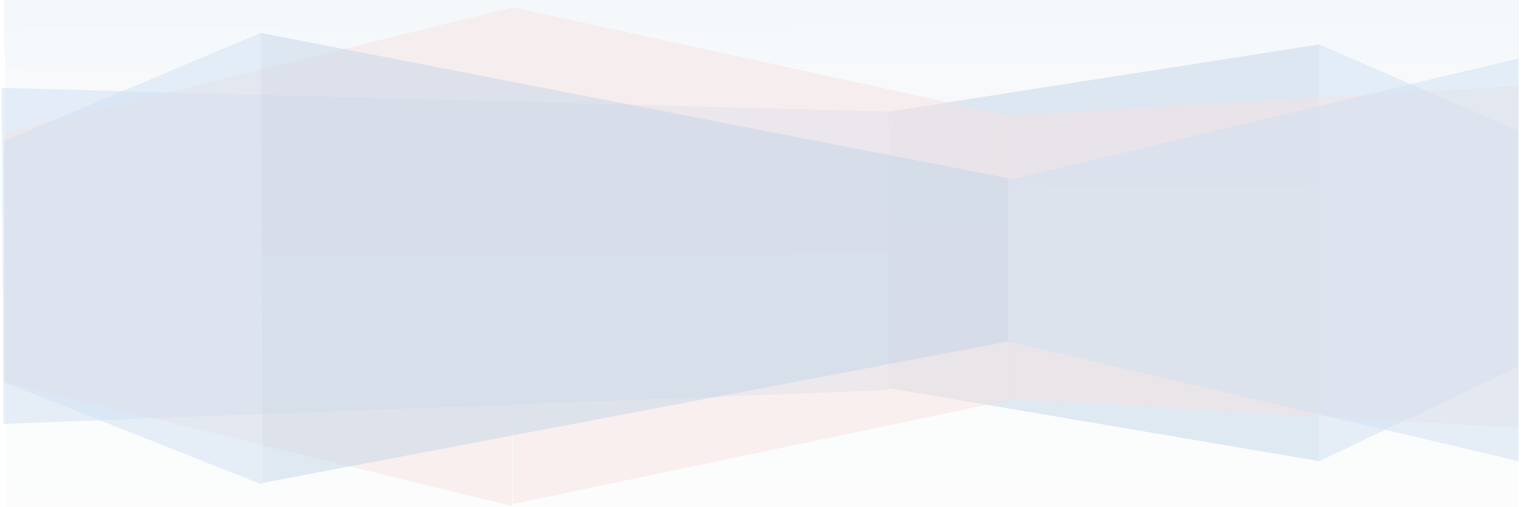


# Project Management Survey








**BTS730 - Assignment 1**

Lukas Blakk



## Table of Contents

<b>INTRODUCTION</b>	<b>3</b>
<b>QUESTIONNAIRE USED</b>	<b>3</b>
<b>SUMMARY OF RESULTS</b>	<b>4</b>
<b>DISCUSSION OF RESULTS</b>	<b>7</b>
<b>SUCCESS VS. FAILURE</b>	<b>7</b>
<b>PROJECT MANAGEMENT TOOLS</b>	<b>7</b>
<b>THE IMPORTANCE OF A GOOD TEAM</b>	<b>8</b>
<b>CONCLUSION</b>	<b>10</b>
<b>TASK LIST</b>	<b>11</b>

		Task Name	Duration	Start	Finish	Predecessors
1		Create Interview Questions	2 days	Wed 9/17/08	Thu 9/18/08	
2		Conduct Interviews	4 days	Fri 9/19/08	Wed 9/24/08	1
3		Fill in Interview Information	1 day	Wed 9/24/08	Wed 9/24/08	
4		Begin Assembling Outline for Paper	1 day	Mon 9/22/08	Mon 9/22/08	
5		Research Project Management Experiences	4 days	Fri 9/19/08	Wed 9/24/08	
6		Write up Final Conclusions	1 day	Thu 9/25/08	Thu 9/25/08	5,3
7		Print up the Assignment and Hand in	1 day	Fri 9/26/08	Fri 9/26/08	6

**11**

<b>REFERENCES</b>	<b>11</b>
-------------------	-----------

## **Introduction**

This survey was conducted to do research into the successes and failures of project management with regards to IT projects. Three candidates were selected for interviews, all of them were posed the same questions, and their results will be analyzed here in an attempt to draw conclusions about what works and doesn't work in IT project management.

The candidates were chosen based on the criteria that they had done at least one major project, and none of them had worked with the author on a project in the past. An attempt was made by the author to ensure that all three subjects were in different categories from the criteria provided.

One is currently a Seneca College student who worked on a BTS630 project last semester. He worked on a web-based patient management software system for a local Naturopathic doctor.

