



I WANT TO BE A GOOD PROJECT MANAGER

Requirements to be a project manager in
the context of multinational IT projects

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Bachelor's thesis
May 2012
Business Administration
International Business

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ABSTRACT

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Bachelor's thesis 102 pages, appendices 36 pages

May 2012

The main purpose of this thesis is to describe management methods and tools for multinational IT projects. All conclusions are based on the research, when few cases were studied and analyzed. Those cases are IT projects, where team members are from different countries and with different background. At Demola Academy, three IT projects from well-known Finnish companies, took place and proved to be very successful. In addition, three separate cases based on interviews of IT professionals from different companies, took place where they have shared their experience and named the most working methods for IT projects. All programmers were working in multinational teams.

In the first section of this paper, one will find an introduction of Demola projects, then the thesis continues with practical advice and methods given by project managers of the IT projects; some ideas which are discussed are those of motivation, conflict solving, team management, project planning tools and methods. The next section gives practical information about IT management used in IT companies during long periods of time.

It should be noted that, this paper is more practical than theoretically oriented. Most of ideas and results are taken from real experiences of working project managers. The theoretical part mostly includes definitions and explanations of some IT related terminology mentioned in the paper.

Key words: multinational, IT, management, team

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ABBREVIATIONS AND TERMS

TAMK Tampere University of Applied Sciences

Agile, Scrum, Waterfall, Ticket system, wiki – development methods used mostly in IT software project management

BPM – Business project manager (business oriented professional)

HR – Human resource

IT PM – IT project manager (project manager with IT skills and background)

PM – project manager

1 INTRODUCTION

1.1 Background

A person may have a predisposition for being a project manager. This predisposition partly consists of personal traits and partly of a skill set. Personal traits like patience, stable emotional state of mind, easy to work with, a good sense of humour plus target driven approach and sense of team spirit are core features of really good and successful project manager. Management and leadership skills, high motivation can be naturally inherent to a person.

(Petteri Vilen, Project Management course lectures, 2011, TAMK)

I want to be a good project manager! That was my decision, made during my study at TAMK. What do I need to accomplish that; am I a suitable person for this kind of work? Those are questions I have asked myself and to answer them I decided to make this research. While doing so, I decided to make the task a bit more complicated but at the same time more interesting...

Managing the project is already quite difficult task. Usually the key responsibilities of project manager are:

- planning the project
- setting clear goals and objectives for the project
- building project requirements
- managing a project within particular period of time using given resources in the most efficient way
- making a balanced team keeping all team members together
- establishing reliable connection with the client choosing the most optimal tactic in communication with a customer or a partner. (Petteri Vilen, Project management course, 2011, TAMK.)

Those are common requirements applied to a project manager of any project. I would add another condition – cultural diversity. It is not a secret that nowadays international

projects are getting more and more popular. Companies try to use all possible advantages of diversity. This makes the situation a bit more complicated, when in one project team there are people from different countries. Therefore we get professionals with diverse backgrounds also different business attitude, what all gives us more challenges, but at the same time more advantages.

At the same time the market of IT products is one of the most growing nowadays. IT professionals are highly needed. One of the fastest growing areas of employment in recent years relates to computer technology (Best careers for the future - what is the future best job career, www.alec.co.uk). The human brain has and will always be the main contributor to all IT products both old and new, and because of this, they are the most expensive products available.

Accordingly we could consider two tendencies in modern business and project management area:

First, there are more and more multinational projects used by companies, which are looking for the professionals globally (Top three trends shaping global business success, www.globalenglishblog.com).

Second, there are constant innovations, new technologies required to succeed, what leads to increase in IT projects (Top three trends shaping global business success, www.globalenglishblog.com).

Both issues could be interconnected, so we get a new phenomenon, which gives us new types of teams and new variety of projects where we need new methods of management: multinational IT project management. Studying that area is going to be the subject of my Thesis work.

1.2 Purpose of the thesis and methodology

There are some questions which I would like to get the answers on. What is the role of a project manager for multinational IT team? What are required skills to be a multinational IT project manager? What are the existing tools and methods to manage a multinational IT project?

I am sure, there are a lot of materials about the topics, which I am going to study, and I'm not aiming at creating a new method or theory. The main purpose for this paper is studying particular cases, for example, successful IT projects and then describing actual field experiences of working project managers. My goal is to analyze their methods and get the picture of what traits would be most suitable for an IT project manager, who manages a multinational team. By summarizing all those materials I would like to get a better picture of working models for different cases.

In my opinion, IT professionals have one advantage, they can be from different parts of the world, but they can use one language which they all understand very well, it is the language of IT technologies. However here another problem appears, how to explain their ideas to people without IT background, e.g. customers, project managers, partners.

Methodology

The question is: How to manage multinational IT projects? There are different ways to get the answer, for example, by studying theory. I decided to do it in a more practical way by asking from working IT area professionals about their experience and advices concerning project management. In Section 2 of this thesis, two topics will be discussed in detail. A brief introduction of these topics are as followed:

Topic one: an overview of some Demola projects. In general all Demola projects are IT projects and most of the teams have several nationalities involved; hence this is the right place for my research to commence. I will analyze the experience of Demola students. I'm going to use their thoughts and comments to make my work more useful for all participants of multinational IT projects.

I've received some interesting cases and set of different approaches to analyze. There are three IT projects I am going to study and project managers have absolutely different background, one is IT professional without special business education, another is totally business oriented person with no IT skills, and the third is creative, art, design oriented person. I want to study all those cases and see how it works with different project managers, with different ways of thinking. It should be noted that there is not only one way

of management, because all those projects are very successful in Demola, even though they have different ways of management.

Topic two: research and interviews of professionals. I am going to analyze the experience of different professionals, like project managers and programmers. I will interview project managers without IT background and project managers who are familiar with IT area; also IT professionals (programmers) will answer my questions. PMs will be asked about their methods; programmers will tell me about their expectations and how they see the process. The idea is to get as many different opinions as possible, so I can see the issue from different angles. The final chapter will describe tools and methods used by the owner of IT company in Tampere with seven years of experience in multinational IT project management, what will help me to sum up all ideas.

1.3 Theoretical framework

I took the most applicable for my research HR theories and practices as a framework, such as leadership styles, motivation tools, cultural diversity and conflict management. I am going to describe the cases mostly according to those areas.

Figure 1 illustrates how I see PM in IT company working in multinational atmosphere and the main challenges he or she faces. That shows that PM in IT company is responsible for one or several projects, those projects could be different. Some are innovative, when the task is to create a new product for the market (e.g. a new type of navigation system), some can be a software development projects (e.g. reporting software system for the banks), some have multinational team and some need multidisciplinary staff.

Handling organizational tasks (e.g. scheduling or cost management) PM should be able to get the best performance from the team and at the same time keep good relationship with the customer, which could be with or without IT background.

In my opinion to succeed in all those projects PM should know how to motivate the members, manage conflicts and cultural diversity, what kind of leadership to perform. I assume answering those questions will help me to recognize the most suitable ways to manage multinational IT projects.

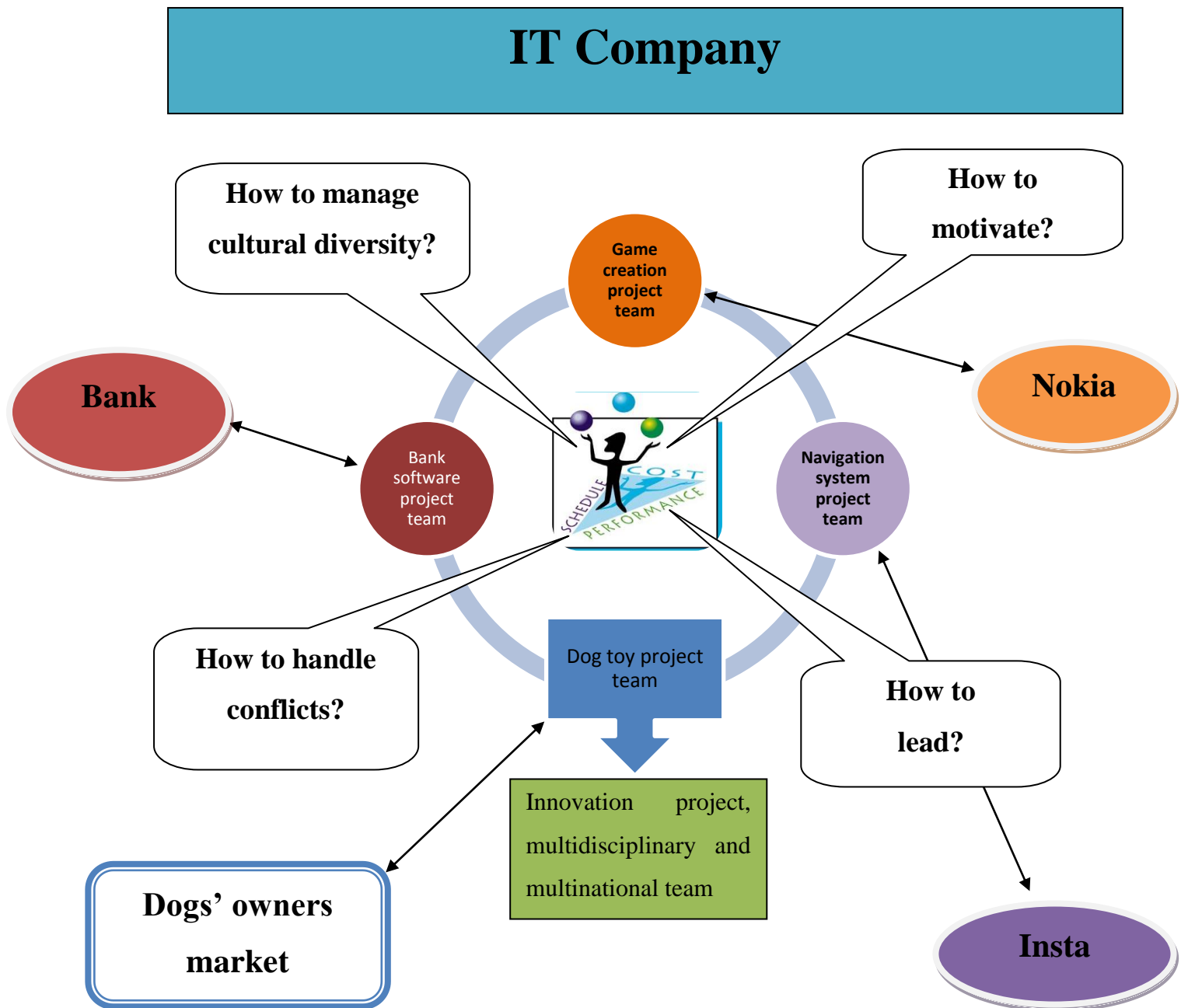


FIGURE 1. Project manager in IT company

I find it necessary to give a brief overview of HR theories concerning issues mentioned above. I suppose it will help the reader to understand better studied cases and the way I was analyzing them, it will make clearer my findings and conclusions.

1.3.1 Leadership styles

Effective leadership styles lead to positive effects and results (Effective leadership styles leads to positive effects and results, www.strategic-human-resource.com). There are several leadership styles, each of them works better in different teams and projects. The idea is to see what is more effective in case of IT projects.

Leadership - the ability to guide, to motivate, and direct other people in order to achieve a common objective. Leadership assumes that there is follower-ship defined as "the ability to follow a leader." It is usually compared to "managing" usually defined as achieving an objective through the utilization of other people's abilities and efforts. A leader is more than a manager. (Leadership, Glossary, www.strategic-human-resource.com.)

Charismatic Leadership

Some believe that charisma is inborn. This is the characteristic of a person who inspires without trying very hard. He or she appears to have a natural ability at leading others. (Effective leadership styles leads to positive effects and results, www.strategic-human-resource.com.)

Participative Leadership

This style is important in making teams work effectively. The leader is both leader and active participant. (Effective leadership styles leads to positive effects and results, www.strategic-human-resource.com.)

Contingency leadership

This is the type of leadership where plans are made in taking care of any possibility that something may go wrong. Risk management is part of this. (Effective leadership styles leads to positive effects and results, www.strategic-human-resource.com.)

Autocratic Leadership style

This involves use of position, power and authority. Simply put, "What I say is the law." Sometimes, this style can resolve problems in situations when other styles fail to achieve the results. But it creates stressful and unhealthy conditions. (Effective leadership styles leads to positive effects and results, www.strategic-human-resource.com.)

Facilitative Leadership

People or groups of people are given some form of autonomy in performing what they are required to do. It is necessary to provide all the supports to enable them to accomplish the given tasks. (Effective leadership styles leads to positive effects and results, www.strategic-human-resource.com.)

Democratic Leadership style

"Democratic" refers to the situation where one is given the freedom to act in the process of doing required tasks. This style is suitable where the people are mature and know all or most of the things involved in accomplishing the tasks given to them. Self-regulation ensures that everything goes according to plan based on the policies, rules and procedures. (Effective leadership styles leads to positive effects and results, www.strategic-human-resource.com.)

Situational Leadership

The leader is required to exercise different skills under different circumstances. Try to understand the leadership styles in order to play your role while wearing "different hats." Alertness to changing circumstances is required of leaders. A fast response plan is also needed. (Effective leadership styles leads to positive effects and results, www.strategic-human-resource.com.)

Team Leadership

The leader of a working group or party needs skills in handling each team member temperament and needs, and the needs of the group. Good intra-relationships (within), understanding, cooperation, collaboration and partnership are necessary. (Effective leadership styles leads to positive effects and results, www.strategic-human-resource.com.)

That was a brief introduction of different leadership styles, based on that HR theories after studying different IT project cases, I plan to finalize what type of leadership is the most suitable for multinational IT projects.

1.3.2 Motivation

Motivation - is something such as an incentive or a reason that makes a person act in a certain or expected way. An example is pay, that is, money. (Motivation, Glossary, www.strategic-human-resource.com.)

Many theories have been founded to explain motivation; however they have had their own critical acclamations. Here are simplified tools and techniques to understand the motivational factor, named as Positive and Negative tools and techniques:

Positive tools:

- Praise - one of the oldest methods used even today to motivate individuals. Effectively used in training and helping individual in learning new concepts
- Salary or wages or increments- all these are fringe benefits used to motivate the employee, but this being only a temporary phase
- Recognition - this is a very positive tool, wherein the higher ups motivate the employees by recognizing their work potential, the employee feels highly motivated when his work gets recognized, rather than just giving him a big pay packet
- New roles- when an employee is given higher roles, they themselves act as motivators rather than working for years on the same routine job
- Social atmosphere and working conditions - also play a crucial role in motivating the employee in his work. When the employee is surrounded by equally motivated lot, he or she is bounded to be motivated and vice versa
- Needs - all of us have needs which are varied and ranked by us differently, hence it is important for the boss to have a clear cut measuring method to know the varied interests of their workforce. (Blog about Organizational Behaviour and Human resources, Tools and Techniques-Motivation, www.obandhr.blogspot.com.)

