

Elisa Rakkolainen

# Managing a Peer Group in Television Production

Helsinki Metropolia University of Applied Sciences

Bachelor of Engineering

Media Engineering

Thesis

8.5.2013

Author Title	Elisa Rakkolainen Managing a peer group in television production
Number of Pages Date	32 pages + 1 appendix 8 May 2013
Degree	Bachelor of Engineering
Degree Programme	Media Engineering
Specialisation option	Audiovisual Media, Business in Europe
Instructor	Erkki Aalto, Head of a Degree Programme
<p>The purpose of this thesis is to provide an example of how a peer group can be managed in a project where an online magazine is published fortnightly. A gaze over regular television productions has been taken and it is compared to the Metro TV-project, which has been the experimental basis for this study.</p> <p>The theory of project management is compared with the actual execution of Metro TV. Human resources, including the part of the project manager, have been closely observed to emphasize the effect they have on each and every project.</p> <p>Graphs and tables in this thesis have mainly been modified to match Metro TV in order to bring understanding to both the scope of the project and the characteristics defining it.</p>	
Keywords	television production, peer group, project management

Tekijä Otsikko	Elisa Rakkolainen Vertaisryhmän johtaminen televisiotuotannossa
Sivumäärä Aika	32 sivua + 1 liite 8.5.2013
Tutkinto	Bachelor of Engineering
Koulutusohjelma	Media Engineering
Ohjaaja	yliopettaja Erkki Aalto
<p>Insinööriyön tarkoitus oli tutkia, miten projektijohtamisen teoriaa voidaan soveltaa projektiin, jossa vertaisryhmä tuottaa internettelevisiolähetysten joka toinen viikko.</p> <p>Työssä vertailtiin tavallisia televisiotuotantoja ja Metro TV -projektia. Metro TV oli Metropolia Ammattikorkeakoulun projektikokeilu, jossa oli tarkoituksena selvittää, miten pelkästään opiskelijoista koostuva työryhmä pystyy toteuttamaan ammattikorkeakoulun toimipisteitä yhdistävää televisio-ohjelmaa.</p> <p>Työssä perehdyttiin erityisesti viestintään ja henkilöstöön, projektinjohtaja mukaan lukien, koska niillä on suuri vaikutus kaikkiin projekteihin. Kommunikaatio ja kunnioitus ryhmän jäsenten välillä on aina tärkeää, eritoten tässä vertaisprojektissa, jossa jäsenet edustivat eri kulttuureja ja kansallisuuksia. Muita tärkeitä päätelmiä olivat dokumentoinnin tärkeys, koska sillä pystytään muun muassa minimoimaan projektien riskit, ja se että epäviralliset keskustelut auttavat projektijohtajaa hänen työtehtävissään.</p> <p>Insinööriyöraportin on tarkoitus auttaa muita vertaisryhmien johtajia toimimaan mediaprojekteissa, vaikka aiempaa työkokemusta vastaavista tehtävistä ei olisikaan. Työn teoriataustasta voi olla hyötyä muidenkin alojen projektijohtajille.</p>	
Avainsanat	televisiotuotanto, vertaisryhmä, projektijohtaminen

## Contents

1	Introduction	2
2	Metro TV	3
2.1	Metro TV as a Media Project	3
2.2	Metro TV as a Television Production	5
3	Working Group	7
3.1	Educational Background	8
3.2	Organisational structure	9
3.3	Roles in Metro TV	11
3.3.1	Roles in Pre-Production	11
3.3.2	Roles during Broadcast	14
4	Project Management	15
4.1	Skills and Comprehensives Required	15
4.2	Value Chain from Idea to Receiving	19
4.3	Time Management	23
4.4	Managing Risks	26
4.5	Importance of Communication	28
5	Conclusions	32
	References	33
	Appendices	
	Appendix 1. GANTT Chart for a routine episode of Metro TV	

## **1 Introduction**

When I started writing this thesis I had completed my industrial placement as a project designer for Metro TV project. I was hired by Metropolia University of Applied Sciences (from now on I will refer to it as Metropolia UAS) to work on Metro TV based on my previous experience of television and film productions during my exchange in Hochschule der Medien Stuttgart.

Not only did I design the beginning of this project with my group mates, but also coordinated and managed it from an early stage. In order to share what I learned in those months I wanted to write this thesis to help others manage peer projects without previous working experience under the same circumstances.

When it comes to project management there is plenty of literature to be read. My goal has been to find essential information for persons working in managing position in peer groups for the first time. The focus of this thesis lies on Metro TV and small scale television productions but it might also be useful for managing other projects.

## 2 Metro TV

Metro TV was launched as an experimental pilot project [1]. It was based on an idea of a television channel which would bring together the students of Helsinki Metropolia UAS. At that time Helsinki Metropolia UAS was operating on 20 locations and had 16000 students [2]. The Metro TV group wanted to create a medium between the campuses and the students of different Degree Programmes.