One is a Seneca College graduate. His project was a project management system that would work via the web, and his circumstance is unique in that his team was comprised of only two members. This gives some interesting results when compared to the other two candidates.

The third interviewee is a Seneca College professor who has managed a large variety of IT projects. He also works with the open source community managing the management of projects in the IT sector. His answers were very informed and give a lot of insight into project management in open source projects.

Due diligence has been taken to obscure the identities of the subjects.

## **Questionnaire Used**

The following questions were used to gather information from the subjects. Not all questions were asked of each subject since a couple of them were found to be repetitive as the discussion flowed. All the important points are addressed however, and the interview candidates responded well to the line of questioning.

## Summary of Results

Question #	Seneca Student	Seneca Grad	Seneca Professor
1 - Please describe your project. What was the end goal, the scope, the timeline, who was the client?	The client was a Naturopathic doctor. The system was to help him administer his practice. Patient management. Three semesters (9mo) to research, design and implement the system for him. He had no existing system, he used disconnected components. We used php and the database was mysql. We used Apache server, and Mac operating system. MAMP.	The project was called "On Time Timesheets" (OTTS) - take project management schedules and put them online, instead of excel spreadsheets. It involved adding tasks to a weekly schedule, adding weekly schedules to make a project sheet. creating teams. the client was our professor. it was supposed to last 4 months (a semester)	Worked on a project in 2004-5 with a company called {company name}, basically we had to write a windows driver and applications stack for a touch device (protoype) but it didn't work with windows, wanted it to work with anything in windows. Goal was to produce what he called a "compatibility" management layer, so that you could inject into any application gesture data, and data about your hands. also wanted a proof of concept application. Lasted 2 years.
2 - What was your role in the project?	I would do most of the administrative tasks, assign tasks and take care of the repository and coordinating the team. I was a co-leader. There were 2 leaders altogether. Two developers as well (4 team members in total)	Basically, both {team partner} and I did all the roles. So it's not like we split the project up into one person does all db, one does all UI, we both worked on everything and understood the whole project.	Project Lead
3 - Did the project get completed successfully? All goals met? Features implemented?	No. Not all the features were implemented. It was delivered on time with a shrunken scope. The end system was "good enough" but not 100% reliable. This was due to lack of experience, short time, less motivation in team members than desired.	Once we reduced the scope, yes.	It did from the team's point of view, the client did not feel so, he had unrealistic goals - he was never satisfied which was frustrating. All goals were met though.
4 - Were there aspects of the project that did not get completed as expected? If so, what was done to deal with this?	Agreed with the customer that some features would be removed. He was fine with that.	At an earlier point in planning, we had a different professor as a client, what he wanted was Gantt charts, we had to take that out. We didn't have enough time, it was overly complex and didn't provide enough value. With the previous client, that was a high priority task, but once we switched clients there was a different priority level so it was easy to negotiate leaving that out. We dropped a few things almost immediately when we had only 2 team members. We were supposed to have 3 team members but one dropped out.	(did not ask this, covered in other questions)

<p>5 - Do you feel like the project as a whole was a success? Why or why not?</p>	<p>I'm going to say yes, because even though we had disadvantages regarding the quality of the team members, I feel we delivered something that was okay and met the requirements.</p>	<p>Not, the reason is because we haven't implemented it. Once it was done, we were supposed to implement it. So in that way I consider it a failure.</p>	<p>(did not ask this, covered in other questions)</p>
<p>6 - Please describe your team.</p>	<p>The Team leader was a strong leader, technically well founded, able to multitask and delegate work. He had good communication skills. The other two team members were weak technically, not motivated, not responsible. They just wanted to pass the course, or finish the project without having to contribute as much. The didn't behave like responsible adults/professionals.</p>	<p>{team partner} worked really well, I was very fortunate to work with someone like her. She was team leader and did a lot of research. She took the time to research the libraries needed for a calendar. I think she went out of her way to do things better. It was also really easy to work with her. One time I found that her code was hard to look at and brought it up with her, and when I pointed that out she not only agreed, but refactored it, didn't take it personally.</p>	<p>Myself and then some of his engineers, 4 students on my side - work for 2 years.</p>
<p>7 - How did the team work on the project? What sort of techniques did you use to work as a team?</p>	<p>Weekly meetings, where we would review the work that was done and divide up tasks for upcoming work. Make sure everyone understood what was going on. We established a rule that if something was assigned, it was to be completed by the due date - you have to say if there's a problem beforehand, this helped us be on schedule. We used a SVN repo to control the source code. We used Trak, a tracking system where we had roadmaps and milestones. In person meetings with team and with client. Online meetings were rare.</p>	<p>Esp. towards the end if a lot needed to be done we would meet face to face and code together, but if we couldn't we would use IM a lot. We had excel spreadsheets.</p>	<p>two week release cycle, they each had to focus on an area of the code - ex. hardware - usb driver, another worked on win32 api, another on the layer above that - application layer, and then another worked on the UI for firefox and did extensions. they each were dependent on the one below them. team meetings once a week, talk about where things were at - suggestions, questions, status updates. always had deliverables for me. it was a model that i adapted for the dps 911 class. they all worked here at the school as opposed to at home. lots of IRC, blogging, i'm heavily influenced by open source methods - because this was research oriented and had never been done before, it was difficult to map out with conventional project management software - so we worked on a incremental improvement model. it's a risky thing to do but i had a really good team, and the requirements changed so frequently that it became just keeping up with what his expectations were.</p>