Negative Tools:

- Punishment - when an employee is punished for doing the wrong style of working, the punishment itself can make wonders in motivating the employee to do a good job
- Reinforcement - whatever the work style, or project the employee undertakes, it is important that the employee knows whether it is wrong or right. Or what the amendments he has to do, the knowledge of result is a must, otherwise, the concept of motivation doesn't arise

- Critical evaluation - this helps the employee to improve his quality of work, helps in betterment. (Blog about Organizational Behaviour and Human resources, Tools and Techniques-Motivation, www.obandhr.blogspot.com.)

This was the summary of mainly known motivation tools. Analyzing the cases will help me to find out what techniques are more suitable for IT project management.

1.3.3 **Managing cultural diversity**

Cultural diversity - is the most exciting aspect of business in the modern world. The incredible amount of fresh ideas and new ways of doing business derive particularly from cultural diversity in the workplace. (Brian V Moor, Cultural diversity in the workplace, www.blogspot.com.)

Yet, within these opportunities lie many challenges:

- Misunderstanding
- Mis-communication
- Lack of commonly understood respect
- Prejudice
- Racism
- Xenophobia
- Superiority and Inferiority clashes
- Tribalism
- Language confusion
- Varying value systems. (Brian V Moor, Cultural diversity in the workplace, www.blogspot.com.)

All caused by the ever-increasing cultural diversity in the workplace. Possible solutions:

- Building respect
- Getting common understanding
- Building professionalism

- Reducing and controlling prejudice
- Improving communication
- Clear past interpersonal conflicts
- Developing accountability, ownership and responsibility
- Building teamwork & unity
- Getting the commitment of the entire team
- Ensuring cultural diversity in the workplace works for the clients, the teams and the company or organization, well into the future. (Brian V Moor, Cultural diversity in the workplace, www.blogspot.com.)

I assume that there could be some of those problems taking place in multinational IT projects. I plan to find out what are they and what the solutions are.

1.3.4 **Managing conflicts**

There are different reasons for the conflicts, for example, lack of communication (poor communication channels), information, lack job recognition and employee development, lack of support from management, operational changes, lack of recourses, friction between manager and employee or between two or more people, cultural diversity etc (Conflict resolution, www.mindtools.com.)

However there are few rules, which help to move on with conflict resolution, I would refer to the theory "Interest-Based Relational (IBR) Approach". This type of conflict resolution respects individual differences while helping people avoid becoming too entrenched in a fixed position (Conflict resolution, mindtools.com).

In resolving conflict using this approach, managers follow these rules:

- Making sure that good relationships are the first priority: treat the other calmly and build mutual respect
- Keeping people and problems separate: important to recognize that in many cases the other person is not just "being difficult" – real and valid differences can lie behind conflictive positions. By separating the problem from the person, real issues can be debated without damaging working relationships

- Paying attention to the interests that are being presented: by listening carefully manager most-likely will understand why the person is adopting his or her position
- Listen first; talk second: to solve a problem effectively manager has to understand where the other person is coming from before defending own position
- Setting out the "Facts": the objective should be agreed and established, observable elements that will have an impact on the decision
- Exploring options together: important to be open to the idea that a third position may exist, and you can get to this idea jointly. (Conflict resolution, mindtools.com.)

In the end of the paper I will sum up the ideas of PMs about conflict resolution, if they act according these rules or prefer some other ways.

1.4 Structure

Chapter 2 is going to give the overview of Demola projects, which I am going to study. Their teams, goals, background information. Chapter 3 will give the methods and tools described by Demola project managers. I will analyze the ways they have managed their Demola projects. Chapter 4 will summarize the information and advices I got from working IT professionals from different IT companies, who are/were involved in different IT projects. Chapter 5 will include some IT related definitions and terms, which were mentioned in the paper. Chapter 6 will be Summary and Conclusions.

2 DEMOLA ACADEMY AND IT PROJECTS

2.1 Demola Academy

To understand how to manage multinational IT projects I am going to study a few cases, which were held in Demola Academy. This is a perfect place to get answers for the questions, which I settled in my work.

Demola is Functional and internationally recognized open innovation platform for students and companies. In Demola, university students develop product and service demo concepts together with companies and create new solutions to real-life problems. The immaterial rights of the results stay with the multidisciplinary student teams. Companies can then purchase the rights or license the products or services from them. Demola also creates new spinoff companies around the innovations. (Demola's official web page: www.demola.fi.)

They work on projects in the area of technology, services, digital media and games, social innovation and business concepts. Companies bring their project ideas for student teams to cultivate. Demola offers the teams the tools and the teams design the solutions collaboratively. Results are honed into real products and services to be part of the companies' operations or spawn new companies. (Demola's official web page: www.demola.fi.)

2.2 IT Projects

There are mostly IT projects in Demola and most of the teams are multinational. I am going to describe three different projects, each case has its own special features and each differs from others in some points.

The first project named "Off-road Vehicle Navigation Application for PCs", the second "Kinetic Games" and the third "Techie doggy toys". Let's take a look at each to get the idea, what they were doing.

2.2.1 Off-road Vehicle Navigation Application for PCs (business project manager)

Team:

TABLE 1. Team Members (Off-road Vehicle Navigation Application for PCs)

Role in the team, interests	Nationality	IT skills
Project manager, Human resources	German	No
Design Implementation	Finnish	IT professional
Design Implementation	Finnish	IT professional
Design Implementation	Finnish	IT professional
Design Implementation	Russian	IT professional

All team members are male.

Project's Background and Need

The goal of this project was to demonstrate an off-road navigation software with Insta Defense Security Oy as a partner. The need behind the project was off-road navigation, which can be used for military applications, and it is also useful for people simply hiking or biking outdoors. Currently there are relatively few outdoor navigation software programs, and they don't take into account different vehicle types, such as tanks or trucks. (Off-road Vehicle Navigation Application for PCs, project plan, 3.05.2012, Demola.)

The main goal of the project

The goal of the project was to demonstrate an off-road navigation software on a generated map, which models different terrain types and shape of terrain. Also, the software has to take into account different vehicle types, such as a tank or a jeep. The goal was not to produce a software which had direct commercial applications, but to find out ideas which could be used as basis for further projects with the focus on path finding (pre-

cise algorithm), visualization (2D) and an easy handling for the end user. (Off-road Vehicle Navigation Application for PCs, project plan, 3.05.2012, Demola.)

2.2.2 Kinetic Games (IT project manager)

Team:

TABLE 2. Team members (Kinetic Games)

Role in the team, interests	Nationality	IT skills
Project manager/UI Designer	Finnish	IT professional
Graphic artist	Finnish	IT professional
Software/Signal Processing	Spain	IT professional
3d Modeler/Mathematics	Italy	IT professional
Software design/programming	Finnish	IT professional
Software design / programming	Finnish	IT Professional
Software design / programming	Finnish	IT professional

All team members are male.

Project background and need, the main goal of the project

Nokia developed a bendable device: the Kinetic Device. A prototype was presented at the Nokia World 2011, which took place in London last October. (Kinetic Games, project plan, 7.05.2012, Demola.)

The main goal of this project was to provide some games, leveraging with the new physical interaction enabled by this device. Exploiting the possibilities of a bendable device for new user experiences was a motivating challenge and left room for imagination.

The prototyping of these games has been requested since the only applications presented at Nokia World Forum were a music player and photo browsing applications. The new possibilities introduced by this new features were thus still to be demonstrated in a gaming situation. Intuitivity and accuracy were supposed to be enhanced by the use of the bending and twisting moves. (Kinetic Games, project plan, 7.05.2012, Demola.)

The main goal of the project was to make a game that was enjoyable and interesting so that Nokia's new device and its features were used as widely as possible. (Kinetic Games, project plan, 7.05.2012, Demola.)

2.2.3 Techie doggy toys (creative project manager)

Team:

TABLE 3. Team members (Techie doggy toys)

Role in the team, interests	Nationality	IT skills
Project manager, Visual Design	Spanish	Media Professional
UI, hardware	Finnish	IT professional
Software and electronics	Canadian	IT professional
Programming	Chinese	IT professional
Assembling, durability, UI	Finnish	IT professional

3 members are female, 2 – male.

Project background and need

Problem is that people go to work every day so they have to leave their pets alone and in today's world are becoming more worried for their pets' wellbeing when out of the house. The team was creating a monitoring system, so with the ease of using their phone, the dog owner can see right away what his or her dog is doing at the moment and

graphs what the dog has been doing during the day. At the same time the aim was to include the toy that can be controlled from the phone, it can play music or shake, so the dog will be entertained. (Alicia, project manager 'Techie Doggy Toys', Demola Academy, 7.05.2012, interviewer Daria Dmitieva, transcribed.)

The goal

To create from one to three interactive toy prototypes in which the owner can interact with their dog, keep track of their behaviour, calm separation anxiety or give treats using motion and capacitive sensors, vibration, light, sounds and be connected to Internet, home network or owner's mobile device. (Techie doggy toys, project report, 15.05.2012, Demola.)

2.3 Different projects - different ways to manage

We are given here three different IT projects and three different project managers, the first of which has only business background and nothing from IT, second is IT professional, and the third manager is a creative person with art, media, design orientation. I expect from those projects three different ways of management and three different ways of thinking and because of this reason, each of them should have special ways to organize the process and handle the problems. It should be interesting to see from different points of view how to manage the project.

So my idea is to describe those projects, how they were conducted, and what kind of tools and methods were used by each project manager. I am going to combine all this with information that I got from working IT professionals from different IT companies, who are/were involved into different IT projects and see the best solutions from project managers of multinational IT projects.

3 DEMOLA PROJECTS AND THE WAYS OF MANAGEMENT

3.1 Three different types of project managers

I have interviewed each project manager of the three Demola projects. Clemens, Heikki and Alicia gave me their own advices how to manage multinational IT projects. In Sub-Sections 3.1.1 through 3.1.3 one will find the summary of their thoughts (you can find the whole interviews in the Appendixes 1,2,3)

3.1.1 Clemens, ‘Off-road Vehicle Navigation Application for PCs’ project, business oriented project manager

(Appendix 1, interview)

Clemens is German, who has gotten his education (Economics and International Business) and some business experience in the Netherlands. He took part in business related project in home university (mini company (‘Carry on’). The main responsibilities were managing finances, however, he also organized introduction week for the university (for 400 people). Clemens made his internship (sales invoices and commission) in a big German public limited company.

Clemens decided to take part in Demola’s project because he wants to become an entrepreneur and run his own company in the future and Demola is a good place to try out if he has enough skills for management and leading people.

I have asked Clemens how he had managed the whole project, what kind of challenges he faced, how he solved the problems. At the same time I have asked advices how he sees the best project manager for such kind of multinational IT project. Here are the main tools and methods he was using together with advices.

Team members and hiring process (who is the most suitable team member for IT project)

I was trying to get the best solutions to see who can be suitable for that type of projects, in case if all candidates are even in their professional skills. The main point is to understand the best way to recruit IT professionals. What kind of personal qualities are required for good IT team, how to hire the best people and who would create problems, conflicts etc

Off-road navigation software project team consisted of mostly IT professionals and only one business oriented person. In Clemens' opinion it is not the best solution for such kind of project, especially when it is connected to innovations and making a new product.

From the IT side the most preferable candidate would have experience in different fields not only programming. It could be business knowledge or design, some specific hobby. It is always better to have open minded people, with broad scope of knowledge. "I like to work with people with broad scope, open minded, it is easier when you work with interdisciplinary people, they come up with more creative ideas than programmers, who are too focused. I would avoid taking those 'nerd' guys."

In general for the team: more diversity is better.

"What I really miss, we have only men in our group, the best thing is to have mixed group, in the Netherlands there are many additional work groups, you only work in work groups and usually the best groups consists of men and women. Next time I would choose one or two women if we have group like for that project (5 members). And media guys are missed ... some more creative. It is pretty hard for me to convince all programmers what I want to change. They say: "It is customer friendly enough", but it is not, it is grey, the buttons are ugly, they don't see that. Some more business related guys and some more creative people. The project has too strong focus on a technical background."

I have asked Clemens about having arising conflicts between the team members, who could at some point face problems with opinions. The answer was, that "it is even an advantage to have some people who can argue and prove their ideas. It is preferable to have team members who are at the same stage as project manager. It is easier to lead

them, because in this way they can be creative and effective. It is always good to have the same or even better skills than PM does, otherwise the project won't succeed".

Team management (multinational challenges, ways of leading and communication)

I was asking about managing people with different backgrounds, those who are from different countries.

There were three Finns and one Russian in the team and the project manager was German.

I have noticed that at some point it was easier for Clemens to understand and work with Finns. I suppose the reason is that business culture and attitude to work is more similar in those two countries. Finns and Germans are more organized and use the same approach to get things done, e.g. better in keeping deadlines, schedules etc while Russians are more chaotic in that area, it is quite often for them to make all in the 'last minute'. However easier doesn't always mean better for the project. Different approaches can become an advantage.

In general communication inside the team wasn't that different, team members are all very young to have huge differences. However, different ways of communication were easily recognized, such as how the official meetings were run:

Finnish people are quite informal and in many cases silent... Clemens had to encourage them to say something. "It is better to ask twice (5 minutes later somebody for sure will say: "I have a question!") and they come up with really good ideas. Finns try to be very polite."

With Russian people it is completely different: Russians seem to be more direct, which to some could be looked as at a rude or impolite approach in doing business.

Then, the idea behind education and how it differs between the three cultures. Education in Russia is more theory based, for example, Russian team member had a lot of good ideas but he didn't know how to put them into action and Finns are more practically oriented. Also seems that Russian IT students don't have any business background

and studies, therefore they are less organized, which sometimes it is too chaotic way, how they do the things.

I have asked Clemens, if it would be better to have one nationality for the project. The answer was that one nationality could make things easier; usually people with different education make the work more effective and creative. It can be an advantage to have multinational team, but if there is fast approaching deadline and are short on time it could be a problem if people have to spend time to organize themselves in the diversity. But it is always preferable to have multidisciplinary team.

In addition Clemens mentioned that he had to change the way of leading according to this team. It works in different way in Finland, than in Germany. The way of leading is more aggressive and direct in Germany, for example, the boss gives instructions and team members should follow them. In Finland, project manager should always first ask team members if they agree with his decision and way of thinking, there is always a dialogue. "Project manager is a 'Primus inter pares' or the first among a group of peers. All decisions are made in a group, of course, sometimes he gives a direction and has to decide something, such as managing conflicts, but in general all team members are involved into the decision making process.

Management tools

Most of the IT projects have special development methods to get things organized and structured e.g. Agile, Scrum (part of Agile), Waterfall. In that project at the planning stage the team chose Trello system (Scrum based). The whole process was divided onto several parts (4 weeks periods - sprints) and each part included a set of particular tasks to complete. (I have given more deep explanations of those terms in Chapter 5, IT related definitions)

Expectations from team members

I was interested in the PM's opinion and wanted to have the following two questions answered: what is expected from team members and what is the way which helps to avoid or predict problems or conflicts?