Metro TV ended up being an online TV magazine, produced by students. In the beginning it was agreed that the live shows would be distributed on our own web page fortnightly in order to create a “real working life” routine. Personnel's goal at that time was mainly to create a new learning environment for students. It was known at this point that the shortage of staff might be one of the factors hindering the progress of this project. [1]

Technically Metro TV simulates the existing technologies and implements them on a laboratory environment. First television courses at Metropolia UAS, which might have been the sparkle for Metro TV, took place in the beginning of year 2004. Later on the distribution systems have been updated to 3G-SDI, which can carry HD signal. Metro TV's signal is distributed to IP reception and the personnel of Metropolia UAS have been developing the signaling and distribution system further on. [3]

Students participating in Metro TV got situational support from the staff but otherwise we were producing to the show completely by ourselves. In the beginning most of us group workers were “motivated fourth year students with team spirit” [1]. Motivation started to lead us further and what we learned was being briefed to the other group members. Metropolia UAS provided us with the equipment, an own studio and control room but the rest was up to us [1].

### 2.1 Metro TV as a Media Project

Project Management Institutes definition for a project is “a temporary endeavor undertaken to create a unique product or service” and British Standards Institution declares the following: “A project is a unique set of coordinated activities, with a define starting and finishing point, undertaken by an individual or organization to meet specific

objectives within defined schedule, cost and performance parameters” [4, 1]. Metro TV fulfils the first definition, but in the second definition the timeframe does not correspond to this media project. In an ideal case a project has a clear start and an ending, but Gardiner mentions that an ending can also be when the objectives are met (or when the project is defined to be not executable). [4, 3]

For the realization of Metro TV, students who could create an online publishing environment were needed but also persons with the understanding of audiovisual media would become crucial to the project. Knowledge of design and printing would be required for posters and business cards. This new medium needs to be marketed in some way. Information needed to do all this is being taught to students in different modules of Media Engineering. Figure 1 displays the technical structure of Metro TV's broadcasting system.

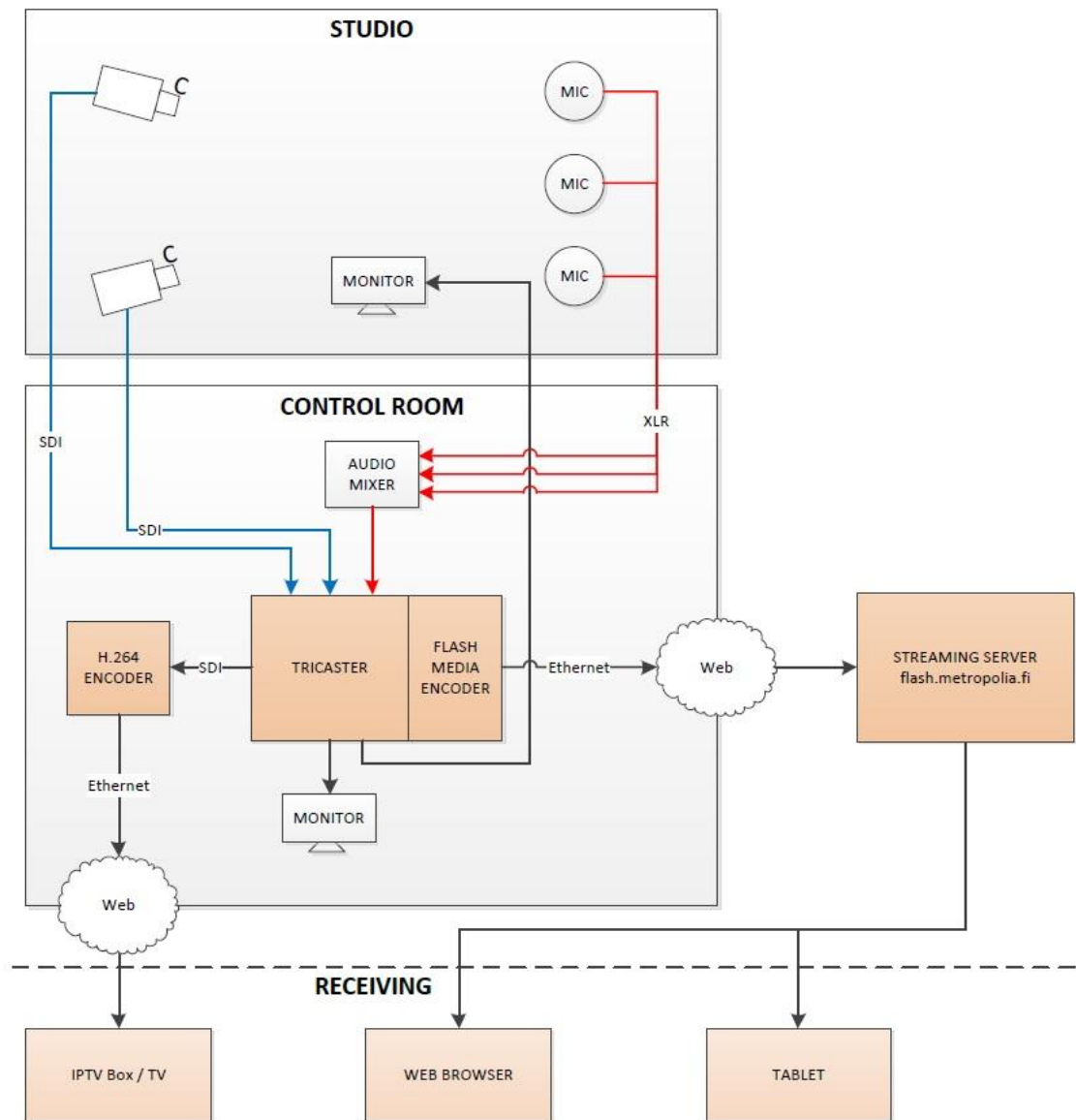


Figure 1. Metro TV's technical structure [5]