<p>8 - What part of the way the project was managed worked for you?</p>	<p>We chose the right parts of the system to remove from the scope when time became an issue. being strict with deadlines also helped us stay on track.</p>	<p>We had to meet once a week to check in on what was done and not done, review the spreadsheets. Because we were working on different stuff, that one meeting could really help to keep us on track, on the same page.</p>	<p>it really worked for me to use a distributed model. we were under an NDA, but we set up a blog and all blogged for each other, also a lot of iRC. loved the idea of short release cycles, we would try things that would fail frequently, code thrown out, wasn't going to work - the weekly meetings brought it back to the point again.</p>
<p>9 - What didn't work for you with regards to project management?</p>	<p>It did not work that we didn't have enough training (for some team members) about how to use the SVN repo.</p>	<p>There wasn't much that didn't work - this was probably because we were only two people.</p>	<p>the client was difficult to work with. it was stressful. he was unclear about what he wanted. couldn't articulate "this is what it needs to do" - there was no working hardware delivered to us. so it was difficult to test, we had to create lots of fake environments.</p>
<p>10 - If someone else was to manage this project, what advice would you give?</p>	<p>Remove the non-functional members and find better suited team members.</p>	<p>Have good team members. If you are not organized, make sure another team member is.</p>	<p>i would have had the people above me do more work with him on what was going to be delivered, much more clarity, instead of "he said she said" and phone calls with changes of mind. his technology would change in the middle of it. we did a requirements doc, but the client also didn't operate with conventional methods - we couldn't have structured something that was so research based, we had to learn so many things to do this - it wasn't just an implementation it was being created as we went. bespoke software. you try something, it falls apart.</p>
<p>11 - How many projects of this scale have you worked on? How many have you managed?</p>	<p>Before this none, and even now I haven't managed any project. i have been in a larger project but with a small team.</p>	<p>3, managed one but passed it on halfway through</p>	<p>worked on ~20, managed a dozen</p>
<p>12 - What suggestions do you have for someone who is about to take on a project of this scale?</p>	<p>Understand the work assigned to you and how it fits into the whole scope of the project. Understand how the work of others will affect your work and see what you can do to improve the bridging between your work and that of the team.</p>	<p>(didn't ask this question)</p>	<p>(didn't ask this question)</p>

## Discussion of Results

### ***Success vs. Failure***

Definitions of success and failure vary, but in the research conducted for this report, all of the respondents felt that to some degree there was failure even if the project itself was completed on time and with the features agreed upon by the client. In this post<sup>1</sup>, the author sets out 4 measurements for project success. In the case of this research however, money and budget do not factor in and so the 4 measurements could be adapted for Seneca College projects to instead measure these key areas:

1. Implementation goals are met (features, scope) to the agreed upon level
2. Effective Teamwork
3. Client Satisfaction
4. Timeline goals are met

While all three of these projects discussed were successful in at least one of the four areas, none of them reached complete success on all four points.

Reading the questionnaire results, it becomes clear that the Client and the Team are two areas that can make or break the success of a project. Not having team members all working at the same level of skill or dedication can bring down the ability of the team to meet scope deadlines, and even affect client satisfaction. At the same time, a client who is not clear about their needs and expectations can frustrate a team, no matter how good the members are, to a point where the measurement of client satisfaction can be difficult to attain.

### ***Project Management Tools***

Among the tools that the interviewees used, none of them mentioned any kind of project management software. Not a single one used Microsoft Project, Basecamp, or anything else milestone based. Excel was commonly used, as well as bug tracking software in one case. Most of the teams relied on communication via IM, IRC or blogging. Meetings in person were infrequent and mostly used to make sure team

---

<sup>1</sup> <http://projectsteps.blogspot.com/2004/09/what-makes-successful-project.html>

members were on track to meet the goals. How these goals were tracked however, was unclear. This is an interesting result since this report is geared towards an understanding of project management techniques and yet people who are actually managing projects are not following any sort of established system.