Team members should be punctual, do the work that was agreed, to give a call to project manager if they can't come to the meeting or will be late, come to visit PM if they have problems. Clemens always encouraged his team members to participate actively in the discussions, or to discuss how they have opposing views. It is always better to have thinking members.

“I always encourage them to participate actively, say something, if I decide something wrong, they should say it... I am not the brain of the group; we have 5 brains in our group. Some bosses do not want that their employees think, but especially in IT branch it is absolutely necessary! According to my style of leadership I need thinking members, I really want them to tell me if they have better idea or if there are some problems...”

Project planning process

First of all the team should do it together, there has to be a discussion about what should be done, how and when. Each member should give his or her opinion about the processes and tasks. Only after this work packages have to be divided according to particular skills and abilities of team members.

The whole project plan should be done by the PM, because in Clemens's opinion, documentation it is the PM's task. “My point of view we have to use every ‘free hand’ as a programmer, this ‘free hand’ should really program, not waste time by typing project plan, because I cannot program... our core competency is programming ...Everybody should do what he wants and can.”

During the project it is more than possible to have changes, but it is important to follow the overall structure and keep to the set deadlines. In that case Scrum methods help, where you can divide the whole project onto several sprints (1-4 weeks), each sprint consists of several tasks that should be completed.

At the planning stage it is important to estimate the time constraints, which will be needed for each task, here is IT knowledge are critical, because for non-IT person it hard to see how much time each task takes.

At the same time PM always has to be ready for making changes, such as if the customer asks for a new feature. PM has to focus on what is more important and skip less valuable work. The biggest challenge in IT projects is actually constant changing environment, it is important to keep discussing with the team.

Meetings

The project had two types of meetings: with the customer (formal) and team meetings (informal) and I have noticed that all three projects had the same types, customer- and team meetings. However the most formal was customer meeting in Clemens's team. Other teams didn't use that much agendas and minutes and the reason could be that German business culture has more strict approach to the meetings with authorities, than Finnish and Spanish.

So the customer meetings in 'Off-road Vehicle Navigation Application for PCs' project were highly formal, with agendas and minutes, strict schedule and roles. At the same time the team meeting were just discussions, what should be done, what is done, how to solve problems, because the customer shouldn't know about team's problems. During a customer meeting should be shown what team has done in a nice way, plus questions and feedback.

I have received an advice from Clemens, to make the process faster it is helpful to allow programmers speak their native language if they are from one country. "I didn't want to slow down the whole project, because of language problems, so I decided to allow Finnish guys to discuss the issues in Finnish and then to tell the solutions for that ... They can talk Finnish as often as they want, if it makes the project faster, I am interested in result. I have asked Russian guy, so it was democratic decision."

Customer relationship management

In that project the project manager is the only person who contacts the authorities, only one who writes and gets emails. Clemens supposes that it is very important to get the customer involved, so PM was taking care about that. The customer was invited to every pitching event in Demola and then the review was sent to him.

I asked for advice if the customer is not involved or doesn't want to be. In that situation better to take responsibility and make decision independently. "You have to take into account that it is not a customer it is your partner, you will sell the product to another customer... in that case I would decide on my own ... otherwise you won't move on."

Risk management

The main idea is that there is no way to avoid all problems, but you can oversee most of them. As in any project in IT project there are risks, such as somebody leaves the team, the team can't keep the deadline, lack of some resources, sickness of team member, communication problems, conflicts, failure to complete the task. Most of those problems can be managed and solved but special for IT project is probably could be risks when some of the equipment is broken or important information, files could be deleted or disclosed.

The best solution for all this is to be ready from the beginning to all those possible problems and to do as much as possible to avoid them, e.g. make backups and oversee possible conflicts.

Managing conflicts

In most cases for such kind of projects there are low-level conflicts. Especially with Finnish people, they are not that conflict, "they usually focused on the main goal and know what they want to achieve". There could be conflicts because of national diversity and different background; however this is the case with all projects working as a multi-national team.

The solution is to observe the discussion and ask both sides points. Then, if it possible, to ask not involved members' opinion, followed by picking out a better decision what will work for the customer. PM should always encourage the team to remember what customer has said. The task of PM is to keep track on a customer side and PM has the last word to say.

Motivation tools and team building activities

In most cases for IT professionals the project itself can be a good motivation, also money which they get for a good work, food (“one of the best motivation tool; if you are hungry and food is bad quality you can forget about other things”).

Team building activities (e.g. social events, going to a bar together) are very important; it helps to get trustful relationship. The best conversations happen when team members are not sitting in front of the computers and it is absolutely necessary, when people meet in not typical, usual work environment.

Advices for the whole project, based on own experience

I have asked project managers to share what they would do in the same way and which mistakes they would avoid.

First of all Clemens believes that the PM should be responsible for all non IT related activities. PM responsibility is to do the project plan and to do the organization stuff, write the papers and the others should only implement their personal parts (e.g. expectations, working hours).

Another piece of advice would be that the PM should work more in the beginning, has to think about things what can appear later, even it seems having a lot of ‘lazy’ hours when project just started.

Ideal Manager for multinational IT project

“In general he or she should be open minded, flexible (it is very important), should have been travelled to a lot of countries, should have done some internship or study abroad, so should be familiar with different cultures and working styles, ways of leadership. He or she should be very good communicator (the most of the projects fail because of lack of communication, it is the biggest problem everywhere, especially with the programmers); PM has to encourage them to talk; otherwise he or she will never get their needs and problems.

Then PM should have business skills, should be business oriented. At the same time he or she should be interested not only in business, it doesn’t matter it could be, for exam-

ple, design ..., it makes things easier. If you only focus on business you are not able to adapt good ideas from other disciplines.”

One of the most important questions I wanted to get the answer on was: is it necessary for PM to have IT skills to manage IT projects?

“It depends on the size of the project, it would be useful, it makes communication faster, easier. But still the most important for PM to be business oriented, business skilled, to focus on a customer needs. It can be IT manager who has business skills, of course, but he or she has to have business skills somehow. I am absolutely sure project can survive without IT skilled PM, but it won’t survive without Business PM.

In case the group is bigger than 10 programmers there could be two managers, it would be useful to separate the work. When there is one person who sticks only on IT stuff, who makes meetings with the programmers, where they can discuss the directions, and make decisions, and there is another person, who organizes public affairs, keeps track on a workload etc. Bigger the group it is more useful to separate the work.”

3.1.2 Heikki, ‘Kinetic games’ project, IT project manager

(Appendix 2, interview)

Heikki is Finnish, IT skilled project manager. He is studying usability engineering at University of Tampere. Heikki hasn’t been project manager before, but has been working in few projects at usability side, so he speaks the same ‘language’ as other team members of Demola project. Heikki gave his advices about project management.

Team members, hiring process (who is the most suitable team member for IT project)

It is quite important to obtain team members who are independent thinkers, who can come up with the ideas by themselves, e.g. for graphic design; it is very helpful when programmers are initiative. It is better to avoid people who are not open towards new instruments and ways of doing things, when they see the processes only from one angle, use always the same tools and methods, they should be creative. “I want to have in my

team open minded people, more flexible, who can accept different opinions and be ready to learn.”

Team management (multinational challenges, ways of leading, communication)

Challenges arising from multinational teams: some members were not punctual; the problem was solved by just explaining, how things are going in Finland; and that it is important to come in time. The same members were not that organized, but at some point PM should understand, that it is different way of doing things and probably to control some critical processes. Language problems were solved by supporting all important discussions with emails, written minutes after the meetings.

There were some communication gaps in the beginning of the project, but later on people became closer and things got better. “Some of our team members are not that socially active, they don’t keep contact so much as other people, but it has been becoming better and better during the project (some people need time to get into communication), maybe it is about getting trust.”

I have asked if it is necessary to have a multinational team. The answer was that it depends on the customer, team should be chosen according to customer needs and final product, in case it is going to be used by people from different countries better to have international team.

Management tools

As in previous case the team used Scrum method (the length of the sprint was 2 weeks).

Project planning

The team was using the same project plan which was made in the beginning. In most cases the process of planning was the same as in ‘Off-road Vehicle Navigation Application for PCs’ project team. So all team members were taking part in the discussion; everyone gave his opinion and explained which task would be more suitable for him. However Heikki was aware about everyone’s skills so in some cases he gave the tasks and

divided work packages by himself by taking into account what each member is able to do.

Also Heikki gave one week to study Unity (work environment for game creation), so everyone could evaluate what he can contribute into the project, which task would be the best for him.

Heikki mentioned that an 'Hour' document (paper where team members mark hours they spent at particular task) as helpful tool for planning. "It is useful tool to see how much time tasks need to be done, so in the future we can get better planning for similar tasks."

Meetings

There were settled fixed team meetings once a week, but customer meetings were discussed every time. Both meetings weren't that official, without strict agenda. During customer meetings PM was introducing the results and team was getting a feedback; at team meetings there was mostly discussion about the tasks, problems, solutions.

Customer relationship management

The team got 'free hands', which made the process more enjoyable. There were customer meetings in the end of each sprint (2 weeks period), where the team usually was getting feedback, asking questions, showing what had been done, also told if there were any problems.

It was more like partnership for that team. Heikki has IT background the same is for the customer; hence they could speak common 'language'. The relationships were mainly about showing results and discussing solutions at the meetings. The customer had a good idea how things were working in the product, so there was no need in extra explanations.

"Nokia customer got IT background (engineer, usability engineer). We gave the ideas, customer has chosen the most suitable ones then we started the work. I'd say it's not minimized but more open relationships. So we have basically 'free hands' to do things

our way, but the final product is made so it meets the customer needs. This means that we can use working methods that fits for us, but at the same time develop product that satisfies customer in all areas. Basically this means that in the end of every sprint we tell the customers what we are focusing on the next sprint rather than they are telling us what they need, of course, if there had been situation where we didn't have enough time to everything; they had the final word on setting the priorities for tasks. This works only if both, customer and team have same idea of the final product.”

Risk management

Some of risks were estimated from the beginning at the project planning stage. Two of problems took place (one team member left projects and the other was that one of the devices was broken), but they were expected and team members were ready for that. So it was easier to handle them.

Conflicts

There were no conflicts between team members, except small ones, for example, when somebody was late, but it was solved very easily. The main solution for conflicts is to stay friendly and to talk about problems with team members.

Motivation and team building activities

“The biggest motivation for team members of that type of project is the project itself.” And as it has been mentioned already in the paper: one exceptionally good motivator is food. Heikki has used it several times by bringing e.g. candies during long workdays.

Then Heikki told me that he had promised the team to give a free week after hard working days, when they had to finish some big task, so programmers were working in better mood waiting for holidays.

Team building activities are useful, but PM needs to take into account that all this needs time, so it helps, but there should be small short-time consuming activities.

“I think the way how we work at Demola is more casual and relaxed than "work-like", so it somehow provides good environment to get to know each other.”

Advices

I have understood from the interview that Heikki tried to give his team members as much freedom as it is possible, so he didn't control every process, only in some critical moments. He explains it that it could be frustrating for programmers when PM gives too many instructions and tries to push processes.

“I give tasks for everyone, but I don't push them doing things during the sprint if everything goes like it should. If there's no process in the last week of sprint then I start to give more strict and exact orders, but not in 'bossy' way, more like advices.”

Ideal PM

“He or she should be social and not 'bossy'. At the same time PM has to have courage to give tasks, to tell what should be done, but remember to give free time for team members, also to give freedom to decide by themselves. He or she should be like an 'elder brother' who organizes things, takes care about processes, so team members don't have to worry about documentations or meetings, they can concentrate at their tasks.

But at the same time the way to manage depends on the type of people in the team, some people need more strict kind of leadership; some can be frustrated by that. So it is quite hard to have both types in one team to manage them, it is better to hire similar in that way people for one project.”

It should be noted that for this project it was very useful that PM had IT skills. Understanding things helps a lot, especially in a small group.

3.1.3 Alicia, 'Techie doggy toys' project, Creative project manager

(Appendix 3, interview)

Alicia is studying Media in Tampere University of Applied Sciences; also she has been doing photography. Alicia is taking part in the Mindtrek festival organization (International Digital Media & Business festival), which is the way she recognized her management skills. As she told me Demola had become a good place to try out her ability to manage projects and see if she wants to move on in that direction in the future.

In Alicia's opinion there are two ways of doing things: first starts with education and getting the needed knowledge and then going to practical experience and the second way is to start by doing and learn during the process. Alicia is the second type, she is learning by doing. She mentioned that some of management knowledge and ways of organizing people were already in her head, she probably just didn't know the names and some terms e.g. development methods, but always felt like a good organizer.

"I always knew how to organize, for example, my time and my schedule, this is much more applied. Some people have studies at that field and some people have no studies at all but they are still very good managers. Some people learn by studying some people learn by doing, I am the second type."

I should mention that Alicia's project is one of the most successful in Demola Academia, hence I find it useful to analyze Alicia's management way and approach. She got her own way of managing people not from the books and lectures. However her advices must be very helpful for those people who want to become good multinational IT PM (e.g. me). During my interview I have asked the same questions which were for Heikki and Clemens.

Team members (hiring good professionals)

It should be a person with a lot of motivation and of course should have enough skills. It should be a person who knows 'a little about everything'. Especially in case of small teams, so it is better to start with that.

It is better to avoid those people who can't work in a team ("Sometimes you can find a person who can do everything and he or she just focuses on a task, doesn't really need others"), they are better at doing individual work related projects.

Team (multinational issue, ways of communication, challenges)

Alicia from the beginning has noticed differences in communication. According to nationality team members behaved in different ways. At some point that was challenging to manage those people, but it gave a lot of benefits and became an advantage. Alicia is sure that team must be multinational for such innovation IT projects.

“I think it is great that we are from different nationalities, we can have so many different points of view. For example, Finnish people usually for taking less risks, and we with Canadian team member are more like ‘No let’s try this!’, we can balance each other. Also Chinese team member is always very cheerful. That makes them all work harder, I think that balance us in a very good way. Cultural diversity works very well in most cases, sometimes there could be problems, like language issue, people feel more comfortable speaking their own language, but a part of that , there are problems you can fix.”

According to nationality Alicia described her team members and their special characteristics, attitude towards work:

“Finns are silent, less risk taking; they prefer to take things in which they are sure and stay at that level.

Chinese: there could be language problem ... then communication is quite hard, when person prefers to work at home a lot, kind of self-working. I always had to ask: What you are doing, at what stage are you? The way of understanding things is really difficult. I had to ask a lot and we have managed. But still the person is very good at work. The solution for that situation: Reminding, calling.

Canadian: more or less the same like Chinese. But I suppose it is not nationality issue it is more technical people issue.”

In case PM faces the problem, when team member prefers to work by him or herself, one way to manage is by repeatedly asking, reminding about team work and responsibilities and, of course, talk and explaining help.