## 2.2 Metro TV as a Television Production

In YLE's big productions the crew in the studio consists of six camera operators, three lighting technicians, two audio technicians, a floor manager and a set supervisor. In addition to they have a control room, an audio control room and a picture quality control room. The people in the control room are director, assistant director, video mixer, media operator (assisting with the pre-recorded material and graphics) and possibly a producer who gives advice to the presenter (depending on the production). An audio



engineer is working in the audio control room and picture quality control room holds a crew of a lighting technician, a light operator and a picture quality supervisor. These roles and the number of staff can vary in different kind of productions. Approximately twenty five persons are working in YLE's production "Suorana: Kortesmäki", but it can be considered as a small crew for a big production. [6]

In Metro TV the smallest crew we could execute a show with consisted of nine persons; studio crew of two camera operators, floor manager and a presenter and control room crew of director, assistant director, video mixer and an audio mixer. Stream supervisor was also required.

Media programming, or television programming is basically the act of choosing the best broadcast times and topics for programmes. These actions' main objective is to attract audience for advertisers in commercial media. [7, 4]

Metro TV is not a commercial show, but it needed a specific broadcast time to attract the viewers. The working group came to the conclusion that the broadcast should not be during office hours, because students would most likely be on lectures that time. The regularity to broadcast on a specific weekday was supposedly giving the sense of continuity; you could watch Metro TV every other week the way you watch your favourite sitcom. As Eastman and Ferguson say "positive" stories are pleasant for the audience [7, 12], and this is what we kept in mind when planning the pre-recorded clips and live-sections for the upcoming show. Nowadays most people want to have their "15 minutes of fame" (and also share it with others) and as we were recording on other campuses, we gave Metro TV exposure and gained more viewers.

The issues handled in Metro TV were ones related to Metropolia UAS. This reflects how ownership has an effect on television programming [7, 7]. Also the ease of delivery is essential for broadcasting [7, 9]. To make Metro TV available for everyone, our web broadcast was being optimized for gadgets (and not only computers).

### 3 Working Group

The students working on Metro TV represented different nationalities and therefore efficient communication was needed right from the beginning. More about the communication is found under sections 3.2 and 4.5.

The book "Operations Management Processes and Value Chains" recommend that the group members are selected based on technical competence, sensitivity and dedication [8, 73]. In Metro TV the dedication to the project was the only thing required from the students. Working crew got ECT's according to their working hours for Metro TV [3]. Technical competence and political sensitivity were assumed to come along the process with the help of coworkers and school personnel [3].

A project manager should build a team, in which people will create innovation and openly discuss ideas, communicate freely with other group members, work for the team and obtain co-operation from people outside the team. An ideal working group also wants to improve the work done, asses everyone's work pragmatically and remains as a group - even though something would go wrong. [9, 20]

The nature of working has changed a lot to a direction, where services are produced instead of goods. As the communication is not done with machines, but coworkers, it is more difficult for a supervisor to observe and control the workers. This has created a new type of workers, information workers, as Ekman calls them. Information (either learned or heard) is the tool of these workers. They do not work close to their manager, and have a great freedom to execute their tasks. With freedom comes a downside, uncertainty, which workers patch with discussions with their colleagues. [10, 40-42]

The workers in Metro TV were indeed information workers, which makes the management more difficult. I let everyone do their work the way they preferred, but was always ready to advice or support. By unofficial discussions I tried to make myself easier to approach, also in case of accidents or lack of information and in cases I could not help, I contacted other people to help solve our problems.

Project manager's responsibility is to conduct team building. A manager also needs to organize the team by defining activities and tasks for each worker. Kick-off meeting is a good way to give everyone a clear picture of the project. A project manager also has to

establish communication links with group members to clarify communication rules and how problems should be reported. [4, 210]

Lamminaho states in her thesis that in school productions the relations between workers are emphasized in both good and bad. As everyone is aware of the personalities of other group members, they usually act accordingly. Emotions and attitudes become a part of working together. On the other hand it helps with the communication but can also reduce effectiveness of the group. [11, 11]

### 3.1 Educational Background

All the students working on Metro TV were studying Media Engineering. According to Metropolia UAS's website, the purpose of Degree Programme in Media Engineering is to give a base for engineering profession and to make it possible to develop oneself after graduation. The professional studies include software engineering, multimedia technology and production, internet technology, web development, mobile programming, visual design and e-services. [12]

Producing an online magazine, which is the goal of Metro TV, requires skills in television production but also other technical skills. All the professional studies in Media Engineering can be bound to create a broadcast in online environment. The students who focus on internet technology and web development were contributed to create the platform for internet publication, whereas software developers and mobile programmers tackled with the challenges of our broadcast working on many platforms. As the goal was to familiarize everyone with all the tasks in television production, most of the people took more than one role; one in the pre-production and one in the actual broadcast. This also made it possible to work with a fewer amount of people than normally required in a television production.