When we read how many projects fail<sup>2</sup> in the IT sector, it is not surprising when talking to actual IT project managers reveals that many of them eschew any kind of systematic approach to project management. Not a single subject discussed risk management, time management, tracking of deliverables, or any other method of evaluating the project as it was being developed.

There are a wide variety of tools out there, and a breadth of experience in managing IT projects, and yet in this particular field more than any other there is a tremendous failure rate. If one were to draw conclusions just from the interviews conducted for this report, it would seem as though all the project managers felt the need to invent their own system. According to the subjects the thought of learning a new system was overwhelming and the idea of adhering to an existing system would have been limiting because of the project's uniqueness.

It must be possible to use existing, solid project management tools without cramping the style of a new and visionary project. Hopefully for future projects, those interviewed will consider using a project management tool. This research certainly points to that idea being something which could really help with the desired end result, since it could give teams better visuals of where they are weak or strong.

### ***The importance of a good team***

Team members with the skills needed to get the project done can never be undervalued. As several of the interview subjects pointed out, the success and failures they experienced were a direct result of the quality of their teammates.

---

<sup>2</sup> [http://www.it-cortex.com/Stat\\_Failure\\_Rate.htm#The%20KPMG%20Canada%20Survey%20\(1997\)](http://www.it-cortex.com/Stat_Failure_Rate.htm#The%20KPMG%20Canada%20Survey%20(1997))

When selecting team members it is imperative to look for different qualities in each member. The Seneca grad pointed this out when saying that having a teammate who was organized brought a lot to the project. The Seneca student felt that if two of the team's four members had been more passionate about the project, and not just trying to lay low and pass the time, the project could have been more successful.

37 Signals (creators of Basecamp project management software) have an excellent online book called "Getting Real" where they discuss ways to be successful at executing projects that are similar in scope to the ones researched for this report. One of the essays goes into depth about getting the right number of team members and recommends 3 people<sup>3</sup> for the first iteration of a project. In the three interviews, the team numbers were 4, 2, and 5. All three interviewees when asked about how they managed the project with regards to communication between team members seemed to take a very casual approach to that segment. It seems as though with such small teams communication between team members is not an issue and does not get in the way of the project's end result. This would confirm what Marc Hedlund<sup>4</sup> says :

**"Keep the team as small as possible. Metcalfe's Law, that "the value of a communication system grows at approximately the square of the number of users of the system," has a corollary when it comes to project teams: The efficiency of the team is approximately the inverse of the square of the number of members in the team. I'm beginning to think three people is optimal for a 1.0 product release"**

---

<sup>3</sup> [http://gettingreal.37signals.com/ch03\\_The\\_Three\\_Musketeers.php](http://gettingreal.37signals.com/ch03_The_Three_Musketeers.php)

<sup>4</sup> [http://gettingreal.37signals.com/ch03\\_The\\_Three\\_Musketeers.php](http://gettingreal.37signals.com/ch03_The_Three_Musketeers.php)

## **Conclusion**

With such limited scope of interview data it is hard to draw conclusions about project management as a whole. Since the subjects are all connected to Seneca College, there can only be conclusions drawn about the techniques in this particular segment of project management.

All the projects had in common that they were student projects being done for no charge, two of the three had no integration to existing systems and were designed to be stand-alone applications. The project success rate was low, if only in the eyes of the interview subjects, for reasons such as; weak team members, client communication, scope reduction and incomplete implementation. In fact none of the three projects discussed were implemented in the end.

This research leads to several conclusions about how these projects could be better managed:

- Strong, dedicated team members who are interested in a successful outcome and passionate about the project itself
- Better tracking of the project's tasks and goals through project management tools (software) that would give the team a handle on where the project is on a regular basis. This would be useful for keeping the scope and end goals on track and realistic
- More planning on the implementation end. All three projects were measured as being complete when the features were implemented but all three systems still had far to go to be fully implementable systems.

As project managers, all three subjects were strong leaders who worked hard to make their projects succeed. In this way, all the projects succeed because of the dedication of their managers.

## Task List








		Task Name	Duration	Start	Finish	Predecessors
1		Create Interview Questions	2 days	Wed 9/17/08	Thu 9/18/08	
2		Conduct Interviews	4 days	Fri 9/19/08	Wed 9/24/08	1
3		Fill in Interview Information	1 day	Wed 9/24/08	Wed 9/24/08	
4		Begin Assembling Outline for Paper	1 day	Mon 9/22/08	Mon 9/22/08	
5		Research Project Management Experiences	4 days	Fri 9/19/08	Wed 9/24/08	
6		Write up Final Conclusions	1 day	Thu 9/25/08	Thu 9/25/08	5,3
7		Print up the Assignment and Hand in	1 day	Fri 9/26/08	Fri 9/26/08	6

Figure 1 - Task list from Microsoft Project

## References

See footnotes.