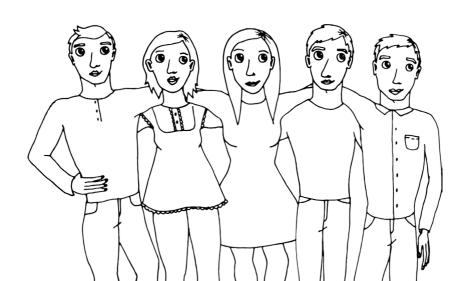
Saga Santala

DESIGN THINKING FOR PROJECT MANAGERS

How to Rock a Product Development Project



If you want to walk fast, walk alone.
If you want to walk far, walk together.

-African proverb -

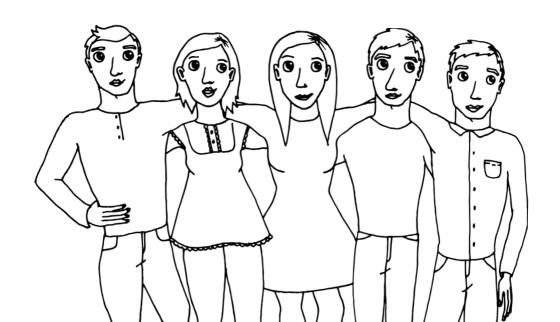


Pdp PRODUCT DEVELOPMENT PROJECT

Saga Santala, 2016

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FOREWORD

This guide book is aimed at both new project managers and people who want a refresher on the topic of managing a product development project. The book contains the minimum information that I believe is needed for the challenges that a project manager faces. I cover the big picture of project management from a design thinking point of view and I guide the project manager during her/his challenge of leading an interdisciplinary team towards the desired outcome using methods from design thinking.

In the beginning of the guide book, I cover more precisely the topic of design thinking. In my opinion, the great value of design thinking lays in understanding the big picture and user needs. These things can also be seen in the book in the way that I cover project management both from a process and team management point of view. To make it easier to take the big picture into account, I strive for visualizing and simplifying the different phases of a product development project. Additionally, I take a look at themes that are important from a team leading point of view and that the project manager should be aware of and bear in mind during the entire process. User-driven team management is strongly present in the guide book.

This guide is divided into three sections which cover relevant themes related to the beginning, middle, and end of a project. At the beginning of each section, I briefly describe the content of the section and list typical feelings for the project phase, for which a project manager should be prepared.

Over the course of the book, the reader will be presented with concrete solutions to the challenges that the project manager faces. However, it is good to remember that management is acting with people and things do not always go as planned. It is advisable to be gracious to oneself and to remember that the project manager is a human being like everyone else. To do one's best in a challenging situation is enough.

My goal was to make a practical guide that is easy to read. If you want more information, please check the source material in the end of the book. The main source for this guide, however, has been the overall knowledge and experience that I have gathered during my own project manager experience in the Product Development Project -course. All the content of the book may and shall be applied to ones own and the team's needs. Each project and team is different and we can learn a lot from each other. I will gladly receive feedback or questions through my email: saga.santala@hotmail.com. I wish you the best of luck and success in your future projects!

finitata

Helsinki in fall 2016, Saga Santala

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INTRODUCTION

What is the value of design thinking in project management?

Design thinking refers to solving problems using methods that are familiar from design. A product development project involves a lot of problem solving. However, a problem can be a great opportunity, if one is able to face it with imagination and trust in one's own capability.

The mission of a project manager is to find out what skills the team has and put those skills to the best possible use in order to get the best results. From a design thinking point of view, this means, among other things, taking the people and the big picture into account, emphasizing group work, and utilizing different kinds of design methods. By implementing the aforementioned, genuinely innovative products that answer to a real user need can be developed.

A project manager, who exploits design thinking, leads a team with user needs in her/his mind. She/he gets to know the team members and strives for taking their needs into account in her/his management style and actions. She/he sees the benefits of working together and strives for improving team work with different methods.

A project manager should improve the team's communication and serve as a link between different stakeholders. Visualizing and prototyping are great methods for enhancing communication and understanding. By exploiting these methods, especially in an interdisciplinary team, meetings and ideation sessions filled with special terminology become more understandable and things proceed.

Pdp - Product development project

Product development project (Pdp) is an interdisciplinary course aimed at engineering, industrial design and business students. It's hosted by Design Factory, an experimental co-creation platform of Aalto University. The course is open for other students too and there are participants also from outside Aalto University. Altogether, there are more than a hundred participants in the course.

At the beginning of the course, much attention is directed to the forming of highly motivated interdisciplinary teams. The intention is to find the most suitable project for each team amongst the sponsors that are mostly manufacturing companies. The goal is to give students unrestricted freedom to conduct the project.

During the course, studying is based on problem based learning. The teams plan their process together with their sponsors and try to utilize interdisciplinary know-how to the best of their abilities. Projects typically include planning, research, concept generation, prototyping and testing. At the end of the course, the final results are presented in the Product Design Gala, which is open to everybody.

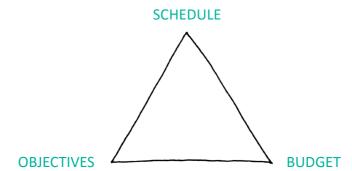




PROJECT INITIATION

A project is initiated for achieving a certain goal. It is unique and it has a well-defined beginning and end. A project is typically initiated based on a need. Value is trying to be provided either to the company or the customer. Often these two go hand in hand. After this, it is examined whether it is sensible to initiate a project and if there are enough resources for conducting it.