PM’s Expectations from team members

Alicia was expecting that team members were constantly learning for the project e.g. how to work with people, talk about tasks not in technical words, also how to market themselves and the product.

Management tools

There was mixture of different development methods, like Agile and Waterfall.

Project planning

The customer (Nokia) settled a tight schedule for the team, hence the main task was to divide the work into work packages and assign them to each team member.

The main idea is that project plan should be written all together: “PM should not write it by him or herself, everybody has something to say, one person can’t know what the other person can do...” All team members should be aware about everyone’s skills and abilities.

There have been changes in the project plan, because some unexpected things, like sickness, quitting from the project etc

Meetings

There were two types of meetings (as in the projects mentioned before): official meetings with the partner or customer (every 2 weeks) and once a week or even more often with the team, which are not fixed and quite informal.

Customer relationship management

The customer of the project was technical oriented and really involved into the process; hence in general there were no problems in communication.

In that project Alicia wasn’t the only person responsible for communication with the customer. If there was a technical issue the IT person of the team contacted customer, Alicia supposes that it is time consuming to have only one person, who still is going to

resend the message to another professional. It is better to contact directly. But everyone should be aware; hence emails usually have all team members included.

“I am not the only one responsible for that ... when they have to talk about technical stuff, normally the customer contacts directly to technical oriented team member, it takes longer if it goes through me, but we track emails, so everybody knows what is going on.”

That approach is different from Clemens's and Heikki's teams. I would assume that in the first case that was common decision of the team. Programmers probably didn't want to get involved into relationship with the customer, so Clemens was kind of link between two sides, in that project that was more comfortable way for everyone. And in second case Heikki was IT skilled PM, hence there was no need in 'translation' of IT related issues.

Managing conflicts

In Alicia's opinion it is good to avoid conflicts, but PM has to be able to handle the conflicts, they do happen. The best solution for that is to talk; there is always some common point that can be found.

“If you have to face that, you have to be calm and try to be as much as possible talkative, communicative, try to find out what he or she wants (person who starts the conflict), sometimes it is just about the communication. People who make conflict they have an idea, strong idea, about something they just go for it, and they are really close minded. But if you try, let them see that the others have something different, with time and some efforts you can manage it. Some conflicts could be culturally an issue, for example, the way of communicating with a woman, the position of a woman. But normally it is just lack of communication (strong vision of something).”

Motivation tools and team building activities

The best motivation for team members is the project itself, then cheering, reminding about success, good feedback from professionals.

Team building: “I always convince them to go somewhere together and to talk about something else than this project”. It helps, but there should be enough time for that.

Advices, based on own experience

Alicia: “This project is really successful, I am happy with the team, results...” But still Alicia emphasizes that communication should be more intensive, more common, everyone should be aware about all processes going on in the project.

“I would communicate much more. Everybody should know that people are doing in a team. So if customer asks, what is going on with the code or something, and I say: I don’t know, ask programmer... This should not be a right answer!”

It is also very useful to have one communication tool for everyone, e.g. this team had a Facebook group, but not all members were using it actively, hence Alicia should inform different team members in different ways: through email, FB group or calling.

Ideal PM

I have asked who the ideal PM is and if IT knowledge is needed to manage such kind of project.

It is important for PM to be cheerful and know how to work with people and in a team. Good PM should see the skills of people and know how to manage them, see their roles. He or she should be able to get things all in order and keep the process structured, and of course, PM should be good with deadlines.

IT background is needed, that definitely helps, but PM has to know only the basics, just to know what team members are talking about. “I think the PM should know a little about everything but nothing really concrete, because if you know too much, then you will get too stacked”

3.2 Conclusions

It was a wise decision to take three different projects, which had three different project managers. After those interviews I found out some main points of successful project management and it seems there is no one way to get project done. All depends on the nature of the project, on its size, on the customer, on the team and even on project manager who makes the atmosphere and gives the direction.

I should remind again that all three projects are very successful, customers are happy, Demola academy staff is proud in spite of projects managers are so different in their background and attitude to work.

Here I want to sum up the best ideas and advices gotten from Demola project managers.

In most cases it is very useful and good for the project to have a multinational team (regardless of some challenges), plus at the same time it's even better if it is multidisciplinary team, so all members can contribute different skills and knowledge to the project. That means PM should be always aware about differences according to ideas surrounding different background, some people are less organized, independent, but they can be more creative, risk taking.

Communication is the best tool for handling conflicts, also PM should always be ready to say the last word and remind the team members that every solution should be customer oriented and be done according to customer needs.

IT skills help a lot, but over knowledge can slow down the process and make it less creative. However basic IT knowledge should be, so PM can estimate right deadlines and understand what his team members are talking about. The main task of PM is to organize the best atmosphere for professionals, so they can work on their tasks and not care about things what can disturb them during the working process (finances, meetings, documentation flow etc).

The best project manager should know "a little about everything but not really concrete", be self-organized and have cross-cultural communication skills.

Finally it is time to take a look at theoretical concepts which were described in the beginning and make conclusions based on them.

It seems that all Demola project managers were avoiding behaving in autocratic way. They were mostly facilitators and sometimes working together with the team on some tasks, what refers to participative leadership style. Giving more freedom to team members and still controlling at critical stages is close to situational leading.

Recognition, money rewarding, praise were common motivation tools used by Demola PMs. At the same time friendly social atmosphere and good working conditions encouraged teams to work better.

Common problems faced by PMs according cultural diversity were language confusions and different attitude to work. Simple increase in communication and more support helped to solve the problems.

Conflicts almost didn't take place in the teams. I would conclude that Interest-Based Relational Approach was used by all PMs: good relationships were the first priority in all teams; all PMs were always ready to listen and they were working together solving the problems.

4 MULTINATIONAL IT PROJECT MANAGEMENT BY PROFESSIONALS

4.1 The experience of IT professionals

I have interviewed a few professionals from different IT companies. I was interested in getting both sides' opinion: how programmers, those participants of IT projects, see the processes from inside, then how it works for actual IT project managers. Here I am going to first analyze the answers, then compare them with Demola project managers' experience. (The actual interviews are in the Appendixes 4,5,6).

The main purpose of interviewing IT professionals for me was to understand their needs what kind of conditions are the best for them, what motivates them, what is challenging, how they see an ideal project manager. I didn't ask them how to manage the project, I was mostly aiming to get what are the best conditions for programmers, when they enjoy their work and the only challenge is coding.

In addition, I have asked them to tell me about their experience in meetings, customer relationship. One thing was common: most of my questions were understood in a very concrete way (as it actually should be in case you ask technical person), and on one of my favourite question how to handle conflicts I got the same answer from all programmers: We almost don't have them...

4.1.1 Brian, IT professional

(Appendix 4, interview)

Brian used to work as a software implementation specialist (he was working with clients in deploying the software for them the way they want it). He was responsible for the coordination and execution of the full software implementation process of company's financial reporting software on client sites throughout Europe.

There were few project managers in the company. Brian was responsible (a part of technical activities) for daily work coordination, he was kind of between project managers and whole IT team, 'helping with daily stuff'.

Briefly about the project and company

Brian was working in European division that had a parent company from US. The activities were quite different from American side, because the US has one way of doing taxation and one way of book keeping also reporting is different, in addition different European countries have different legislation. That requires being more dynamic and flexible.

The average age of European devise members was about 25-26 years of age. The company had the Head of European division, four PMs, 12 Implementation Specialists. Then on the other side there was team from India (30 years old). The team had own project manager and similar Implementation manager (like Brian), who had to explain and delegate the tasks to his own team. One project they were working on took about 3-4 months. Customers: mostly investment banks which needed automation of their book keeping.

Cultural diversity and its challenges

There were three teams: one from Europe, another from US and one from India. Brian noticed that US colleagues have different way of getting things done (Americans have more structured way). And both sides preferred to follow own systems (“That was really clear that they didn’t like our way of working, we didn’t like their way of working”). In this case when teams located in different countries, the impact of cultural differences is much less, than it would be if teams were working in the same building, for example.

There were some language problems with Indian colleagues. They were doing exactly what was said by European team leaders, what was probably, because of lack of knowledge and difficulties in understanding. During the project the problem was solved by creation of checking system, so Irish programmers have been going through all what was coming from Indian partners.

“We had to make things very clear. Because one thing I noticed with the team in India, they would do exactly that you said to do even it was maybe obviously wrong, it was a little bit hard. I had to be very careful writing emails, writing changes to make, because there would be one or two times there we had some problems. You don’t check every

word, how it is spelled and then you get comments back from the client: ‘this word is spelled wrong’ ... that looks quite unprofessional. We handled it quite well, we had some kind of check list, we’ve gone every time thorough everything what returned to us, it would be all spelling checked... We were working through the problems and getting better system.”

Meetings (with team) and communication

Having everyday’s conference call, where all team members together with project managers were having discussions about what was done, should be done and if there were problems, held the meetings in Brian’s company, those meeting were not official.

“The atmosphere was a little bit crazy, it could be that I was working on my own in one bank and 12 others were working with some other tasks; it was a bit crazy keeping communication. Mainly we just had emails, also we tried to make a call every morning at 9 o’clock or if needed every evening, like conference calls. So we can have a talk where about anything that coming to your mind and have some kinds of forum to discuss with everybody, basically, think...

It was helpful, because if you are working as a project manager on your own on the place, you can only see the picture from your own side, but when you hear that everyone else is doing and little issues and problems ... it is good to get this feel of how others are doing things.”

Also there were many discussions (same way via conference call) with head of European division, where team members were asking questions, working on the problems and getting advices. If there was negative feedback from the client they got task to fix the situation and find the solution.

Work with customers and its challenges

The main problem with the customer is: no IT background, hence it is hard to explain some ideas. Sometimes work looks easy on the paper, but in reality quite hard to implement.

A possible solution could be: just to be ready spending more time with non IT customer, after some time they “get more understanding how things are getting done”.

Another problem could be: lack of customer involvement and PM should take care about it. There are some points which can slow down the whole process, as a result demotivation of programmers.

“The main challenge and problem was the fact that there was not that much communication between me and the client, and how to use the software, they had one vision of result I had another. They didn’t have the interest in using it. They just wanted a cheap way of getting the things done. The feedback was too long there was round one ... round two of visions, and there were some points of full stops in a wrong place.

I knew myself if clients were interested and sitting down for a few minutes we would solve the problem much faster. I guess they had their own system and culture and the way of doing things which wasn’t as flexible as ours. They had everything like documented written. I would encourage and ask for more interaction with the clients more and show interest in it...”

Motivation and team building

IT professionals were already motivated by working in a young company; they were almost the same age. Some kind of ‘get together’ activities organized by project managers were giving a sense of rewarding, so programmers knew if they work hard they will get enough compensation. Also small things like some snack on a work place could rise up the mood and motivation.

“Working in young company was kind of interesting. I could say it was more like college life. We were working the whole day and there could be like pizza boxes on the table.

We all are getting annoyed with each other and at the same time we had this kind of culture: we knew that we are not going to be not rewarded for doing this. There was still after time boss coming and say: OK! Here is a rental car and you have next two days off, go and have fun!

So when you get such kind of things you think: Well yeah I can work in this company! I know that probably it is not that normal culture in the company, but it was really working out for us, because we were such a young group, like mostly ‘working hard playing hard’. “

Team building is really important and it helps to understand each other better, it is much easier to talk face-to-face to explain things. There should be social events, Christmas parties, for example. Friends can do much more.

“Team building activities are necessary. When I think about the relationship how I would be with the European staff, and if I had this only phone communication without personal contact... it was so much easier to talk to people with those I was working with, who are always around. You don’t even have to explain the things when you have this good dynamic going on. I could say that it is one of the most important things that you could have.”

Conclusions and ideal project manager

IT professionals need more flexible and free atmosphere. It is better if relationship with the customer handled by project manager, who can explain to non-IT clients how work is going on. In case with Brian’s company, the Head of European division had experience in accounting, so he knew the processes from clients’ point of view, it made communication much easier.

PM should be ‘elder brother’, but not strict boss. He or she should be organized, flexible, be ready to work 24 hours, and should have good communication skills.

“You spend too much time by organizing other people, insure if everything is correct for other people, you don’t think about yourself. You won’t be so independent minded, you’re just happy figuring out people’s stuff.”

4.1.2 Juho, IT professional

(Appendix 5, interview)

Juho has 3 years of web development experience, also experience with working in multinational teams. Most projects have been about developing open source web applications for the human resource management of medium and large enterprises.

Briefly about project and company

There were multiple smaller projects that were all part of bigger project of upgrading the product family of the company, where Juho is working. The project took place in 2009 till 2010. The goal was to upgrade software architecture. There were two foreign teams: one was located in Bangladesh, India and another in Minsk, Belarus. Both teams had one to three members depending on the phase of the project Finland had a team which consisted of two project managers (customer side), one IT-consultant (IT side) and four developers (including one trainee).

Team members (who are the most suitable to work with)

Good English skills are important because it won't cause language problems. Then ability to prove their point of view is a sign of 'thinking' professional, the person who always agrees in most cases is not creative and doesn't really help the team.

"... people who always agree to everything start quite soon being less desirable by other team members. These people usually aren't able to see the big picture or they just don't care about the results."

IT professional should keep deadlines and be responsible. Also they should be able to describe their idea to non IT oriented people. Communication skills are important too.

"... there are people who are not really bad at what they do but they are overly unsocial or just communicate in a way that is difficult to be understood by others. The inability to communicate with others easily impairs the team work."

"...considering my personal experience I would avoid people who talk more than they do (not always but it could be a sign that they don't know what they are doing). They

also tend to angry really easily if someone points out their mistakes or suggests something that they do not understand.”

Cultural diversity and its challenges

There were language problems in the project.

“Neither of the foreign teams were too fluent in English. Instructions had to be explained more than once and by changing the contents a bit (to simple English). This often slowed down the development and sometimes even caused a bit of frustration”

Then there were some intercultural communication problems: Indian colleagues were not direct and couldn't disagree and refuse, what could cause decreasing of work quality and sometimes even failures of the whole task.

In most cases the solution for those problems is more efforts with communication, more explanations, clear language, and more collaboration.

“Use more time and effort for communication; don't assume others know what you are thinking; use precise univocal language; if something can be misunderstood it probably will be; more collaboration instead of just dividing tasks to people.”

Meetings

The Finnish team had meetings once a week (not official), where team members were discussing current situation and problems, their solutions, also design of new features.

Working with the customer

The communication with the customer was mostly going through the email. In Juho's opinion it is not the best way to keep customer informed, because “emails get easily slow and clumsy, there are a lot of copies and replies, it is not chronological”.

Solutions could be meetings or communication via some tools that can keep the correspondence in chronological order (e.g. instant message tools)

The best way to have customer meetings is when Business project manager together with IT consultant are attending. So customers explain the wishes, BPM offers some solution and IT professional gives comments how and when it could be done.