Not only did the field of studies of the students working in the group vary but also the working experience. As a group we tried to make the most of the professional knowledge we already had; persons who had participated in television or film productions earlier had their say when designing the structure of the project. Persons with some special skill e.g. streaming or designing tutored the other students interested in that particular branch. Learning from peers was a cornerstone during the project.

### 3.2 Organisational structure

Any group must create an organizational structure in order to reach a goal. Most of the industrial organizations use conventional hierarchical structure, of which a simplified example is shown in figure 2. [9, 9]

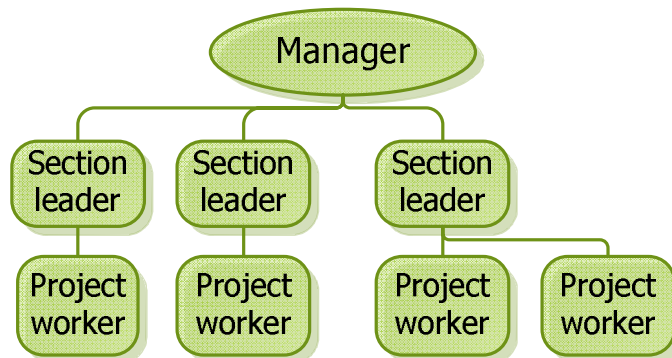


Figure 2. Hierarchical functional organisation [9, 9]

Pros of the hierarchical model are the following: it keeps the control at the top, represents the functions logically and maintains the power and prestige of the functions. It also reduces duplication of tasks and the reporting policies are simple. For workers it means more concentration on their functional skills and for the organisation it allows extremely high capital utilisation. [9, 10]

Although the pros are easy to see, so are the cons of the hierarchical model. It can cause over-specialisation, weaken co-ordination between functions, repress the development of managers, lengthen the response time in periods of fast change, create an increasing burden for the manager and it also requires detailed preparation to work fluently. [9, 10]

In the book “Operations Management Processes and Value Chains” organizational structures are divided into three parts: functional, pure project, and matrix [8, 73].

Let us assume that the functional organizational structure is used. In that case all the individual projects inside an organization are focused on only one thing and the project manager needs to negotiate with other departments if project group A needs assistance from project group B. This might lead to problems with time management

because project group B most likely has a lower priority for projects taken care of project group A. Resource usage is bigger though, because project workers in group A who are not working on their current project, can be “borrowed” to other project groups. This model can be applied to Metro TV, because i.e. web design was done simultaneously with content producing, even though they were not considered as different project groups. In Metro TV the deadlines were mainly at the same time, because broadcast was done every two weeks. This solved the lower priority issue. [8, 73]

Pure project -organizational structure means concentrating on only one project. Projects, in which this approach is used, should be big and offer so many tasks that the workers could be working on it full time. Pure project model simplifies the lines of authority, but in small projects, like Metro TV, it could lead to duplication of resources and Metro TV did not have enough tasks for everyone to work full time. [8, 73]

Matrix structure is a combination of the functional and pure project -organizational structures. It allows resources and workers to be moved from different tasks to other ones. [8, 73]

One of the most important goals of Metro TV was to let students learn all the different roles within television production. Since the hierarchical pyramid model would have hindered the knowledge exchange, another model for hierarchy needed to be found. For Metro TV the matrix organizational structure was the most efficient one, because at times things needed to be done fast to enable a fortnightly broadcast. Our peer-to-peer communication model, the so called Matrix organizational model, is displayed in figure 3.

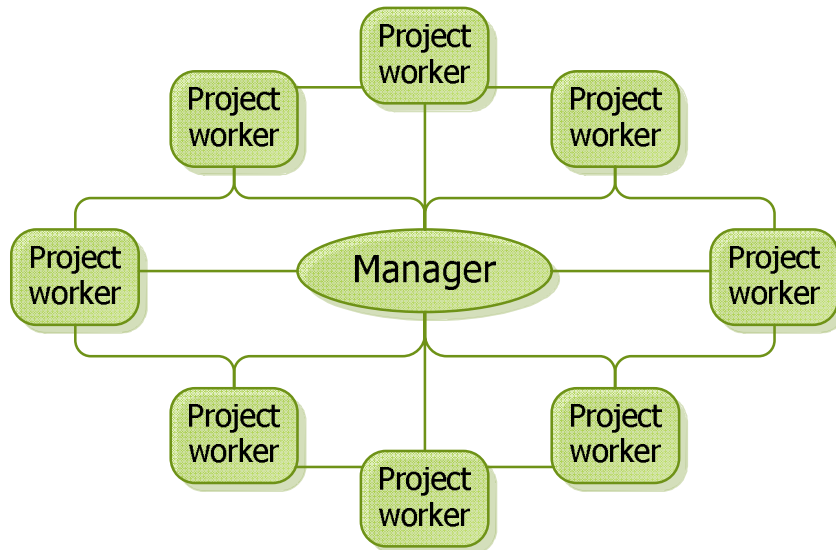


Figure 3. Communication flow in Metro TV

Benefits of the model in figure 3 are that it allows the group members to work anywhere and anytime. Its objective is to create something as a group and it makes the communication flow easier, because everyone has access to information. The emphasis lies on working in a peer environment where everyone is equal. [13]