A project is characterized by a defined schedule, budget and objectives. The project manager is responsible for making sure that the aforementioned are followed and she/he guides and enhances the team through the project. However, it is not always possible to keep to all three criteria so it is good to discuss in the beginning which criteria can be bargained. It is important that the project has a specific goal or objective that is aimed at during the entire process. This helps the team to plan what should be done and how.

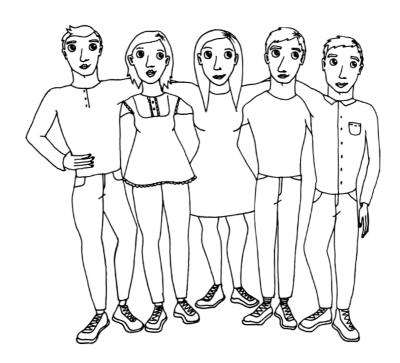


PUTTING TOGETHER A TEAM

A team is a tight self-run group that works together towards a common goal by utilizing complementary skills in the group. When forming a team for a project, it is essential to gather relevant expertise and genuinely interested people together. Interest for the topic is important in order to have a motivated team and to be able to achieve good results.

In addition to skills, personal chemistry is important. Ideally, the one putting together the team knows the people from before and can choose people that she/he believes or knows to get along well. In the case of a product development project, it is good to remember that diversity is a great benefit. Real innovations can be generated in such a team, where the different point of views and skills meet. In this case, the learning experience is also more versatile.

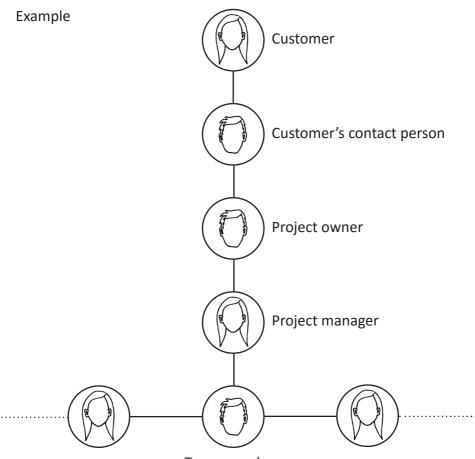
When forming a team, a personality test or making a know-how map can be beneficial. A know-how map can also be used during the project for checking what kind of skills can be found in the team and who to ask for help.



STAKEHOLDERS

All the people that are affected by the team's actions and with whom the team is dealing with, are called stakeholders. Different stakeholders have different roles and interests in terms of the project and they require different amounts of communication. At the beginning of the project, it is good to identify the different stakeholders and make a communication plan with them. Things to think about are when, how and on what matters to communicate, and who will take the lead on communication.

Stakeholders with a larger role in the project have more influence and interest in knowing how the project is progressing. Less important stakeholders can be satisfied with simple progress updates. Some decisions are preferable to make together with the different stakeholders and sometimes other types of cooperation can bring great value to the project.



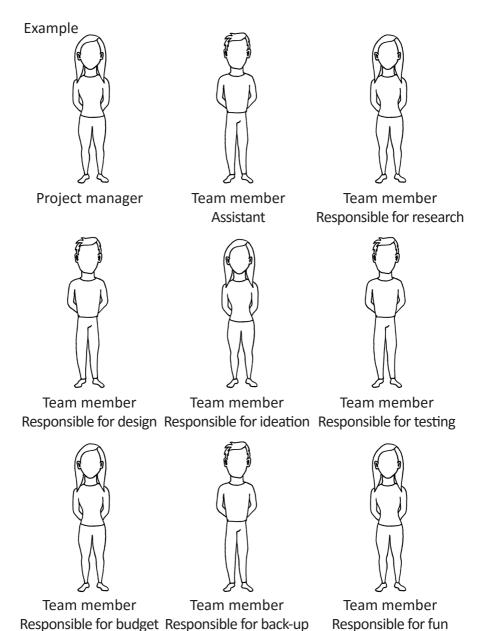
Team members

ROLES AND RESPONSIBILITIES

Roles define work distribution between the team members, as well as expectations concerning them. They clarify the process, take care of things being done and may, in the best case, motivate the team to do a better job. Responsibilities are bigger entities that consist of smaller tasks and are taken care of by a specific person in charge.

It is important to find meaningful roles and responsibilities for everyone. If some of the responsibilities do not attract anyone and are still necessary, they can also be raffled or put into a list, from which each can select their preferred one. However, it is always best for the team members to participate in the sharing of tasks to make them more committed to the project. With the help of a know-how map, tasks can also be shared based on skills or learning goals.

It is good to define together with the team what roles the project requires and what they include. This way the one in charge for a role knows what is expected from her/him. Roles can also be swapped if desired.