“The most difficult part in communicating with customers is that they usually aren’t technically oriented so there easily occur misunderstandings and insufficient explanations about their needs.”

Motivation and team building

Interesting challenging task can motivate programmer. They “are motivated by doing some cool stuff, if it is too simple, not challenging, programmers don’t like it, they want to be challenged, they want to do something new. If they are already in the project and find the idea interesting, they are already motivated.”

Then IT professional should get some freedom, too much control leads to frustration. “They want to have freedom to decide what they can do, if PM always says how they have to do, they can easily quit their work. Independency is important.”

Some team building activities can be useful, as it builds trustful relationship among team members; also it is quite often that in different atmosphere can come more interesting ideas. Simply it could be: “Fridays’ beer, corporative parties to get the ideas running”

Managing conflicts

In most cases programmers don’t have conflicts; if person knows what he or she is doing there won’t be that many reasons for arguing. The best solution to avoid conflicts is: to hire real professionals.

Best practices and advices

It is always better to be honest with the customer. It will help to avoid many problems. “Project managers have bad habit, they promise to the client shorter period to get project done. Better to be honest.”

“Every week code reviews help to avoid many problems, conflicts and overlapping of work, when several programmers work at the same task.”

Ideal project manager

Good project manager shouldn't always control the work of programmers, “they don't get to be creative, they want to solve problems their own way”. PM should give more freedom to IT professionals, when they can come up with more creative ideas.

“He or she can see the whole picture, manage finances, timetables, deadlines and give more freedom. Too many advices is not the best solution with IT professionals. He or she listens to the programmer, helps with the delays.”

It is an advantage to have PM who has some IT background, but in case the team is well skilled and have enough experience in most cases they can make technical decisions by themselves, “often they have much better technical understanding. They don't need that technical oriented PM at all”. More PM works with the team less IT knowledge is needed; he or she starts to understand how things work and how much time each task can take.

4.1.3 Antti, the owner of IT company

Here is the information and advices I got from Antti, he has 7 years of IT experience. He is the owner of an IT company located in Tampere. I assume that this was the right person to ask: How to manage IT projects and multinational teams?

Briefly about the projects

“Projects have been usually related to application development or user experience prototyping. Goal has been making a product or part of a product. Project length has been from three months to two years, mostly longer than one year. Teams have been more local in smaller projects and spread more globally in bigger projects.”

Hiring professionals (how to get suitable people)

“Hiring process should include at least long enough talk with the person to find out real priorities of the person and to get sure that he or she is “on the map” with his or her personal and professional life.” The most required professionals should be “focused people who have personal interest to the topic and who have proven background”.

Project team (ways of communication according to their different nationalities)

“Communication and processes are different depending which culture person is influenced by. Some cultures are used to more bureaucracy and some are more independent: High vs. low hierarchy.”

“Problems related to communication can be generally described “how to understand what the person means”. In some cultures people have more negative and in some more positive view from the current situation. In addition, more bureaucracy and authority hierarchy you have been used to, more negative information you tend to hide. So low hierarchy is better. Basically there is no process that handles these problems; it’s more that people inside the project should be aware of these issues.”

Expectations from team members

“I expect relaxed feeling inside the project even in front of “impossible problems” with great output during the project.”

Project management tools

“Deep Leadership” and “Scrum” methods were used. Responsibility of the end product quality is given to the team itself or single team members and not to the authority using the team.”

“Challenges were usually related to available resources, to tackle problems in scheduled time.” Teams should accept that some people have less or more problems or tasks in their personal lives that affect to the team’s output velocity and, if possible, schedule them too.

Project planning

“Scrum methods have good example from time management: prioritized TODO-list with relative sizing with the list items, and estimated team’s bi-weekly velocity. You can see by this way how many resources there is available against the work amount needed.”

Meetings

“Scrum methods have good agendas and roles for the project meetings. Meetings related to other things, marketing, selling, development discussions, internal information sharing etc. Have usually separate predefined processes agreed. There are no big challenges related to the meetings if the processes are well made and the communication methods are available easily to all people taking part in the meeting.”

Challenges during the projects, managing conflicts

The most common reasons for conflicts were estimated by Antti:

- parties can’t agree about time, when particular work should be done
- some lack of transparency of processes

“Conflicts are usually happening when processes and agreements have clear lacks on some areas. Usually this happens if all related parties cannot be agreeing in time the things needed. Conflicts can be also made by hiding the project related issues from other parties.”

In those cases PM should oversee upcoming problems and fix it on time by clarifying those issues. “If I have been seeing upcoming glitch in the project I have been making it clear to all parties in time so that solution can be found in time.”

Ideal project manager

Antti emphasizes that PM should not be responsible for technical tasks in the team and that he or she should focus on daily organization tasks. “Project manager should never be a technical role person in the project. Project manager’s role and work should support the teams: making the papers, bills, arranging the meetings, trips etc.”

Also it was mentioned that ‘human being’ issues can be handled by PM, but that happens in case when there is no other HR personnel responsible for that (probably bigger companies' case). “If company does not have own human management hierarchy, where next upper level is separate from the project managers, project managers are usually handling this “human” side as well.”

In Antti’s opinion there are cases when PM doesn’t need any IT background. “If project is “normal” and not really R&D related, project manager does not really need to have IT background.”

4.2 Conclusions

It seems that methods and tools used by IT project managers, working in IT companies, are quite similar with Demola projects’ cases. Such as facilitative leaderships style of PMs or the way of motivation, but still there are some differences. For instance, Antti advises to separate PM and programmers in a way that PM should be responsible only for organization not for technical part; he or she shouldn’t be a ‘work force’ in the project. In Demola projects it happens when PM can program or make usability test (Kinetic Games PM - Heikki) or help with interface design (Techie doggy toys, PM - Alicia)

In my opinion it depends on the project size also on the company policy. It is occurred that both schemes work well and that all projects succeed. However probably in bigger IT companies, PM gets much more responsibilities than in situation with Demola projects.

We should take into account that some organization tasks were completed by Demola staff, e.g. project managers were not responsible for recruiting or some problem fixing (e.g. when 'Kinetic games' team member left the project, Demola in a very short period of time found a replacement). Demola Academy provides comfortable conditions for IT projects, when teams can avoid or fix most of the problems, which in 'real' life requires a bit more time and efforts.

However some IT companies probably use the same framework and organizational structure as Demola Academy has. I assume it is a very well working system, this conclusion based on a lot of successful stories and great results of most academy projects.

I find it reasonable to separate responsibilities of working team and its project manager; it gives more space for PM to take care about creation of environment for effective work, instead of thinking about particular tasks acting as a team member.

5 PROJECT MANAGEMENT AND IT-RELATED TERMS

This section has definitions related to project management and IT areas, such as development methods (those which were used by project managers in case studies: Agile Scrum, Waterfall, Ticket system).

5.1 Agile

Agile software development is a group of software development methods based on iterative and incremental development, where requirements and solutions evolve through collaboration between self-organizing, cross-functional teams. It promotes adaptive planning, evolutionary development and delivery, a time-boxed iterative approach, and encourages rapid and flexible response to change. It is a conceptual framework that promotes foreseen interactions throughout the development cycle. (Agile Software development, last modified on 11 May 2012, Wikipedia, free encyclopedia, www.en.wikipedia.org.)

Agile Project Management is one of the revolutionary methods introduced for the practice of project management. This is one of the latest project management strategies that is mainly applied to project management practice in software development. (Agile project management, www.tutorialspoint.com.)

'Agile' is an umbrella term used for identifying various models used for agile development, such as Scrum. Since agile development model is different from conventional models, agile project management is a specialized area in project management. (Agile project management, www.tutorialspoint.com.)

In an agile project, the entire team is responsible in managing the team, and it is not just the project manager's responsibility. When it comes to processes and procedures, the common sense is used over the written policies. This makes sure that there is no delay in management decision making and therefore, things can progress faster. (Agile project management, www.tutorialspoint.com.)

In addition to being a manager, the agile project management function should also demonstrate the leadership and skills in motivating others. This helps retaining the spirit

among the team members and gets the team to follow discipline. (Agile project management, www.tutorialspoint.com.)

Agile project manager is not the 'boss' of the software development team. Rather, this function facilitates and coordinates the activities and resources required for quality and speedy software development. (Agile project management, www.tutorialspoint.com.)

5.2 Scrum

Scrum is an agile software development model based on multiple small teams working in an intensive and interdependent manner. The term is named for the scrum (or scrum-mage) formation in rugby, which is used to restart the game after an event that causes play to stop, such as an infringement. (Scrum Definition, www.searchsoftwarequality.techtarget.com.)

Scrum employs real-time decision-making processes based on actual events and information. This requires well-trained and specialized teams capable of self-management, communication and decision-making. The teams in the organization work together while constantly focusing on their common interests. (Scrum Definition, www.searchsoftwarequality.techtarget.com.)

Scrum involves:

- Initial appointment of a project manager called the "scrum master."
- Definition and prioritization of tasks to be done.
- Planning sessions for each task.
- Daily meetings among teams.
- Identification and evaluation of potential project risks and process pitfalls.
- Execution of projects in brief, high-intensity, frequent work sessions.
- Reviews of progress and evaluations of completed projects.
- Openness to constructive criticism and ideas for improvement. (Scrum Definition, www.searchsoftwarequality.techtarget.com.)

Sprint.

A sprint is the basic unit of development in Scrum. Sprints last between one week and one month, and are a "timeboxed" (e.g. restricted to a specific duration) effort of a constant length. (Agile Software development, last modified on 11 May 2012, Wikipedia, free encyclopedia, www.en.wikipedia.org.)

Each sprint is preceded by a planning meeting, where the tasks for the sprint are identified and an estimated commitment for the sprint goal is made, and followed by a review or retrospective meeting, where the progress is reviewed and lessons for the next sprint are identified. (Agile Software development, last modified on 11 May 2012, Wikipedia, free encyclopedia, www.en.wikipedia.org.)

5.3 Waterfall

The waterfall model is a popular version of the systems development life cycle model for software engineering. Often considered the classic approach to the systems development life cycle, the waterfall model describes a development method that is linear and sequential. Waterfall development has distinct goals for each phase of development. Imagine a waterfall on the cliff of a steep mountain. Once the water has flowed over the edge of the cliff and has begun its journey down the side of the mountain, it cannot turn back. It is the same with waterfall development. Once a phase of development is completed, the development proceeds to the next phase and there is no turning back. (Waterfall Definition, www.searchsoftwarequality.techtarget.com.)

The advantage of waterfall development is that it allows for departmentalization and managerial control. A schedule can be set with deadlines for each stage of development and a product can proceed through the development process like a car in a carwash, and theoretically, be delivered on time. Development moves from concept, through design, implementation, testing, installation, troubleshooting, and ends up at operation and maintenance. Each phase of development proceeds in strict order, without any overlapping or iterative steps. (Waterfall Definition, www.searchsoftwarequality.techtarget.com.)

The disadvantage of waterfall development is that it does not allow for much reflection or revision. Once an application is in the testing stage, it is very difficult to go back and

change something that was not well-thought out in the concept stage. (Waterfall Definition, www.searchsoftwarequality.techtarget.com.)

5.4 **Ticket system**

Wiki is a common system for documentation, internal documentation, users' guides and handbooks. It gives overall picture of the project.

Tickets. Each Ticket represents particular task of the project. Tickets are divided among team members. Tasks can have different statement (e.g. completed, in the process or needs to be reviewed) (explanations provided by Juho, Software Developer, 7.05.2012, interviewer Daria Dmitrieva, transcribed)

6 SUMMARY AND CONCLUSIONS

In the introduction part I have described few HR theories and practices that became my theoretical framework. I assumed it would help me to analyze my findings. According to this framework I would like to remind the reader the main challenges of multinational IT project manager, a part of general management tasks. PM should be able to:

- choose the most applicable leadership style
- understand the way of motivation
- know how to handle the conflicts
- manage culture diversity

The framework serves the actual purpose of this paper, which was to find out the main methods and tools for multinational IT project management by studying several cases. I have decided to analyse the most successful projects and understand the way they were managed.

In addition the name of the thesis gives the main goal of my research, which should have helped me to recognize am I good enough to try out project manager career. Can I become a good project manager? The answer on one question will help me to introduce all my conclusions and findings gotten from my research.

Who is that person, ideal project manager for multinational IT project?

First of all it should be a person who is: communicative, social, open-minded, and easy to be around. This is absolutely true! I have noticed it even before having a conversation with project managers. I didn't know most of them personally; I just got their contacts from Demola. From the first emails I felt those people are very friendly and they do love what they are doing and all people around them, they are always ready to help even it is not connected to the project. "You're just happy figuring out people's stuff!" (Brian, IT professional).

Then a good project manager should be organized and be able to keep things in order, structured. When person is not able to organize him or herself I don't think it is possible to organize others.

Project manager should always stay calm even under the pressure. IT projects are the most unstable in their nature, there are always changes going on (for example, customer can change the task that can cause the change of interacting ones). One of the main tasks for PM is to create calm and enjoyable work atmosphere for team members. It doesn't help when PM can't control emotions; it just increases stress and anxiety in a team, what impacts on the results negatively.

Next PM should set right ethical values and follow them. In most cases IT projects deal with confidential and valuable information, it is important what programmers aware about it and act according moral and ethical rules and PM is the first person to show that.

Those are common things for all projects, now I will go a bit further and see what is needed for multinational team. I think it was proved that cultural diversity does have its impact even in IT projects. Hence it is really important for PM to be cross-cultural competent. He or she has to be aware of the differences, like

- The way of treating up-level colleagues (e.g. how it was in case with Indian programmers, who couldn't say a word against Finnish partners, it caused a lot of misunderstanding and problems, good PM should oversee that situation)
- The way of work. Some people are more organized, some do things in chaotic way, some more independent, self-working, some prefer to work always with the team; PM should use the advantages of all approaches, there is no right or wrong ways of working, all methods can give nice results, more important how PM directs those people
- Attitude to time (ability to keep deadlines, being on time at the meetings)
- Ability to take risks (e.g. Finns are tend to keep stability, Spanish people are more risky. Good PM can find a balance using both approaches)

- Different language skills. Obviously, it is always wise to take professionals with good English (common language of programming), but even PM faces the situation when one or several team members have difficulties with understanding. He or she should do the best to avoid negative impact on the results of the project and atmosphere in the team, e.g. one of solution to support every meeting with written information, what was discussed, or use of 'simple' language, then if there are several team members speak the same language, it can be helpful to allow them to discuss some ideas using their native language
- Different ways to treat women (good PM should oversee if problems could appear in that way. It is always better to form the team with people who respect each other and understand that all are equal at work at least in case of gender)
- The way to express thoughts and opinion (some people are direct, some don't say what they think, it often depends on nationality. PM knows that and doesn't accept directness like rudeness or asks more questions if person is not that open)
- In general people from different countries are different in their behaviour (e.g. Finns are more shy and silent. PM should ask twice to get good ideas from Finnish programmers).