The figures in this chapter do not always represent that all the decisions come from the manager but “unofficial leaders” also affect them. By participating in unofficial discussions with a laid-back atmosphere (“hallway discussions”) a manager can gain trust and earn the mental status of a leader. [10, 14; 10, 115] This topic is processed more carefully in chapter 4.5.

### 3.3 Roles in Metro TV

#### 3.3.1 Roles in Pre-Production

Producing an online-magazine needs a lot of preparation, even though the actual broadcast can be considered to be the highlight. Roles in this phase vary from online development to producing content.

The producer (and the Editor in Chief) for this production was Director of Degree Programme for Media Engineering, Erkki Aalto. All the important decisions needed to

go through him and his goal was to keep the original vision alive throughout the project. The producer's job is usually to manage the finances of the production, hire the staff and make the working contracts with the staff members [11, 8].

The best way to describe project manager's role in Metro TV's pre-production is Max Wideman's definition, which has been paraphrased by Gardiner. They state that the project manager's tasks are communication with the sponsor (in this case the producer) and clients as well as managing the competent personnel for the project. This definition also withholds taking care of productivity and facilitating communication as well as documenting the progress of the project. [4, 108]

Web developers are needed to create the platform for the actual broadcast. Their job can be done at any time because it is mainly individual work. They are a good example of information workers, which are described under heading 3.

As we were marketing the show with print products, we needed a print product manager. This person's main responsibility was to take care of quality products by selecting the right kind of materials and co-operating with the designer of the product.

Both online development and printing needed designers, who would create the design frame for the work done. Luckily one of our group members had a background in designing, so he taught us some of the basics.

Before the broadcast the studio needs to be built and the lighting needs to be set. The set designers' (a.k.a. art director) and lighting technicians' (a.k.a. gaffer) work is mainly done before the actual broadcast. The main problem with the lighting occurred with the objects already in the set and reflections from them, whereas creating the set was difficult due to the lack of funding. As versatile lighting equipment was provided to us by Helsinki Metropolia UAS the reflections were successfully removed, even though the size of the studio was restricted. The set designer's main challenge was the lack of funding, but the solution for that was found in the solidarity within the group. The set designer / designers made a list of the things needed in the studio and the group members checked if they would have something similar available. Through lighting and set design, different moods can be created.

The content producers play the most obvious roles in pre-production. As the broadcast was built by both pre-recorded material (inserts) and the live-sections inside the studio, half of the material was ready to be broadcasted before the show begins. Content producers include scriptwriters, camera operators, audio supervisors, reporters, presenters and editors.

Scriptwriting probably plays the least-technical role in pre-production. Still it needs to be done in order to create a good broadcast with a plot. Even though the inserts would be informative, they still need a proper dramaturgic beginning and ending to make a logical entity. Scriptwriters need to understand the objectives of the project and work hand-in-hand with the producer [14, 7].

Camera operators' and audio supervisor's tasks do not vary that much from the camera operators' and audio mixer's part during the broadcast. During content production, they most likely have to be on the move, which brings more challenge to their tasks. Lighting or acoustics outside the studio are difficult to manage, which is why during filming the first thing for the crew to do is to find an environment, where light and sound would be satisfying. Filming crew usually had a small light-source with them, but in the end, better results were made when the set was selected carefully in terms of light. The audio supervisor on the other hand usually had at least two microphones with him or her in order to record the audio as subtle as possible.

Reporters (journalists) and presenters worked closely in Metro TV; sometimes they even were the same person. The reporter's main task was to find an idea for the insert and create some kind of script to it (this is where scriptwriting usually would take place). The presenter worked as a narrator during the inserts as the point of view during the videos was usually from their perspective.

Editing takes place as soon as the video and audio materials are delivered to the editor. In Metro TV we tried to have the same person work as the camera operator and the editor, because one's own material is always easier to edit and this way the person editing is already familiar with the material. This also made it possible to learn from own experiences: if filming was done poorly, editing took a lot more time. A video editor not only fixes the flaws in the video material, but can also vary the mood of the insert by using different video or audio footage and effects [14, 9].



### 3.3.2 Roles during Broadcast

The live sections of the shows are usually produced in the studio. In this section I will go through the crew members in the control room, where output material is handled, and in the studio, where live interviews take place.

The director is the person, who will select the footage to be broadcasted during the live show. The director controls the whole working group via headsets during the live broadcast, so the person in this position needs to have an overlook on everything happening in the studio. Imagination, understanding of small details and creativity are the best qualities a director can have [14, 7].

