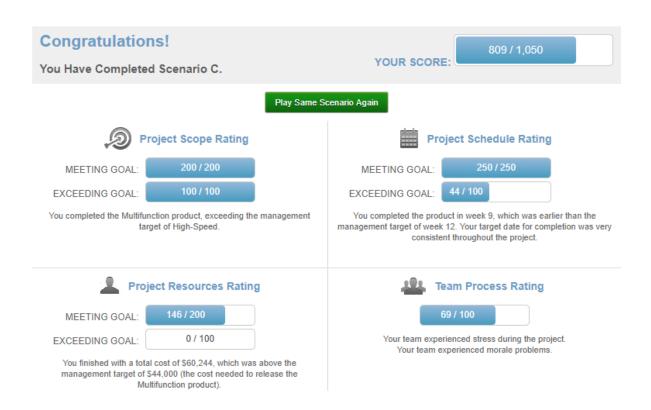
The first week went very well but I decided to increase the number of employees because the team were sceptical of completing the project on time, this was very beneficial as while we were way over budget the team were very far ahead of management schedule.

By Week 4, the project was vastly over budget but nearly half the tasks were complete, the team were however gaining knowledge of their duties and while mildly stressed, their morale was quite high.

Since the team were working better and required less input from me, as the weeks progressed I decided to remove one on one coaching, status reviews and the daily roundup to give them more time to focus on the task itself, since the prototype was complete they had more time for tasks. While the goal was Week 8, the project finished in Week 9 and \$16,000 over budget. Final score 809/1050.

While High skilled employees are more expensive I found that with the tight deadline using Medium-High required more coaching and would give them less time to work on the project itself. And while my personal Target Completion may seem excessive, it forced the team to work hard and didn't place enough stress to cause panic as a Week 7 deadline did.

In the end, I feel the strategy was the best available, a perfect score is impossible but I made do with what I had, the team stress and morale could certainly be improved but there is an inherent stress in all projects of this scope.



## Scenario F

Scenario F was littered with issues that occurred all throughout the simulation, from the first few weeks when the technology the team required for breakthrough features failed and more effort was required to catch up, to a car accident which meant team members who had been working well together would have to be replaced and the new members caught up to speed. And finally late in the project, management discovers that company's main competitor's product is far more advanced than expected and decide to increase the scope of our project.

Scenario F was by far the most difficult simulation due to these issues, constant setbacks and struggles to complete the project on time forced me to attempt a similar strategy to Scenario C. By leaving the budget to the wayside and attempting to complete the project far ahead of schedule in essence circumventing the budget in the hope that it'd be alright in the end, this also allowed me to skip the final issue that occurs in the simulation.

For my best run, in the first week I thought that I would need 5 High skilled employees, with 2 hours one on one coaching, 1.5 hours daily round up and 2 hours of status reviews. I set the prototypes so that I would guarantee a prototype in the first week as this addresses the problem of the failed features. Throughout the project, overtime was encouraged and outsourcing was extensive as Week 9 was the completion goal and the weekly budget was quite high.

I adjusted the meetings as required because the team occasionally didn't understand what needed to be done and I would give one on one coaching. When the car accident issue arose and new team members joined the fold, it slowed down progress as more time had to be devoted to meetings to get the new members up to speed.

The team was under stress throughout the project and morale was never very high, but the scenario was very high pressure and it was nearly impossible to stay on top of things with an issue arising every other week. The team achieved my Target Completion of Week 9 and only slightly over budget by \$1,975. Final Score 744/1000

I found that the high budget and early Target Completion were the only reliable methods for a decent score in this scenario. If the project was not completed before Week 11, the company would add 30 extra tasks in order to compete with their competitor resulting in extra weeks of work .

The highly skilled employees allowed for the learning curve to be greater especially when team members were lost due to the car accident. On reflection, I'd attempt to find a way to keep the employee stress down while still achieving my aims.