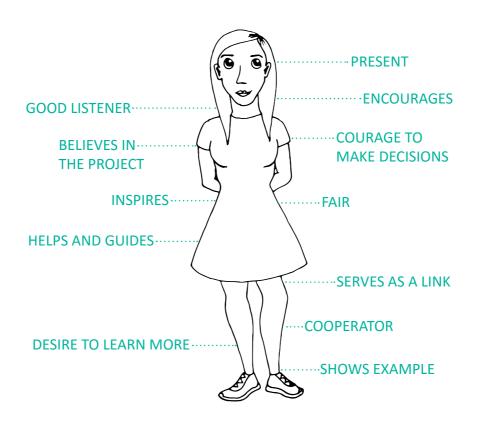
PROJECT MANAGER

The project manager is primarily responsible for achieving the project objectives. Her/his main duties include defining clear and achievable project goals, communication between stakeholders, to ensure the cooperation between the different parties, as well as project time, cost and quality control.

The project manager's task is to delegate tasks within the team and to motivate, help and quide, if necessary. A skilled project manager also helps team members achieve personal development goals. However, the project manager does not need to know everything and she/he is authoritized to ask stupid questions. With her/his example she/he creates a safe team spirit and encourages open communication and sharing of thoughts and ideas.

The project manager should utilize the team's knowledge and opinions, and ask for feedback on her/his actions. This way she/he will have an opportunity to become a better project manager and take the team's needs better into account. The project manager's task is to ensure that everybody is following. Writing notes can help when difficult topics are discussed.

QUALITIES OF A GOOD PROJECT MANAGER



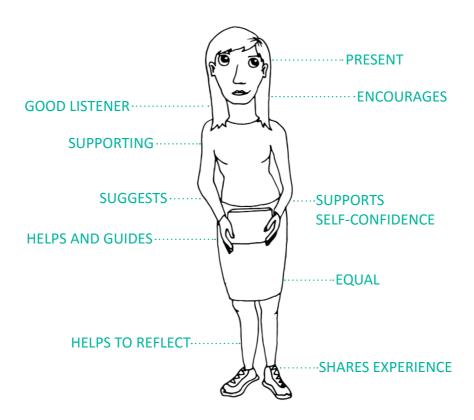
MENTOR

A mentor, as a person with more experience in a particular topic, provides guidance to a less experienced mentee. In a product development project a mentor is a person from outside of the project team. She/he can support, give advice, encourage and possibly also give concrete proposals on how to solve complex challenges.

The mentor can be met when needed, for example once a month for an hour or two. The key challenges can be discussed with the mentor or she/he can help with preparing for future challenges. The mentee's job is to think about and tell the mentor what she/he is expecting from the meetings. It is good to focus on one to three themes in one meeting, to get the most out of the meetings.

The meetings with the mentor are based on open discussion, equality and trust. The mentor can also help with reflecting on the mentee's own qualities, goals and development. Although the meetings aim at development of the mentee, the mentor can also learn a lot.

QUALITIES OF A GOOD MENTOR

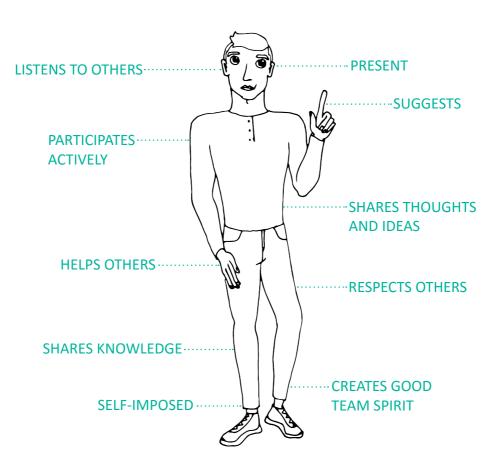


TEAM MEMBER

A team is only as strong as its weakest link. Therefore, it is everyone's responsibility to show good example and take care of other team members. Adherence to agreed schedules, self-imposed contribution and active communication are included in the manners of a good team member. It is also important to take care of one's own responsibilities and ask for help, when needed.

It is the team members' responsibility to provide enough information to the project manager for common decision making and let the project manager know what kind of resources are needed for executing one's own tasks. Active participating effects the team spirit and leads to a successful outcome.

QUALITIES OF A GOOD TEAM MEMBER



GOOD TEAM

A good team is united and active. Its members feel safe and dare to participate. They openly share their ideas and thoughts, and no one needs to be afraid of failure or humiliation. A good team is encouraging and has a supportive atmosphere. The challenges are common, not anyone's alone. Team members actively provide their knowledge in order to achieve common goals and they are not afraid of challenges, instead they want to learn more.

Open communication, active participation and motivating tasks bring a good team closer to their goals. The project manager should find a way to deal with difficult things with the team. It may be, for example, gathering together so that the project manager clearly explains why the team has been convened. At the beginning of the project, a team can create common rules and hang them on the wall for the duration of the project.

ACTIONS OF A GOOD TEAM

- agree on team culture
- create common rules
- form common goals
- discuss expectations and skills
- respect each other
- pull together
- maintain safe team spirit
- everyone takes responsibility for themself

INTERDISCIPLINARY TEAM

An interdisciplinary team has a wide range of expertise. Making use of this knowledge requires open communication and the courage to ask when something is not understood. Working in a team like this has advantages and challenges. When the team spirit is high and everybody feels safe to share thoughts and ideas, it is more likely that the outcome is something innovative. Challenges may be related to different point of views or priorities; different things feel important, and the way of thinking can be difficult to understand.