In Metro TV the assistant director's main task was to keep everyone aware of the schedule both before and during the broadcast. The assistant director was the right hand of the director who helped running last-minute errands. Usually assistant director's task is to bond the director with the rest of the group and help with extras on the set [11, 8].

The video mixer, a.k.a the technical director, is the person who executes the director's vision; this is why the communication between the video mixer and the director is extremely important. This person's main job is to keep an eye on video material and keep its quality on a good enough level for being broadcasted [14, 8].

The job of an audio mixer is sometimes considered to be less important than other jobs in the studio. This is, however, not the case in real life. One noticeable factor differentiating amateur and professional productions is the quality of audio. The audio mixer's tasks are to select the equipment and its positioning, keep the dialogues clear, reduce noise and control the background audio and sound effects [14, 8].

In the studio the camera operator, or the operators, try to achieve the best video material they can while following director's orders through their headsets. They are responsible for operating professional video cameras and need to maintain composition, focus and camera angles while on air [14, 8].

The floor manager (also called stage manager) is the person, who keeps things running in the studio. He or she coordinates talents on screen and supervises

personnel in the studio. One important task of a floor manager (before the actual show) is to greet the guests and make them feel welcomed before guiding them to the set [14, 9].

The presenter (in common language called the host/hostess) is the narrator of the studio. He or she will interview the guests. In Metro TV the presenters also came up with questions themselves, which would normally be a part of scriptwriting.

Stream supervisor takes care, that the broadcast is streamed live. After the broadcast a recorded version is posted online in order to provide the episode to the ones who did not see it live.

## **4 Project Management**

### **4.1 Skills and Comprehensives Required**

Everyone has their opinion about what kind of person a project manager should be. From my point of view the success of the Project Manager is defined by seeing if the requirements of the project have been fulfilled. One of the factors to this is managing the schedule and making sure that the broadcast happens at agreed time [3]. Gardiner states that management skills consist of hard skills and soft skills, of which the latter one is more difficult to learn [4, 7-8]. I would call the hard skills required to manage a project to see the whole picture and be capable to help with simple work steps and soft skills emotional intelligence. Emotional intelligence (EQ, emotional quotient) can be detected in a person who accepts and values one's own and other persons' emotions [4, 8]. Ekman's description about trustworthiness could be related to emotional intelligence.

Managing and leading are two separate things, which Ekman describes well. Managing consists of planning, writing documents, dividing responsibility and solving problems whereas leadership is creating a feeling of unity among shared values. He emphasizes trustworthiness as a good leader's/manager's attribute throughout the "Johda enemmän, hallitse vähemmän - epäviralliset keskustelut esimiehen työvälineenä". The trust among workers and supervisors is described in table 1. [10, 11]

Table 1. Leader's trustworthiness among employees and co-workers [10, 48-53]

How much employees trust the manager	A lot	Unofficial Leader - no status - is listened to by workers - usually have a lot of experience	Official Leader - status - appreciated by everyone - usually involved in hallway conversations
	A little	A Friend - has the status, but is not seen as a manager by anyone - most likely promoted from the working crew	A Status Leader - not involved with workers - uses only official communication
		A little	A lot
How much other supervisors trust the manager			

As seen in table 1, trustworthiness is different for an unofficial and official leader. Later on in his book, Ekman advises for possible leaders to gain trust as a leader, not as a friend. This is accomplished by setting boundaries to unofficial and official conversations and by following company's policies in all communication situations. If a supervisor does not act like a leader, he or she is replaced in no time by unofficial leaders. An official manager should know who are the unofficial leaders and reward them officially, if they are good examples for others. [10, 111-112]

To gain trust from the working crew a manager should take the following steps [10, 120]:

- be interested of the work people do and give people support, when needed
- take part in unofficial conversations, but set boundaries to it
- try to figure out what people think of their work and how they are feeling all in all
- before making decisions or writing documents, think about what kind of reaction they cause and if they are executable

John Adair describes a good leader's qualities to be enthusiasm, integrity, demandingness, fairness, humanity and humility [15, 8]. As a skill to learn he names

flexibility because no matter how narrow the field of work is the situations still vary [15, 23]. He has also conducted a study among a cross section of successful chief executives, who list the most important five attributes of a leader as following: ability to take decisions, leadership, integrity, enthusiasm and imagination [15, 220].