Those are only few things that can impact on the way of communication; the main idea is that PM should be as good as possible in feeling and overseeing all those differences and getting the best from each cultural feature.

Finally let's summarize what is necessary for IT projects. The most important for IT PM the understanding that the team consists of highly educated professionals, in most cases they know much more about their work than PM. The best solution is to talk to them all the time. PM is not the main person to decide what and how programmers should do.

The role of PM in IT projects is to create the best atmosphere for team members, where they can work without caring about things outside their particular job, like finances, customer relationship, documentation (the most hated part for the most of the programmers), scheduling, meetings etc

I would like to come back to theoretical framework and leadership styles mentioned in the beginning. After studying the cases I would conclude that the leader of IT project should give team members some form of autonomy in performing what they are required to do. It is necessary to provide all the supports to enable them to accomplish the given tasks (facilitative leadership) (Effective leadership styles leads to positive effects and results, www.strategic-human-resource.com).

It is easy to decrease the willingness to work by too much control and strict recommendations. Freedom is one of the most important conditions for IT professionals, they don't mind PM organizing their time and schedule, set deadlines, explains customer wishes, but how to make those wishes come true (at least technical part) they prefer to decide by themselves. Therefore autocratic leadership is absolutely inappropriate in case of IT project. However still in some situations (for example, when the deadlines are strict and delay can cause problems) increase of control would make the work more effective (situational leadership style).

I found out it is more easy to motivate programmers than non IT professionals in the project. For most of IT professionals their work is linked to their daily life interests, programming could be their hobby. That means that interesting tasks, interesting projects are already motivating. Also there are some other usual motivation tools, such as recognition (e.g. organizing special events, like trips in the end of challenging project or task), good work conditions and money rewarding.

Another interesting issue I wanted to understand, is how to handle the conflicts in IT projects. In most cases I got the answer that programmers don't fight that much, especially if they are skilled enough. Sometimes there could be some conflicts when several team members do the same job, but use different approaches, in that case better to have meetings and discuss the task in most cases problem disappear at that stage.

There could be more difficult case if IT project has members with non IT specialization, then again more communication helps. It is quite often that person who creates conflict has some strong idea and chooses a wrong way to get attention to that. Referring to the theory, which was described in the beginning of the paper (Interest-Based Relational

Approach), I would conclude that keeping people and problems separate, listening and communication help in IT projects too.

One of the most wanted answers I was looking for, was about IT background for PM. Almost in all cases I was convinced that IT skills are really helpful, but they should be in that amount which is needed only to understand basic things, like how much time is needed to complete particular task or some special terminology which is used by programmers. Sometimes, not always, it can become disadvantage then PM is too educated and knows all processes, it can lead to being too focused and controlling.

It is more important for PM to be customer oriented, to understand the features of the product from the client's point of view (e.g. knowing bank accounting and reporting is more useful for a bank software project, how it was in case with Irish software company). "I am sure that the project can survive without IT skilled PM, but I am absolutely sure it won't survive without business oriented PM." (Clemens, 'Off-road Vehicle Navigation Application for PCs' project, Demola.)

Finally few words about management tools and systems for IT Project. There are different types of software for project planning and management, such as Agile (Scrum) methods, Waterfall. Use of one or another depends on the project and team members' preferences, it is better to decide this together with the team. One good advice also is to keep all team members always informed about current situation in the project, when each team member knows what the others are doing.

So I can answer the question asked in the beginning (Am I good enough for that type of Projects?):

Thinking about all answers and advices gotten during my research, I realize that work as a manager in multinational IT projects is one of the most suitable and interesting area for me. There are skills which I don't have so I still have to study a lot, but this is something that I could do ... 'figuring out people's stuff' does make me happy.

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APPENDICES

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Appendix 1. The interview with project manager of ‘Off-road Vehicle Navigation Application for PCs’ project, Demola

Could you, please, tell about yourself (what kind of experience do you have, do you have business background or are you IT professional?)

I have studied Economics and International Business in the Netherlands. I have business related background, because I did business related project in my home university (mini company (Carry on); idea is to create business idea, to write business plan, to find and convince shareholders, produce). I was responsible for financing. I have also organized intro week for university for 400 people. I did the internship (sales invoices and commission) in a big German public limited company.

I have no IT background.

Why Demola?

I want to run my own business in the future, Demola is a good opportunity to figure out if I have the skills of manager or not; am I able to lead people with different background as I got.

If you had a possibility how would you choose team members for IT project? What type of personality would you avoid, what are the best for this type of projects? The main point of this question is to understand the best way to recruit IT professionals. What kind of personal qualities are required for good IT team, how to hire the best people and who would create problems, conflicts etc.

I would prefer some guys who have experience in some other work field, not programming, some business or something else, also some experience and knowledge in some specific hobbies, because I like to work with people with broad scope, open minded, it

is easier when you work with interdisciplinary people, they come up with more creative ideas than programmers, who are too focused. I would avoid taking those ‘nerd’ guys.

What I really miss, we have only men in our group, the best thing is to have mixed group, in the Netherlands there are many additional work groups, you only work in work groups and usually the best groups consists of men and women. Next time I would choose one or two women if we have group like for that project (5 members). And media guys are missed, some more creative. It is pretty hard for me to convince all programmers what I want to change. They say: “It is customer friendly enough”, but it is not, it is grey, the buttons are ugly they don’t see that! Some more business related guys and some more creative people. The project has too strong focus on technical background.

Would you avoid conflict people?

It is even an advantage. I like people in my team who are the same stage like me, I don’t want people who are less level than me; it is easier for me to lead them because this way I can be creative and effective. I prefer to have the same skills or even better, more different skills in my team. Otherwise I won’t succeed; I can do it on my own.

Project team. What would you say about different ways of communication according to their different nationality? Does it have impact on the processes? If so, what kind of influence? Do you find it necessary to have multinational team for such projects or would it be better to have only one nationality in your project? What kind of challenges (if you had) did you have because of such diversity? In general, what did you expect from you team members, what kind of methods and management tools did you use to manage them? What type of personality your team members?

We have German, Finns and one Russian.

Yes, you can see different ways of communication on the official meetings:

Finnish people are quite informal. Silent... I have to encourage them to say something, typical Finnish people. I know, you always have to ask twice (5 minutes later somebody for sure will say: I have a question!). And they come up with really good stuff. They try to be very polite.

With Russian people it is completely different. Sometimes Russian team member asks directly the customer ... what seems impolite, even he doesn't mean that.

Did you try to manage it somehow?

No wasn't any serious problem.

Inside the team communication not that different we are all very young to have huge differences.

... Education is different (Russian education is more theory based, Russian team member has a lot of good ideas but he doesn't know how to put them into action and Finns are more practically oriented). Sometimes Russian guy wants to explain something on a white sheet and Finns say it is too complicated, we don't need that ... and then I have to make a decision, I usually take the easiest version.

One nationality could make things easier, usually u enjoy people with different education.

Then Russian people doesn't have business background and studies therefore they are less organized, sometimes it is too chaotic, how they do the things. We have different ways of getting work done.

We are in Finland so we have to try to follow their style, in Germany I would be a boss, I would just say: You do this and this, but in Finland it wouldn't work, you have a dialogue. You are 'Primus inter pares'. We decide in a group, of course sometimes I give a direction, I have to decide something, but I cannot decide general picture. Also it comes from my lack of IT knowledge.

It can be an advantage to have multinational team, but if you have to hurry, if you have lack of time it could be a problem if people are not able to organize themselves. But I would always prefer to have multidisciplinary teams.

Expectations, management tools?

They have to be punctual, to do work we agreed, give me a call when they are late or can't come, come to visit me if they have a problem...

I always encourage them to participate actively, say something, if I decide something wrong, they should say it... I am not the brain of the group; we have 5 brains in our group. Some bosses do not want that their employees think, but especially in IT branch it is absolutely necessary! According to my style of leadership I need thinking members; I really want them to tell me if they have better idea or if there are some problems or something.

What can you say about project planning? How did you manage with that in your team? What are the best ways to do that? Time management, scheduling... challenges

We have combination of two ways: one when you decide everything before a hand, and when you get tasks during the process. We sat together, decided what we have to do in general, divided, and made work packages. Of course, we changed a lot, added tasks, then subtasks, deleted, moved from some sprint to another, postponed something.

(Time management): more or less we have strict schedule, sometimes you have to postpone if you can't make it, for example, customers asks for changes, then you have to focus on that, if it is more important, skip some other tasks. It is also my task to keep track on this. You always have talk to your team, you can decide all on your own but it doesn't work. Challenges: changing environment.

Meetings. How did you manage your meetings?

We have two types of meetings: with the customer (formal, agendas) and with the team (minutes only if somebody missed the meeting).

I got solution. I didn't want to slow down the whole project, because of language problems, so I decided allow Finnish guys to discuss the issues in Finnish and then to tell the solutions for that, explain to me etc. They can talk Finnish as often as they want, if it makes the project faster, I am interested in result. I have asked Russian guy, so it was democratic decision.

CRM in your project. What are the best ways in your opinion to manage relationship with the customer?

I am the only one guy who contacts authorities, I am only one who writes emails, gets emails, 2-3 days before the meeting. We invite customer to every pitching event, then give a review of every pitching event, we try to involve customer, then he gets impression of involvement.

If the customer is not involved?

First, you have to take into account that it is not a customer it is your partner, you will sell the product to another customer... in that case I would decide on my own ... otherwise you won't move on.

How to handle conflicts?

We had them at very low level, usually we don't have it between Finns, they managed by themselves, they are high cultured and they mostly focused on that they want to achieve. We have mostly the conflicts between different cultures. I am usually the observer if they have the discussions about new tools, sometimes I ask: what can I do? We have fights between Russian and Finnish guys, because they have different approaches, the one wants to do it in more easy way, another in more complicated one, then they are drawing, we have debate, then I ask both sides opinion, then I ask not involved guys,

then I pick up better decision what will work for the customer... I always encourage them to remember what customer has said.

My task to keep track on a customer side. I say: your solution is very nice, but the customer wants to have easy/nicer/ any kind of solution and your solution fits better to customer need. Finally we use it. I usually have the last word to say, somebody must have it, you have to find a solution. You are running out of time, because you can't make a decision.

What motivation tools did you use, what do you think about team building activities?

Motivation is high, they work not only for Demola and me but also for their own (they have the project as university course), then money (I repeat: if we achieve that, we will get that amount of Euros), also food (I have recognized food is one of the best motivation tool, I would always pay attention in any company... if you are hungry and food is bad you can forget about other things), next, especially for IT guys, social events, to go to bar or something like that.

Team building should be in advance before project starts ...

I think this is very important to meet those people in not typical usual environment. I have the best conversation with my guys when we do not sit in front of the computers. You can make close relations with them. In order to get trustful relationships that is very important. It is absolutely necessary. Just go to the bar drink one beer, talk to each other in a cosy different environment.

If you had possibility to do the whole project again, what you would do in the same way, what mistakes (if they were) would you avoid?

I would try to spend more time in the beginning, you have a lot of 'lazy' hours, but as PM you have to think about things what can appear later. Risk management, even it looks like lazy time.

My point of view, especially if the group consists of only programmers, my responsibility is to do the project plan and to do the organization stuff, write the papers. The others should only implement their personal parts (expectations in the project plan e.g. working hours). My point of view we have to use every 'free hand' as a programmer, this 'free hand' should really program, not waste time by typing project plan, because I cannot program... our core competency is programming ...Everybody should do what he wants and can.

Who would be an ideal PM? You own comments thoughts, advices...

In general he or she should be open minded, should have travelled to a lot of countries, should have done some internship/study abroad, so should be familiar with different cultures and working styles, leadership, should be flexible (very important), he or she should be very good communicator. The most projects fail, because of lack of communication (simply as you can think about it, just talk, keep talking). Biggest problem everywhere, especially with the programmers, you have to encourage them to talk; otherwise you will never get their needs and problems.

Then PM should have business skills, should be business oriented, he or she should be interested not only in business, really open minded, it doesn't matter it could be design or something, it just makes things easier. If you only focus on business you are not able to adapt good ideas from other disciplines.

IT skills is it a must?

It depends on the size of the project, it would be useful, it makes communication faster, easier. But still the most important for PM to be business oriented, business skilled, to focus on a customer needs. It can be IT manager who has business skills, of course, but he or she has to have business skills somehow. I am sure that the project can survive without IT skilled PM, but I am absolutely sure it won't survive without business oriented PM. In case the group is bigger than 10 programmers there could be two managers, it would be useful to separate the work. When there is one person who sticks only

on IT stuff, who makes meetings with the programmers, where they can discuss the directions, and make decisions, and there is another person, who organizes public affairs, keeps track on a workload etc. Bigger the group it is more useful to separate the work.

Appendix 2. The interview with project manager of 'Kinetic Games' project, Demola

Could you, please, tell about yourself (what kind of experience do you have, do you have business background or are you IT professional?)

My name is Heikki and I am a project manager of Demola project. I am studying usability engineering at UTA, 5th year. Haven't been project manager before, but I have been working in few projects before, at usability side. I have IT background (web sites, time-tabling program)

Why did you choose Demola?

Demola project is a course for university (Innovation project course).

Background information of the project.

If you had a possibility how would you choose team members for IT project? What type of personality would you avoid, what are the best for this type of projects?

People who can think by themselves, so they can come up with the ideas, for example, for graphic design. Project manager doesn't have to think about it. Should be initiative, independent thinkers, creative in their work. Team work is important but it doesn't mean that people don't have to work by themselves. Readiness for extra work is welcomed.

(Avoid): who is stacked on something, sees the processes only from one angle, uses always the same tools and methods ... is not open for new instruments and ways of doing.

(About conflicts): it is regular to have conflicts, the main question and task for the project manager how he or she handles that. It is not only being friendly, but you have to have skills to manage conflicts. There could be that even everyone is friendly where still could be conflicts in the team.

Project team. What nationalities you have in your team. What would you say about different ways of communication according to their different nationality? Does it have impact on the processes? If so, what kind of influence? What kind of challenges (if you had) did you have because of such diversity? What kind of methods and management tools did you use to manage them?

Three members are from Finland (programming), one from Spain (programmer), Italy (3D model).

(Impact): Spanish and Italian members were coming late to the meetings, but I have just explained in the beginning that here we don't work that way. Spanish guy doesn't answer emails or calling, then he comes and tells what he was doing, why he didn't show up. Not that organized. Language problems. But we got solution: emailing, written minutes after the meetings etc

Do you find it necessary to have multinational team for such projects or would it be better to have only one nationality in your project?

It depends on the customer (e.g. if you make a project for Finnish high school, then probably Finnish team is solution might be better, but if you have work like this game, when it will be used by people of different nationalities, it is better to have people from different countries). There could be some issues which differ according to nationality, e.g. colours (In Asia red is colour of luck and success, but alarming in Europe). So it depends also on a customer and probably team should be chosen according to customer needs.