Additionally, terminology can complicate communication. The same word can be understood in many ways or sometimes it is not clear at all what is being discussed. In severe situations, it is good to put one self in anothers' position and try to understand the situation from her/his perspective. It is important to provide clear instructions and avoid assumptions. Visualization, asking stupid questions and summarizing can be helpful when there is a need to ensure consensus among the team.



TEAM SPIRIT

A unified team is created by building team spirit. This will serve as a basis for the entire project. Team spirit enhances a sense of inclusion and a team that gets along well with each other participates and takes more responsibility of the project. In this kind of team, there is no intention of deceiving others and help is provided more easily.

Good relationships make the team members more committed to the project and create a sense of security within the team. A feeling of security is a prerequisite for courageous trying and the sharing of ideas, which in turn contributes to the creation of innovations.

The importance of building team spirit should not be underestimated and it is good to invest in it right from the start. The better one plans the building of team spirit, the better results one will achieve. Team spirit should be maintained throughout the entire project.

IDEAS FOR BUILDING TEAM SPIRIT

- come up with a team name
- organize a team photo shoot
- create common rules for the team
- cook together
- have a party
- go on a project-related trip
- play introductory games

PROJECT PLAN

A Project plan contains all plans related to the project in one place. It describes how the project is being executed and managed. When planning a project, it is good to make use of the entire team's and stakeholders' knowledge. The project manager's role is to manage the project's planning, instead of doing it alone. Participating in the planning also makes the team more committed to the project. When the project plan is ready, it should be approved by all parties. After this, a kick-off meeting, that will officially launch the project, can also be organized

During the project. the project manager's task is to ensure that the project plan is followed and updated regularly. The project plan instructions on the next page are provided by Jyväskylän kristillinen opisto. Source: http://www.peda.net/veraja/jko/amm/atut/lanu/s11/nelonen/suunnitelma

Example of a Gantt Chart -project schedule:

	AUGUST				5 SEPTEMBER S				OCTOBER
	w 1	w 2	w 3	w 4	w 5	w 6	w 7	w 8	w 9
Research									
Task 1.									
Task 2.									
Ideation									
Task 3.									
Task 4.									
Task 5.									

PROJECT PLAN

1. SUMMARY

- a concise summary of the need for the project, goals, execution model
- 2. PROJECT BACKGROUND AND THE NEED
- background and baseline description
- 3. ACTORS AND MANAGEMENT
- a description of the project organization: lead/steering group, actors, partners as well as their roles, responsibilities and tasks
- 4. TARGET GROUPS AND BENEFICIARIES
- the actual target groups of the project and other possible beneficiaries
- 5. GOALS AND INDICATORS ERGO MONITORING OBJECTIVES
- 6. PROJECT IMPLEMENTATION MODEL AND WORK PLAN
- a description of the execution of the project (most important actions and ways of working)
- rough schedule
- safety plan as well as other permits and requests when necessary
- 7. RESULTS
- most important results that the project is aiming at
- 8. RESOURCES
- human resources, materials, facilities, trips etc.
- 9. BUDGFT
- estimated incomes and costs based on resource based calculations
- 10. RISKS AND THEIR PREVENTION
- a description of the challenges of the project
- 11. DOCUMENTATION, REPORTING AND EVALUATION
- project reporting and schedule/ e.g.: information sharing, documenting, project forms
- evaluation of the project and schedule/e.g.: individual and group evaluations, customer feedback

COMMUNICATION

Communication is sharing knowledge and producing understanding and meanings. At the beginning of the project it is good to agree on how the communication is taken care of and to teach and adapt the team to use the possible communication platforms.

Communication can never be too clear and in the case of important matters it is good to make sure that the message has been understood correctly. Communication can happen for example face to face, over various web-based platforms, in meetings or in feedback sessions. A picture is a great communication tool that allows one to avoid language barriers and jargon-related misunderstandings, especially in an interdisciplinary team. Abstract ideas become understandable to others when they are expressed by a picture.

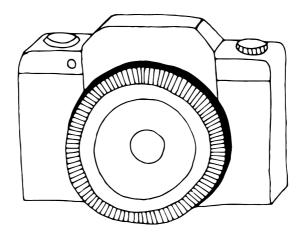
In communiction it is essential to target the right information to the right people. It is good to put things that are communicated to the entire team somewhere visible, so that absent team members can see it when they return. The project manager is typically responsible for communication between stakeholders. It is good to include a communication plan in the project plan.



DOCUMENTING

Documentation is important for both communication and learning. There is often a need to get back to previous documents to check contracts or on the progress of things along the way. It is good to make documenting a habit from the beginning of the project. In this way the important information is available when needed, for example, when informing the stakeholders.

All documents should be collected to one place, where they are available to everyone. A project management program can also be used as a documentation platform. For example meeting reports, photos and various notes can be collected there. The important thing is that the material is easy to find.







PROJECT PHASES

Example







PROJECT SELECTION

IBLUIDING TEAM SPIRIT A

BUILDING TEAM SPIRIT AND PLANNING

RESEARCH

"identifying challenges"

In the research phase, the possible project brief is questioned and the team tries to identify the real challenges. In this way real value can be produced for the customer and the company.

Methods

- observing
- interviewing
- the identification of the user experience

IDEATION

"stretching imagination"

The ideation phase aims to come up with as many different and even crazy ideas as possible. At this point, criticism is ignored and quantity comes before quality.