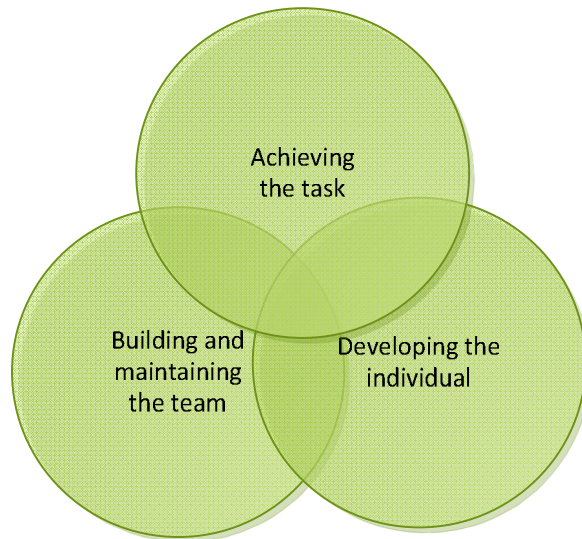


Figure 4. A generic leader's role [15, 45]

A generic leader's role can be presented by the Venn-diagram showed above (figure 4). When managing Metro TV, you should keep the task (the upcoming broadcast) in mind while making sure that the working group is communicating and learning. It's impossible to be everyone's friend but especially for a project manager it is important to get along with everybody. Some distance should be kept though because the leader needs to be seen as a righteous person, who does not favor anyone. Later in his book, Adair applies this model by forming questions which a leader should always keep in mind, as shown in the diagram below (Figure 5).

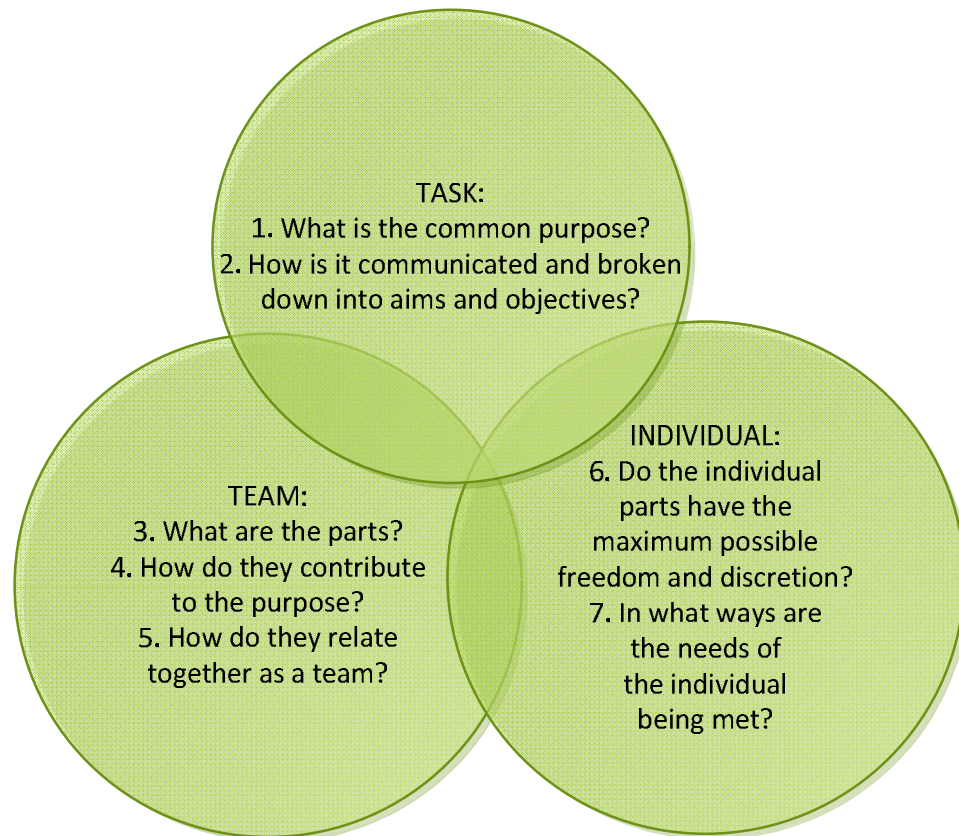


Figure 5. Organizing the organization [15, 159]

A good leader also remembers to delegate. Delegation is forwarding a task but still offering help if needed, whereas abdication is running away from the leader's responsibility by denying assistance [15, 164]. From my point of view, a good leader learns to see problems as "our problems" and not "your problems", which helps to create a feeling of unity within the group.

Krajewski, Ritzman and Malhotra listed the roles of the project manager to be the following: facilitator, communicator and a decision maker. The project manager should have the "big picture" of the project, but still be able to negotiate if needed. Failures in communication leads to project failure therefore the project manager's communication skills should be up to date. The project manager should have a sense to how the group works best, and make decisions accordingly. [8, 73]

Scott Berkun describes project managing as a series of balancing acts; even though managing a project provides an individual with personal satisfaction, a project manager should keep in mind that projects are done with a team. A good project manager delegates, but also does his/her work. The balance between ambiguity and perfection

should be found regarding the work. Some situations require written communication, but sometimes oral communication is necessary. Project managers should learn to live with complex project structures while keeping the big picture in mind. The right level of patience has to be found; deadlines can sometimes be missed without major failure, even though in common missing deadlines is frowned upon. A good leader is brave while he or she acknowledges the risks and look out for them. Most of all, the project leader should always have a positive view when gazing at the future, even if a little realism is sometimes needed. [16, 10-11]

#### 4.2 Value Chain from Idea to Receiving

One way to describe phases in a project is as shown by Lockyer and Gordon in figure 6 [9, 4]. This is a common approach, e.g. "Project Management Communications Bible" uses other names for the phases (Initiation Processes, Planning Processes, Executing Processes and Closing Processes) [17, 14].