Expectation from team members

I expect when we decided to do something it has to be done (in the end of sprint we see that probably the project is not at the stage there it should be and we come to work even for 10 hours per day). When we work together it makes things much easier and boosts others to work better (motivation).

Seems that your management tools are really democratic you don't force people, you just set the goal and tasks, and then just control if they are going to be completed in time...?

Yes, I just know, for example, if they are relaxed in the beginning of sprint they don't work at their full potential, but the last week is usually time when things have to be done, when I see it. So I don't worry about it on the first week. But still I control the team. Yes, when I know that we are not getting to the point we have to be, I just say that we have to have the meeting and do the project together.

Then I say that probably the work seems to be hard and massy, but when we manage it we will have less of work. Work now hard and we don't need to work hard in the next sprint. I even gave them almost one free week to do other things, we even didn't have meeting that week. Sometimes I have to push them, but they are pretty happy afterwards that things have been done.

(Personality): some of our team members are not that socially active, they don't keep contact so much as other people, but it has been becoming better and better during the project (some people need time to get into communication), maybe it is about getting trust.

Then sometimes there are situations when for some guys who knows how to do something, for them it is hard to accept, when someone shows them how to do it in other way or better... stepping to others tours it is hard ... for them better to study by themselves... that's why I want to have in my team open minded people, more flexible, who can accept different opinions and be ready to learn.

What can you say about project planning? How did you manage with that in your team? What are the best ways to do that? Time management, scheduling ... challenges...

We still have the same project plan we had in the beginning. We made it together, everybody said what were the things had to be done at different stages of the project. Mainly we just split the tasks to sprints. We have 7 sprints; it helps to stay on the schedule. Then we made work packages: at the meetings we discussed who wants to do what, who is used to do what, but there were people who used to do particular work, I knew that, so I asked them to be responsible for that (always better to know background).

We took one week to get to know the unity, so there was free time to work on it. So there was time to understand what we can do with that and see who is able to do what. It was mainly they decided who wants to work on particular tasks and I just assumed that they would like to continue with familiar issues and I said: you can decide it in your work groups. Basically for every sprint I had the task ready what should be done and gave it to programmers or graphic designers, only if needed I have settled the task to particular team member. But in general they picked up by themselves.

(Showing an 'Hour' document): useful tool to see how much time tasks need to be done, so in the future we can get better planning for similar tasks.

(Time management): we have estimated work hours from project plan. If they don't work on the first week they work on the second week of the sprint. But there is one meeting when everyone comes to work together and put all tasks together.

Meetings. How did you manage your meetings?

We have settled fixed team meetings, so every week we have to meet at particular time (Wed at 5). And every meeting with the customer we discuss next time we meet (end of a sprint), then we can meet again with the team to talk about customer meetings.

At Nokia meetings I usually talk and ask question from team members, people from Nokia usually just listen and probably ask some questions, or even answer some of our questions. Usually it takes about half of hour, consists of feedback mostly. I usually use the same document file that I use at team meetings: what has been done, what should be done and if somebody is new where is some introduction etc.

Our customer has IT background which helps us to find common language and relationship is mainly focused on showing results and discussing our solutions in meetings. Outside of meetings communication is done via email and phone to arrange the meetings and solving device problems if there are some. So there is no need for explaining that much about how things work in the product as they have good idea of it.

CRM in your project. What are the best ways in your opinion to manage relationship with the customer? Challenges, problems?

Nokia customer got IT background (engineer, usability engineer; Finns). We gave the ideas, customer has chosen the most suitable ones then we started the work. I'd say it's not minimized but more open relationship. So we have basically 'free hands' to do things our way, but the final product is made so it meets the customer needs. This means that we can use working methods that fits for us, but at the same time develop product that satisfies customer in all areas. Basically this means that in the end of every sprint we tell the customers what we are focusing on the next sprint rather than they are telling us what they need, of course if there had been situation where we didn't have enough time to everything they had the final word on setting the priorities for tasks. This works only if both, customer and team have same idea of the final product.

Risk management. What kind of risks did you have, how did you manage them?

We have one problem one of our programmers left because he didn't have enough time to take part in the project. We got another member from Demola. One device was broken. All this was in our project plan, section with risks; we expected that at some point, so we managed.

Did you have conflicts?

Not that real conflicts e.g. people coming late at the meeting, such but basically I just said that people are waiting here ... in a friendly way and may be you can look at your watch and be on time next time ... and it has been working at least for us.

(How to manage conflicts): we have 7 members, so you can separate at some point people, if it is not possible or damage the process, then I try to talk to people, to understand the situation.

Motivation tools and methods for team members? Teambuilding activities?

The biggest motivation for team members for our type of project is project as itself. Candies! We worked hard the whole day, I bought candies; we were drinking beer for few times together. We got to know each other better ... then you want to work harder. Teambuilding activities are useful. It is important, but when everybody works outside Demola and has a lot to do except, so you have to get time for that. It helps but not that important. It should be small things. And for team building activities I think the way how we work at Demola is more casual and relaxed than "work-like", so it somehow provides good environment to get to know each other.

If you had possibility to do the whole project again, what you would do in the same way, what mistakes (if they were) would you avoid?

Problems and challenges:

One guy quitted, we got help from Demola, but it was much easier because it happened in the beginning.

(Project again) It is a bit too big project for 2,5 – 3 months to work on. Too many things to do, probably we should add less tasks. The rest was OK. Everybody has place to work, everyone does what they want, conditions are good, everyone enjoys. We get help when we need.

Who would be an ideal PM? You own comments thoughts, advices...

He or she should be social and not 'bossy'. At the same time PM has to have courage to give tasks, to tell what should be done, but remember to give free time for team members, also to give freedom to decide by themselves.

He or she should be like an ‘elder brother’ who organizes things, takes care about processes, so team members don’t have to worry about documentations or meetings, they can concentrate at their tasks.

But at the same time the way to manage depends on the type of people in the team, some people need more strict kind of leadership; some can be frustrated by that. So it is quite hard to have both types in one team to manage them, so better to hire similar in that way people for one project.

IT skills for PM, is it important?

Understanding things helps a lot. IT background helps, especially in a small group. I helped guys sometimes, probably, not that fast and effective, because I am not programmer, but still it made things faster and easier...

Appendix 3. The interview with project manager of ‘Techie doggy toys’ project, Demola

Could you, please, tell about yourself (what kind of experience do you have, do you have business background or are you IT professional?)

I am studying Media, I have been doing photography. I have no management background. I had a possibility to take part in Mindtrek.org and I have noticed that I have some management skills. I know things from my inner, I probably don't know how some development methods are called, but they were already in my head somehow. I always knew how to organize, for example, my time and my schedule, this is much more applied. Some people have studies at that field and some people have no studies at all but they are still very good managers (I can see it from my current job, for example). Some people learn by study some people learn by doing ... I am the second type.

Why Demola?

So I realized that Demola would be a good place to try out my skills if I should start get more credits for management, leadership etc.

Background information of the project

Problem is that people go to work every day, so they have to leave their pets alone, nowadays people are more worried about their pet wellbeing. So we sort of creating monitoring system, so from your phone you can see right away what your dog is doing at the moment and the graphs what dog has been doing during the day. At the same time we want to include the toy that you can control from your phone, it can play music or shake or stuff like that, so the dog will be entertained.

This is a big project, we started in January and we finish it in May, but this project will continue, it will be tested by Nokia during the summer and after the summer will be continued somehow.

If you had a possibility how would you choose team members for IT project? What type of personality would you avoid, what are the best for this type of projects?

It should be a person with a lot of motivation, of course, skills. Should be a person who knows a little about everything, we are small team, so it is better to start with that, we need people who can make as much as he or she can ... innovative vision should be, that's the most important, features, basically we have to come up with a lot of ideas.

We should avoid those people who can't work in a team (sometimes you can find a person who can do everything and they just focus on their tasks), self working, that's personality we should avoid.

Project team. What nationalities you have in your team? What would you say about different ways of communication according to their different nationality? Does it have impact on the processes? If so, what kind of influence? Do you find it necessary to have multinational team for such projects or would it be better to have only one nationality in your project? What kind of challenges (if you had) did you have because of such diversity? What kind of methods and management tools did you use to manage them?

Finns are silent, less risk taking; they prefer to take things in which they are sure and stay at that level.

Chinese: there could be language problem ... then communication is quite hard, when person prefers to work at home a lot, kind of self-working. I always had to ask: What you are doing, at what stage are you? The way of understanding things is really difficult. I had to ask a lot and we have managed. But still the person is very good at work. The solution for that situation: Reminding, calling.

Canadian: more or less the same like Chinese. But I suppose it is not nationality issue it is more technical people issue."

One nationality, would it be better?

No, I think it is great that we are from different nationalities; we can have so many different points of view. For example, Finnish people usually for taking less risks, and we with Canadian girl are more like: No let's try this! We can balance each other. Also Chinese girl is always very cheerful. That makes them all work harder, I think that balance us in a very good way. Cultural diversity works very well in most cases, sometimes there could be problems, like language issue, people feel more comfortable speaking their own language, but a part of that , there are problems you can fix.

Expectations from team members, management tools?

They should learn more for the project: how to work with people, talk about something not in technical words, how to market themselves and the product.

(Developing methods): we ended up with mixing different types of management, like Agile and Waterfall (the combination of those). Notice: We got tight schedule form Nokia, so we had some framework.

What can you say about project planning? How did you manage with that in your team? What are the best ways to do that? Time management, scheduling, challenges?

All together, manager should not write it by him or herself, everybody has something to say, we decided the roles, work packages, needs of the project, one person can't know what the other person can do...

There have been changes, because some issues, unexpected things, like sickness, quitting from the project etc.

Time management works great in the team: we decide if something should be done, we set it according their schedule, but we get usually things done in time. If we have to postpone something we inform our customer very in advance so we postpone the meeting. But we are doing very well now.

Meetings. How did you manage your meetings?

We have official meetings with the partner, every 2 weeks, then once a week or even more often, even every two days with the team ... it is not fixed meeting day. With the customer meetings are official.

Team meetings are informal. I have for myself a structure what we have to discuss. Guys are working by themselves sometimes they have more to say to me.

(Challenges): to organize the time, because all are doing different activities.

CRM in your project. What are the best ways in your opinion to manage relationship with the customer? What kind of methods and tools did you use? Challenges, problems?

I am not the only person responsible for that, I am not the right person, when they have to talk about technical stuff, normally the person contacts directly to a technical oriented team member; it takes longer if it goes through me, but we track emails, so everybody knows what is going on.

No challenges: customer is involved, technical, does care about the project, sets clear goals and objectives.

Risk management?

We got different problems: team member left, two were sick. But finally we got the replacement, and then could manage our schedule in a way that sickness of team member hadn't big impact on deadlines; also we had to meet in other place, when our team member had broken the leg. All can be managed... finally.

How to handle conflicts?

Obviously, it is good to avoid conflict members ... But you have to be able to handle the conflicts, they happen. The best solution for that is to talk, there is always some common point that you can find. If you have to face that, you have to be calm and try to be as much as talkative, communicative, try to find out what he or she wants. Sometimes it

is just about the communication, people who make conflict they have an idea, strong idea, about something they just go for it, and they are really close minded, but if you try, let them see that the others have something different, with time and some efforts you can manage it.

Some conflicts could be culturally an issue, for example, the way of communicating with the woman, the position of the woman. But normally it is just lack of communication (strong vision of something, cultural).

In this team we don't have such problems, we always talk.

What motivation tools you use and do you have team building activities?

Project itself, cheering, reminding about success, good feedback from professionals. I always remind them that feedback they got from high professionals, then e.g. we won pitching event, our facilitator is satisfied with our results...

(Team building): I always convince them to go somewhere together and to talk about something else than this project.

If you had possibility to do the whole project again, what you would do in the same way, what mistakes would you avoid?

This project is really successful, I am happy with the team, results.

I would communicate much more. Everybody should know that people are doing in a team. So if customer asks what is going on with the code or something and I say: I don't know ask programmer... that should not be a right answer.

Facebook doesn't work how I expected. Better to have one communication tool, if it doesn't work, then use more suitable for each different person which suits better.

Who would be an ideal PM? You own comments thoughts, advices...

It is important to be cheerful, know how to work with people and in a team. See the skills of people and know how to manage them. Knowing how to work with people. See the roles of people and how to get things all in order and how to keep it structured, be good with deadlines.

(IT background): Some IT knowledge is important. you need to know very basics. That definitely helps, just to know what they are talking about; I think the PM should know a little about everything but nothing really concrete. Because if you know too much, then you will get too stacked. So I think knowing a little about everything is good.

Appendix 4. The interview with IT professional, Brian

Could you, please, tell about yourself?

I used to work as a "Software implementation specialist" Fancy title for working with clients in deploying our software for them the way they want it. I'm well used to working with our software QA (quality assurance) team being Indian based and then working side by side with developers in the US also.

In my role I was responsible for the co-ordination and execution of the full software implementation process of our financial reporting software on client sites across Europe.

I was working in Irish IT company. We had to make software which automates all those reports like hedge funds or investments funds, they have to be done every year and then you have to do this semi-annual report. Our software integrated with their bank software system. At some point we had to customize our software system.

Background information of the project?

I was working in European division which was almost like start up, we had parent company from US company. We started from this European expansion, which was really quite different from American side, because the US has one way of doing taxes and one way of doing books and one way of having reports, different countries have different laws ... in Europe certain county has certain laws. That means you have to be more dynamic and flexible.

The average age of European devise was about 25-26 years. If we talk about one project we were working on, it was about 3-4 months; we were working for the bank in Luxemburg. It was that every company had different way to implement the system, some places they wanted to learn how to use it, some more on to technical side, some even had wish to handle all reports, so we basically took all work from them.

We had on the other side staff in India (30 years old), which had their own PM and the same like me Implementation manager, with who I have to communicate, who had to explain and delegate the tasks to his own team.

Customers: mostly investment banks, which needed automation of their book keeping.

Project team, communication, cultural diversity problems?

We had one Head of European division, 4 main PMs (they have more understanding, they worked longer than we, who knew how it is done, has been done, could give us the idea what we have to do in this company, what will work best, problems that might see a head of us, be like a 'big brother'...), then we who were doing actual work, who were implementation guys ... 12 implementation specialists. There were basically two levels: actual PM who was working with clients, looking for customers and keep them all happy, and PM for daily work tasks and organization.

We had India team 40-50 staff working 24h, and there was another team smaller team, when we finish work here in Europe they just pick up any extra work we didn't finish and do it in US.

All the communication in those teams was between me and the person who has similar role as an implementation specialist. They would know what exactly I am talking about and what needs to be done and then they would pass work over there.

(Challenges): not that much, because day to day work I was working with people I was working before... and the main challenge was working with client side while were well aware they were doing business with an Irish company they were doing business in English, there were some communication difficulties.