Methods

- brainstorming
- post-it notes
- sharing cafe
- 6 thinking hats

CONCEPTING

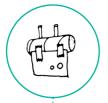
"from an idea to a concept"

In the concept generating phase ideas can be looked at critically and be formed into functional entities. The customer chooses their favourite idea from the concepts.

Methods

- classifying ideas by the theme
- how would apple do it

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PROJECT CLOSING PRESENTATION

PROTOTYPING

"demostrating the idea and concreteness"

The purpose of the prototyping phase is to communicate ideas to others and to demonstrate how they work in practice. The prototype can also be used as a tool for ideating.

Methods

- making quick prototypes
- a play
- demonstrating user experience

TESTING

"developing ideas through experimentation"

The testing phase addresses if the idea works and if it fits for an actual user need. Feedback should be gathered from each testing session and used to further develop the product.

Methods

- controlled testing
- testing intuitivity
- role play
- observing

END DELIVERIES

"material for selling the idea to the public"

Final deliveries are the culmination of the project. That material is used for selling the idea to the public and convincing others. It is good to keep this in mind throughout the project.

Methods

- interactive prototype
- ready product
- dazzling presentation

MEETING

A meeting is a situation where two or more people meet to discuss issues or plan activities. It can be formal or informal. In formal meetings, for example, declaring a quorum is very important. It is good to only invite the people who the meeting concerns, so that participants are motivated and things proceed.

Project management software can be a good platform to create and edit a meeting agenda. During the meeting, decisions and follow-up activities can be documented there and serve as a meeting summary. In meetings where decisions are made enough information should be provided before decision making. The project manager should utilize the team's knowledge and, in case of difficult questions, pairs can be formed to investigate the issues.

The project manager does not need to know everything, she/he can also direct to a person who has more knowledge about the issue or take a small thinking break. Team members should be asked to give input in advance on important matters, so that the project manager has time to prepare for difficult topics before the meeting.

- inform participants about the meeting early on
- book a space and plan the agenda for the meeting well in advance
- be on time
- guide the discussion and stay on schedule
- observe participants and take breaks when needed
- delegate
- make sure things are understood
- end the meeting clearly, preferrably when the spirits are still high, thank the participants and make a summary of the meeting

MEETING AGENDA

It can be a good idea to start a meeting with a "How are you?" -round, so that the participants calm down and can focus better.

- 1. OPEN THE MEETING
- 2. ANNOUNCEMENTS
- 3. DECISIONS TO MAKE
- 4. OTHER EMERGING MATTERS
- 5. CLOSE THE MEETING

WORKSHOP

A workshop is a good way to bring a team together to work intensively on an issue. It is good to have a clear goal and a good plan for the workshop, in order to achieve the goals that have been set. One should choose the right participants for the workshop, as well as buy the needed materials and book the facilities in advance.

The one holding the workshop should act as a facilitator throughout the whole session. In case of a long workshop, it is good to remember to have enough breaks and possibly snacks, so that the participants have enough energy to work. Eating together can also serve as a team spirit strenghtening activity. It is good to keep in mind that people often plan schedules that are too tight on time.

At the end of the workshop, the team should go through what has been done and document the results, as well as agree on further actions, if needed. A good workshop ends clearly and at the appointed time. It is good to stop the workshop, when the spirits are still high, so that the participants leave in a good mood and can enjoy further work on the same things later on.

WORKSHOP PLAN

THEME: Motivation, goals, user interface

17:00 START

Motivational video and picture

17:15 TASK 1

Teapot exercise

18:10 BREAK

Pizza and drinks

18:45 TASK 2

3 main challenges to solve

- first discuss in pairs
- then discuss in teams
- teams write 3-5 challenges on paper
- select 3 main challenges with the whole team

19:00 TASK 3

Based on the three challenges, the teams build a quick prototype in groups of 2-3 people

19:30 FINAL DISCUSSION

Each team presents their quick prototype Open discussion of outcomes

20:00 HOME

COMMITMENT

A committed team member feels a sense of duty towards the project. The goal is to get the team members feel like they are an important part of the project and to take more responsibility for the outcome and success of the project. Commitment can be built on tangible or intangible things. Tangible commitment involves money or other kind of rewards, whereas intangible commitment can involve, among other things, being committed to the team values and decisions.

A committed team member is ready to invest more in the project than a non-committed team member, and is genuinely motivated and interested in its success. As a return, a committed team member gets a bigger role and impact on the project. For a committed team, working together can be so much fun that the team will happily spend time together on the project.

IDEAS FOR COMMITMENT

- common activities
- food
- a trip together
- material for one's CV
- socially meaningful work environment
- roles and responsibilities
- common decision-making
- monetary reward
- meaningful tasks for increasing own competency

DELEGATING

Delegating means transfering a task to another person. This is one of the project manager's main tasks and at the same time is a prerequisite for a successful project. The project manager should learn to delegate effectively at the beginning of a project, otherwise there is a risk that she/he will experience burnout. The responsibility areas make delegating easier. The goal is to distribute the workload evenly among the team members and get things done.

When delegating, one must take the team members's skills and interests into consideration, in order to support high motivation levels and good quality work. One must also rely on the team members when delegating. However, it is good to immediately agree on when and how tasks are reviewed. If tasks are not checked, the team may feel that their contribution does not matter. Big or difficult tasks can also be delegated to, for example, pairs. A well-performed task should always be noticed and the person should receive positive feedback for it.

IDEAS FOR DELEGATING

- everybody proposes what they want to do
- lists: select your favourite task
- lottery
- on the basis of suitability
- on the basis of interest
- on the basis of the learning goals

MOTIVATING

Motivation is the sum of many factors. A feeling of relevance, skills, feeling of one's own capability and a comfortable work environment are essential for motivation. Additionally, concrete goals and clarity improve motivation. When the goals are clear from the start, unpleasant surprises and false expectations can be avoided.

People are motivated by different things, this is why the project manager should get to know the members of her/his team and to find out what motivates them. This information should be utilized throughout the project. It is good for the entire team to understand each other's motives and goals, as these things significantly affect the process of the project and forming realistic and meaningful goals, as well as time management.

The project manager must know how to listen, discuss, coach and come up with solutions together with the team. Good feedback and moments of success are factors that increase motivation. On the other hand, rushing, too much stress, challenges that are too big, or tasks that are too boring are motivation's worst enemies. A team member who has an influence on her/his tasks cannot blame the project manager for boring tasks.

FACTORS AFFECTING MOTIVATION

- team spirit
- goals
- life situation
- internal vs. external motivation
- encouragement and acknowledgement
- skills and knowledge
- belief in one's own abilities and capability
- feeling of being important
- feeling of security even when failing
- realistic schedule and expectations
- meaningful tasks
- motivating working environment
- the consistency of topic and values
- noticing own improvement
- experiencing success

INVOLVEMENT

In a good project, the team has an active part, rather than just listening and taking orders. A participating team member is involved in ideating and decision making. She/he is genuinely affecting the project and feels as an important part of it. It is also essential that the topic interests her/him.

The roots for involvement are created at the beginning of the project when the team spirit has been built. However, the project manager needs to actively involve team members throughout the entire project. A motivated and involved team member takes an active role in the project, but this situation does not apply to every team member. In this case, different participatory methods may be helpful.

IDEAS FOR INVOLVEMENT

- comment round
- (x min.) speaking-tags, which must be used
- throw a ball, the recipient answers
- color cards: red= disagree and green= agree
- using a timer, if somebody speaks too long
- sharing tasks (ideas on page 49)
- voting
- groupwork
- preparatory tasks
- holding a presentation that has been agreed on in advance
- utilizing roles and responsibilities
- share post-it notes, everybody writes an idea per post-it
- collecting feedback
- a lot of methods can be found for different project phases (e.g. ideation methods)

DECISION MAKING

At the beginning of a project it is good to determine in the project plan how decision will be made during the project. At the time of decision making, it is ideal to have as much useful information as possible on hand and to have the relevant people present. However, it is good to keep in mind that there rarely is a situation in a project where complete information can be provided to support the decision making.

It can be useful to define points where decisions need to be made in advance and it is beneficial for this information to be communicated to the entire team. Some of the decisions are good to be made together with, for example, the project owner.

The team members' responsibility is to help and to provide the project manager and others enough information to support collaborative decision making. Collaborative decision making engages team members to the project and the tasks at hand. The project manager should try to anticipate project related issues and to prepare an alternative plan for unexpected situations.

- Who makes the decisions?
- How are the decisions made?
- Which decisions should be made and when?
- Is there enough information to make the decision?
- Whose opinion is needed in the decision-making?
- What follows after the decision?



PROBLEM SITUATIONS

With teamwork it is almost impossible to avoid some sort of disagreement, but one can learn to deal constructively with problem situations in a team. Problems should be addressed as soon as possible and solutions should be looked for together with the involved parties. Things proceed when everybody tries to see the situation from others' perspective and tries to be solution-focused.

When dealing with a problem situation, it is good to also discuss how to behave in the future and what will happen if the situation does not change. In this way the expectations are clear and people will get a second chance. The final outcome of the situation will be up to them. It is good to write down the agreements so that one can get back to them later if the situation does not change.

Visibility can prevent the emergence of many problems. When the responsibilities have been clearly pointed out to the whole team, also the peer pressure is a pushing factor. A person of authority can be added into an email conversation if the messages are not otherwise being taken seriously. The project manager should recognise which problem situations she/he can deal with and which should be outsourced. When things are handled promptly and constructively people can learn from them and, ideally, continue stronger forward.

TYPICAL CHALLENGES

- communication
- engaging team members
- personal chemistry
- disagreements
- different goals and expectations
- cultural differences
- schedules
- quality of work
- distribution of workload
- motivation