According India division: We had to make things very clear. Because one thing I noticed with the team in India, they would do exactly that you said to do even it was maybe obviously wrong, it was a little bit hard. I had to be very careful writing emails, writing changes to make, because there would be one or two times there we had some problems. You don't check every word, how it is spelled and then you get comments back

from the client: ‘this word is spelled wrong’ ... that looks quite unprofessional. We handled it quite well, we had some kind of check list, we’ve gone every time thorough everything what returned to us, it would be all spelling checked... We were working through the problems and getting better system.

(Communication): The atmosphere was a little bit crazy, it could be that I was working on my own in one bank and 12 others were working with some other tasks; it was a bit crazy keeping communication. Mainly we just had emails, also we tried to make a call every morning at 9 o’clock or if needed every evening, like conference calls. So we can have a talk where about anything that coming to your mind and have some kinds of forum to discuss with everybody, basically, think ... It was helpful, because if you are working as a project manager on your own on the place, you can only see the picture from your own side, but when you hear that everyone else is doing and little issues and problems ... it is good to get this feel of how others are doing things.

Meetings?

We had same time (team) conference calls, then the Head of European division has some questions, talks probably with some individually, what has been done ... He was the one who had big picture, he was making the contracts, bills etc he knows exactly what needs to be delivered. If there was some negative feedback, we just got something like: “OK, we made something wrong and client is not so happy about that”, so we have to find some solutions. There was always the communication with my boss; about what to tell to a client what I should say if they ask about this and this. He would have the answers that he would give them ... How to deal with them...

And sometimes we had evening call to see if everything went OK and if everything was looking good for the morning. It wasn’t official just the conversation (after those meetings were some emails, reports...)

Communication with the customers?

One bank we had, we were working with accountants (no IT skilled). That can cause problems, they just see something on a word document, if they had an IT background, they might know, it is not that easy to reproduce that image on the page. They would have request, which I would know or someone with IT knowledge it is not that easiest thing, when it can make communication difficult, that looks simple for the person and it is not.

(How did you manage?) After a while clients start to understand somehow how things are done, so they start to get interested how to use software. E.g. they could come with some small changes and we were working together through that case. We had paper printed out and made some notes. If there were some small changes, I would say: 'sit down it will take few seconds ... you can see the result. It will save your time to go upstairs, reading email, getting back.' Through such kind of things they show more interest in software. It always better when they get some knowledge of the system themselves.

We had cases when we were working with IT staff in the banks, what we were just showing the system and how to format, so they could continue by themselves. It was easier. It changes a work a little bit it was more to show how software works and how you do this.

What would motivate you? Do you find team building activities useful?

Working in a young company was kind of interesting. I could say it was more like college life. We were working the whole day and there could be like pizza boxes on the table.

We all are getting annoyed with each other and at the same time we had this kind of culture: we knew that we are not going to be not rewarded for doing this. There was still after time boss coming and say: OK! Here is a rental car and you have next two days off, go and have fun! So when you get such kind of things, you think: Well yeah I can work in this company.

I know that probably it is not that normal culture in the company, but it was really working out for us, because we were such a young group, like mostly ‘working hard playing hard’.

Team building: it is quite important, but it wasn’t difficult for us. One thing was lacked a bit that we didn’t have one office ever. We didn’t have the meeting with everyone except over the phone. When it did happen we would usually be at summer party or Christmas ... Team building came naturally...

Team building activities are necessary. When I think about the relationship how I would be with the European staff, and if I had this only phone communication without personal contact, it was as much easier to talk to people with those I was working with ... who are always around. You don’t even have to explain the things when you have this good dynamic going on. I could say that it is one of the most important things that you could have.

If you had possibility to do the whole project again, what you would do in the same way, what mistakes (if they were) would you avoid?

The main challenge and problem was the fact that there was not that much communication between me and the client, and how to use the software, they had one vision of result I had another. They didn’t have the interest in using it. They just wanted a cheap way of getting the things done. The feedback was too long there was round one round two of visions, and there were some points of full stops in a wrong place. I knew myself if clients were interested and sitting down for few minutes we would solve the problem much faster.

I guess they had their own system and culture and the way of doing things which wasn’t as flexible as ours. They had everything like documented written. We were providing service (different when we were just implementation guys and training the teams), so the clients seen us we produce something exactly the way they wanted.

If I had to start the project again I would encourage and ask for more interaction with the clients and show interest in it, because after a while just becoming a thing they didn't understand what we were doing and they couldn't communicate with us about the problems, they didn't understand it.

Who would be an ideal PM?

I don't think it is me...

You spend too much time by organizing other people, unsure if everything is correct for other people, you don't think about yourself.

You won't be so independent minded, you just happy figuring out other peoples' stuff.

I'm more independent person, I like to focus on my own stuff.

Should be good in communication, been organized, flexible, be ready to work 24 hours.

(IT skills for PM) More client side knowledge is needed, e.g. The Head of European division had accounting background, it helped, when he saw the things from clients' point of view ... still some IT knowledge is needed...

Appendix 5. The interview with IT professional, Juho

Could you, please, tell about yourself?

... I was working mostly in Finnish projects, 3 years of web development experience, also I have experience in working in multinational teams. Most projects have been about developing open source web applications for the human resource management of medium and large enterprises.

Background information of the project?

There were multiple smaller projects which were all part of upgrading the product family of the company I am working in. The project took place in 2009 till 2010. The goal was to upgrade software architecture. From the beginning there were two foreign teams that took part in the development. Both teams were hired as subcontractors from independent software companies. There were three large companies which affected the specifications of each part of the project.

Team members for IT project?

Best way to see how capable programmers are would probably be to actually see some code they have made. They need to have good communication skills. They must speak fluent English since pretty much development is made in English. They must be able to describe complex ideas and structures so that others (sometimes non-IT people) understand them. They need to be able to give arguments about their own decisions and also to demand others to justify their reasons. You immediately know someone is competent at the point when the person finds out the flaws in your plan and offers a better alternate solution.

Comparably people who always agree to everything start quite soon to seem like less desirable team members. These people usually aren't able to see the big picture or they just don't care about the results.

Considering my personal experience I would avoid people who are: irresponsible and inaccurate about timetables.

People who talk more than they do (not always but it could be a sign that they don't know what they are doing, if they knew they would do, not talk). They are always explaining about something and use a lot of jargon. They also tend to angry really easily if someone points out their mistakes or suggests something that they do not understand. Also there are people who are not really bad at what they do but they are overly unsocial or just communicate in a way that is difficult to be understood by others. The inability to communicate with others easily impairs the team work.

Project team, communication, cultural diversity problems?

There were two foreign teams. One was located in Bangladesh, India and another in Minsk, Belarus. Both teams had 1-3 members depending on the phase of the project. Finland had a team which consisted of 2 project managers (customer side), 1 IT-consultant (IT side) and four developers (including one trainee). Communication was made mostly through project management system (Trac) and Skype.

The system had both a wiki for overall specification and documentation and ticket system for each separate smaller task (we actually write a plan, then all members read it from wiki, then we split up the plan for small tasks – tickets, each member selects the ticket, and after work is done marks as completed).

The language used was English. Neither of the foreign teams was too fluent in English. Instructions had to be explained more than once and by changing the contents a bit (to simple English). This often slowed down the development and sometimes maybe even caused a bit of frustration.

The thing with the Indian members was that they were unable to refuse or disagree. Reasons: Culture: 'customers are their masters', it is not appropriate for them to give their own opinions. This resulted in bad results or at times even failures to get the job

done. At some point the members hadn't had any idea what they were doing but still they wouldn't refuse a task.

The language barrier also resulted some not so severe but rather confusing situations. One of the customers was in an integral part when developing one of the products so their name came up really often in specifications. The foreign team members didn't know what it means so they used it in source code kind of as a working title of the project. So as a result the code which was supposed to be delivered to multiple different companies now had internal referrals to the one company.

What can you say about project planning?

The wiki and ticket system together worked fine: the wiki explained the big picture. Team members selected tickets and solved each particular task. Usually we didn't have the whole thing planned; first we got core features, then adding the tasks and specifications.

Wiki is a common system for documentation, internal documentation, users' guides and handbooks. It gives overall picture of the project.

Tickets. Each Ticket represents particular task of the project. Tickets are divided among team members. Tasks can have different statement (e.g. completed, in the process or needs to be reviewed).

Meetings?

The Finnish team had meetings once a week (not official):

Review of the current progress of the project

Find solutions to the problems

Design new features

The most difficult part about communicating with customers is that they usually aren't technically oriented so there easily occur misunderstandings and insufficient explanations about needs.

Communication with the customer?

Usually emails, but emails get easily slow and clumsy, there are a lot of copies and replies, it is not chronological. Best way is to have meetings quite often and review the current status new issues that need to be solved or at least use of instant message tools.

Communication was mostly on the meetings with customer (plus emails with short questions) there were business PMs and IT consultant. Customers say what they want, business PM finds solutions, then IT professional gives comments what is possible and how much time needed.

If you had possibility to do the whole project again, what you would do in the same way, what mistakes (if they were) would you avoid?

There were challenges: Language barrier, undefined practices. Solutions for those: Code reviews. Use a lot of time and effort for communication. Don't assume others know what you are thinking. Use precise univocal language. If something can be misunderstood it probably will be. More collaboration instead of just dividing tasks to people.

PMs have bad habit, they promise to the client shorter period to get project done. Better to be honest.

Every week code reviews help to avoid many problems, conflicts and overlapping of work, when several programmers work at the same tasks.

What motivates you? Do you find team building activities useful?

Programmers are motivated by getting to do some cool stuff, if it is too simple, not challenging, programmers don't like it, they want to be challenged, they want to do something new. They want to have freedom to decide what they can do, if PM always says how they have to do, they can easily quit their work. Independency is important. If they are already in the project and find the idea interesting, they are already motivated.

(Team building): we had team meetings, which were kind of not official, so we got to know each other. Fridays' beer (could be organized by PM). Corporative parties to get the ideas running.

How to handle conflicts?

Usually IT professionals don't fight.

Probably these 'talkers', 'explainers', seem to get angry easily, because they afraid that people get to know that they are not that good as they said. No-Sayers in most cases don't know what they are doing. Solution: to hire real professionals.

Who would be an ideal PM?

The needs depend a lot on the team and the nature of the project. If the specialists make good experienced team, they can make technical decisions themselves. Often they have much better technical understanding. They don't need that technical oriented PM at all. Business PM doesn't tell to team what they should do, but he gives them an idea: we need such kind of service. Then they discuss it and build the feature themselves.

It is always however good for the business manager to have IT background. More PM works with the team, team is more communicative less IT knowledge is needed for PM, he or she starts to understand how things work, how much time needed etc.

(Personality): More like 'elder brother', because at the end specialists know much more what they are doing, if manager always controls and says how to do things, they don't get to be creative, they want to solve problems their own way.

If you give freedom to think about stuff they come up with much better solutions, they see what customer needs, probably different from what they want. But give enough specifications, otherwise programmer takes care too much on technical side, missing 'customer attractive' point.

The best experience was when I worked with the consultant:

He had his own IT company, knew how to program, had international experience, great English. He knew how all is going on.

PM can see the whole picture, manage finances, timetables, deadlines, give more freedom at most points, has some IT knowledge, then trust is important. Too many advices is not the best solution with IT professionals, listens to the programmer, helps with the delays.

Appendix 6. The interview with IT project manager, the owner of IT company, Antti

7 years of experience, IT professional.

Could you, please, give some information about the projects you have managed before?

All were IT projects. Teams were multinational in 90+% of the cases. Projects were multinational 90+% of the cases.

Background information of the project?

Projects have been usually related to application development or user experience prototyping. Goal has been making a product or part of a product. Project length has been from 3 months to 2 years, mostly longer than one year. Teams have been more local in smaller projects and spread more globally in bigger projects. We use IRC, jabber, skype, email, phone calls and Scrum methods as main meeting process: daily and sprint (two-weekly) meetings.

How do you choose team members for IT project?

Focused people who have personal interest to the topic and who have proven background. Hiring process should include at least long enough talk with the person to find out real priorities of the person and to get sure that he or she is “on the map” with his/her personal and professional life.

Project team, multicultural impact?

Communication and processes are different depending which culture person is influenced by. Some cultures are used to more bureaucracy and some are more independent: High vs. low hierarchy. In real life “one culture” is not possible because persons with right knowledge are not usually available from it. Problems related to communication can be generally described “how to understand what the person means”.

In some cultures people have more negative and in some more positive view from the current situation. In addition, more bureaucracy and authority hierarchy you have been used to, more negative information you tend to hide. So low hierarchy is better in my opinion. Basically there is no process that handles these problems; it's more that people inside the project should be aware of these issues.

Expectations from team members?

I expect relaxed feeling inside the project even in front of “impossible problems” with great output during the project. I am familiar with “Deep Leadership” and “Scrum” methods. They can be summarized to predefined meetings: daily team, bi-weekly project related where TODO-list is gone through and prioritized. Plus to that, responsibility of the end product quality is given to the team itself or single team members and not to the authority using the team.

(Challenges): were usually related to available resources to tackle problems in scheduled time. Single persons have less or bigger problems or tasks in their personal lives that affect to the teams output velocity. Teams should accept these and, if possible, schedule them too.

What can you say about project planning? How do you manage with that in your team?

Scrum methods have good example from time management: prioritized TODO-list with relative sizing with the list items, and estimated team's bi-weekly velocity. You can see this way how many resources there is available against the work amount needed. In bigger scale teams should be formed against good portion of the whole project so that team size is around 1-10 people, preferably 3-7 if team exists for longer (3+ months) time.

Meetings. How do you manage your meetings?

Scrum methods have good agendas and roles for the project meetings. Meetings related to other things, marketing, selling, development discussions, internal information sharing etc. have usually separate predefined processes agreed. There are no big challenges related to the meetings if the processes are well made and the communication methods are available easily to all people taking part in the meeting.

Communication with the customer?

Making the projects succeed with the customer. Exceeding customer expectations. Good coffee and cakes in the meetings. I am not really a marketing man so I don't know more than this.

Did you have conflicts, how did you manage them?

Conflicts are usually happening when processes and agreements have clear lacks on some areas. Usually this happens if all related parties cannot be agreeing in time the things needed. Conflicts can be also made by hiding the project related issues from other parties. I have not been seeing any bigger conflict in the projects I have been in. If I have been seeing upcoming glitch in the project I have been making it clear to all parties in time so that solution can be found in time.

Risk management?

Usually this is a list of risks. Description, Probability, Damage size. Managed separately if risk is realized or new risks can be seen.

Who is the ideal PM? You own comments thoughts, advices...

Project manager should never be a technical role person in the project. Project manager's role and work should support the teams: making the papers, bills, arranging the meetings, trips etc. If company does not have own human management hierarchy, where

next upper level is separate from the project managers, project managers are usually handling this “human” side as well. In this case, they should always have emphatic aspect in their solution proposals to issues. This way teams can have technical problem focus for end product more clearly and project manager can handle multiple projects more easily. If project is “normal” and not really R&D related, project manager does not really need to have IT background.