FEEDBACK

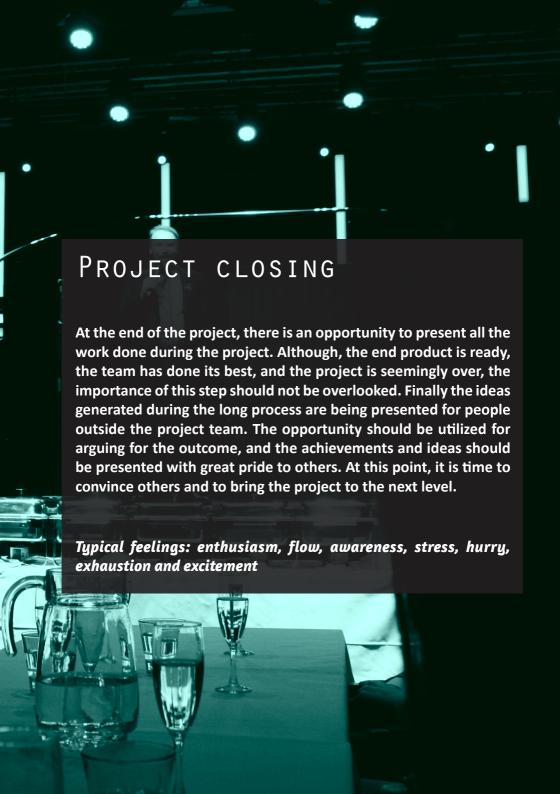
Receiving feedback is essential to development. It gives people the opportunity to continue what has been done well and to learn more about areas where there is still room for improvement. Feedback should be constructive and solution-oriented. Difficult things should be said in an encouraging way. In the best case feedback can be inspiring and motivating.

Everyone should have the opportunity to give and receive feedback in a safe atmosphere. There are many ways for collecting feedback. It can be, for example, oral, written, post-it notes or smileys. One can use their imagination freely to think of different ways of collecting feedback. The project manager should also ask for feedback to be able to understand the team's needs and to become a better manager.



A great method for sharing group feedback can be found from here: www.ilikeiwish.org.





PRESENTING

Presenting is often taken for granted and not rehearsed properly. It is an important skill that should be rehearsed and is learned best through practice. However, it is something that everybody can learn.

Typically, the project manager represents the project and she/he has already presented the project many times before the final presentation. The final presentation is nevertheless the culmination of the project. It is the moment when all the work that has been done can be presented. It is the opportunity to argue for decisions that have been made and market the final product.

One should prepare for the final presentation carefully and with enough time. It is also good to know the audience. A good presentation is targeted to its audience and it is relevant and understandable to the listeners. To get the audience's attention, one should be confident, take the audience into account, and show one's own enthusiasm.

A GOOD PRESENTATION (10 MIN)

2 MIN | SET THE SCENE

- Tell what you are going to tell
- Catch the audience's attention
- Lists of 3 things stick in mind

5 MIN I ACTUAL TALK

- Tell what you came to tell
- Get straight to the point
- Show your own passion for the topic
- A storyline can improve the presentation

3 MIN | SUMMARY

- Tell what you told
- Aim for a strong ending
- Leave time for questions

Stage fright can be eased by standing confidently in the Wonder woman -pose before the presentation for 2 minutes.



FINAL DELIVERIES

Typically, an end product and project report are expected from the team at the end of a product development project. The end product can be a prototype of the idea or a ready product, depending on what has been agreed on. A project report is a written aggregation of the different project phases, research findings, ideas and the final outcome. All the essential information of the project should be found from the project report.

The project report is important for the team's learning experience. The report can be viewed for checking what has been done and through this process one can learn how to do things even better in the future. It also explains how the team has settled upon the final outcome. In the case that the project is continued later and the need for previously explained information appears, this information can be found in the project report.

It is advisable to work on the project report during the project in order to avoid forgetting things. This way, a huge amount of work can be avoided at the end of the project when there is definitely enough other important work to focus on. It is good to keep the end deliveries in mind from the start.

PROJECT REPORT

The content of a project report can vary a lot across different projects. The project plan can serve as a good basis for the project report.

1. PROJECT BACKGROUND

Starting point Stakeholders

2. RESEARCH PHASE

Research methods Research findings

Describing the chosen challenge

3. CONCEPTS

Ideas

Concepts

4. FINAL PRODUCT

Presenting the final concept or product

PROJECT CLOSING

Closing a project includes handing over the outcome of the complited project to the customer. Typically, at minimum the project report and the final product or a prototype are handed over. In addition, the outcome of the project is often presented in a final presentation at the end.

At the end of the project, all important material produced during the project should be handed over so that the project can be continued if needed. The material that is in electronic format can be handed over on a memory stick, e-mail or Google Drive, according to what is determined to be most convenient and safe.

When the material is handed over, it is time to celebrate. The team deserves a reward for their hard work. The same people might also work together in the future, which is why it is important to finish the project on a high note. When a project is ended properly, it is easier for everybody to move on to the next challenge and the project does not stay hanging on anybody's shoulders with some extra tasks.

It is suggested to use the celebration ideas listed on the next page also during the project to build up team spirit and to celebrate moments of learning and achievements. Working should also be fun!

IDEAS FOR CELEBRATING

- open sparkling wine
- eat at a restaurant
- have a BBQ
- go on a cruise
- cook together
- celebrate in the city
- give playful prizes

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ADDITIONAL INFORMATION

Literature

Delft Design Guide. 2013. Annemiek van Boeijen.

Design Thinking: Integrating Innovation, Customer Experience, and Brand Value. 2009. Thomas Lockwood.

Design Thinking: Understanding How Designers Think and Work.

2011. Nigel Cross.

How Designers Think. 2005. Bryan Lawson.

Katso. Näe. Kuvittele. 2010. Jussi Luukkonen.

Luova laiskuus. 2013. Juha T. Hakala.

Managing the Unknown. 2006. Loch, DeMeyer & Pich.

Mielekkyyden muotoilu. 2013. Ilkka Kettunen.

Muotoiluajattelu. 2014. Satu Miettinen.

Nonviolent Communication: A Language of Life. 2015. Marshall B. Rosenberg.

Product Design and Development, 5th Edition. 2012. Karl Ulrich, Steven Eppinger.

Project Management for Design Professionals. 2006. William G. Ramroth.

Project Management for Dummies. 2007. Stanley E. Portny.

Projektihallinnan käsikirja. 2011. Risto Pelin.

Reinventing Project Management. 2007. Aaron J. Shenhar & Dov Dvir.

Rethinking Project Management. 2008. Erling S. Andersen.

The Oxford Handbook of Project Management. 2012. Morris, Pinto & Söderlund.

Tulokseen tiimityöllä. 2003. Karl-Magnus Spiik.

Älykäs johtaminen 7.0. - Miten kasvaa viisaaksi johtajaksi?. 2012. Pentti Sydänmaanlanka.

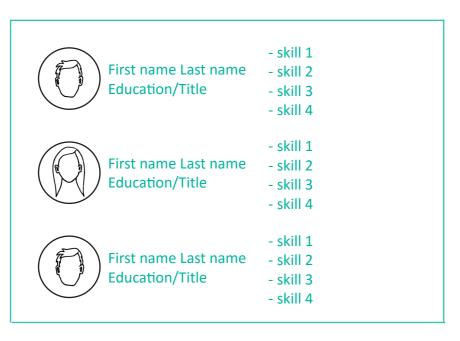
Internet

www.pdp.fi
www.ilikeiwish.org
www.esimies.info
www.mestariluokka.fi
www.projecttimes.com
www.projekti-instituutti.fi
www.hybridimenetelma.suntuubi.com
www.16personalities.com/free-personality-test
www.eosmo.fi/tyokirja
www.innokyla.fi

ATTACHMENTS

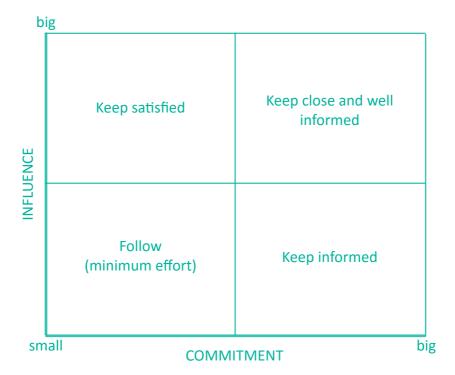
Appendix 1. Know-how map

A know-how map can be done in many different ways, this is just one example. The essential thing is to present the necessary information clearly on the map. The team can be given the task of creating a know-how map in their own style.



Appendix 2. Stakeholder analysis method

The stakeholders are marked in the table based on their commitment and influence. This information is used for planning communication.



Appendix 3. Mentor's future reminiscence method

The goal is to solve a chosen challenge. The mentor will guide the mentee in a open space, as if on a timeline, and will ask questions that the mentee will answer.

- 1. Choose a situation that you want to look back to in this moment.
- 2. Choose a time point in the future when your chosen challenge is in the best possible way or very well. How is it then?
- 3. How have you achieved it? Describe the specific actions and means (what have you done, how have you won the barriers and concerns etc.)
- 4. Who has helped you?
- 5. For what can you thank yourself and others?
- (6. How can you show this gratitude?)

Appendix 4. Introductory games

Slap

Participants form a circle and one of them is selected to the centre of the circle. The selected person rolls up a newspaper and points someone in the circle. The pointed person says someones name from the circle (e.g. Riikka) and the person in the centre tries to slap Riikka. Riikka tries to say a new name from the circle before she is being slapped. If she gets slapped before she says a new name, the roles are switched and she will become the person in the middle of the circle.

Queue game

Participants are divided into two or more teams. The teams's task is to always form a queue according to what the director of the game says. The fastest team wins. Topics for forming queues can be e.g. age, shoe size, number of siblings, the first alphabet of the surname, height etc.

Appendix 5. Teapot exercise (Theme: motivation)

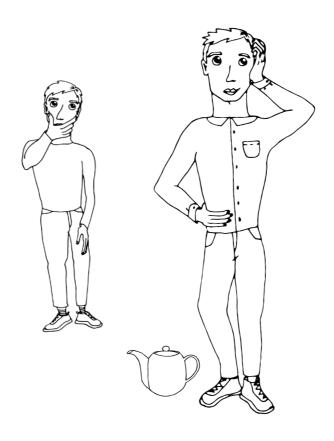
You will need: an object, open space and questions

Place the object in the center of the room and ask the team to gather around it. Explain that you will ask questions, and the team members should answer the questions by moving closer to or further away from the object. Explain the goals for the task. Ask additional questions during the exercise and aim for open communication. Remember to give people enough time to react and react yourself to gestures that communicate something.

Example questions:

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- How motivated are you currently about the project? (Why did you choose that place?)
- How much time are you able and willing to use for the project?
 (What kind of thoughts do others place choices evoke in you?)
- What kind of outcome would you like to achieve with the project?
 (What kind of thoughts do others' answers evoke in you?)
- How can we all get to the same distance from the object, or is it necessary? (What more can you give or what do you have to give up for the project to get to the same distance?)
- Are there still thoughts about the matters that we have now discussed?



Notes