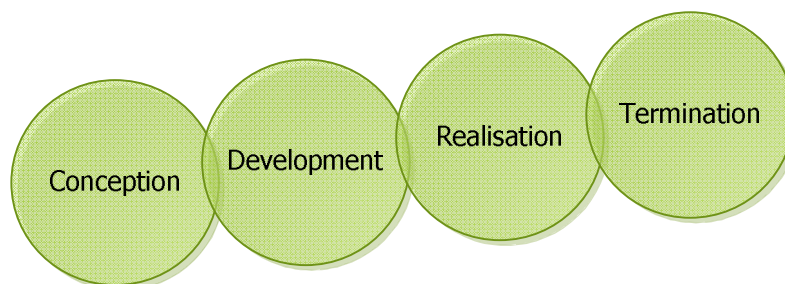


Figure 6. The four phases of a project [9, 4]

Conception-phase is considered to be the most crucial phase because the decisions made at that point will affect in the following phases. The probable project manager should be involved already at this phase, where issues such as budget and product requirements are discussed. [9, 3-4]

During development the working crew is assembled. At this point the organisation is committed to the project and the manager is working closely with the client (as in the following stages). The development phase is for setting precise goals in the form of project management plan or project definition. [9, 4-6]

Realisation is the stage when the actual product is being made. The team, top management and customer should be informed about the progress, expenditure, costs and other relevant issues in form of a project log. [9, 6]

The final stage of the project is termination in which the success of the project is being measured. This phase is pure analysis in order to find successful tools for upcoming projects and find areas of improvement. [9, 6]

Gardiner attaches project documentation to different phases by the following way [4, 28]:

Conception:

- Feasibility Report
- Project Definition

Development:

- Work Breakdown Structure
- Task Descriptions
- Responsibility Assignment Matrix
- Effort and Duration Estimates
- Project Network
- Critical Path Analysis
- Schedule (e.g. GANTT chart)
- Resource Loading Data And Histogram
- Project Budget and s-curve
- Preventive and Contingency Plans
- Procurement Documentation

Realisation:

- Status Reports
- Action Plans
- Change Orders
- Status Meetings
- End Products and Services

Termination:

- Project History Documentation
- Project Evaluation Report



Figure 7 (shown below) will apply this model for Metro TV. The following figure is called a value chain, because by definition it is “an interrelated series of processes that produces a service or product”. A value chain helps to reduce waste and unnecessary costs. [8, 8]

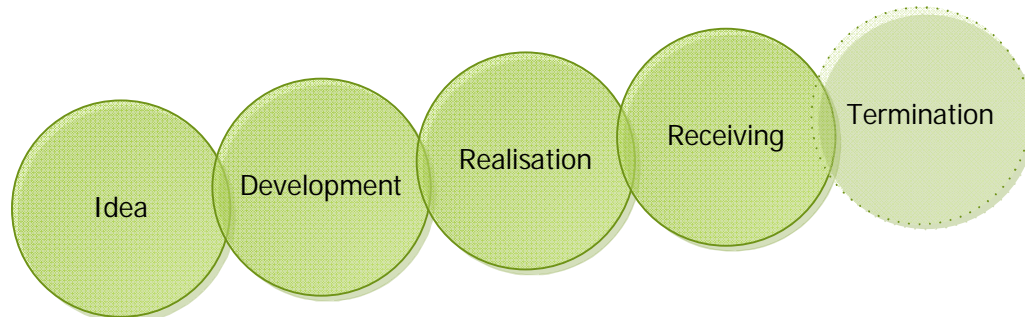


Figure 7. Metro TV's Value Chain

The first circle, “idea”, represents the conception-phase. At this stage Metro TV had only four persons giving their input to the upcoming projects. The objectives of the project were discussed in meetings, as was the need for it to happen and resources required.

“Development” began as more members joined the working group. At this point the “common rules” for persons participating were set and everything discussed in the first phase was accepted and confirmed by the Degree Programme leader. The big decisions, such as where the material resources will come from or how the participation will be rewarded, were also made at this point.

Proper planning at the idea-phase helped us with “realisation” of the project. Some practical issues still needed to be solved, but with clear ground rules, they were not an obstacle to the project. This phase was focused on scriptwriting, marketing the upcoming show, and producing the pre-recorded material.

In this model, “receiving” stands for producing a magazine. After each broadcast the Metro TV group had a feedback-meeting, where everything concerning the episode was evaluated. This stage was always needed in order to improve the quality of the show. After each receiving-phase we jumped back to realisation.

“Termination” is an elective phase depending on who is looking at the value chain of Metro TV. For Helsinki Metropolia UAS it means the stage when the project is put to an



end, where they can evaluate Metro TV as whole, but for individuals it means the end of their working time in Metro TV. For individuals this stage is for evaluating one's performance and things learned throughout the participation.

Other models to visualize a project exist but they do not model Metro TV as well as the value chain. Two of these models, waterfall model and the spiral model are displayed in figure 8.

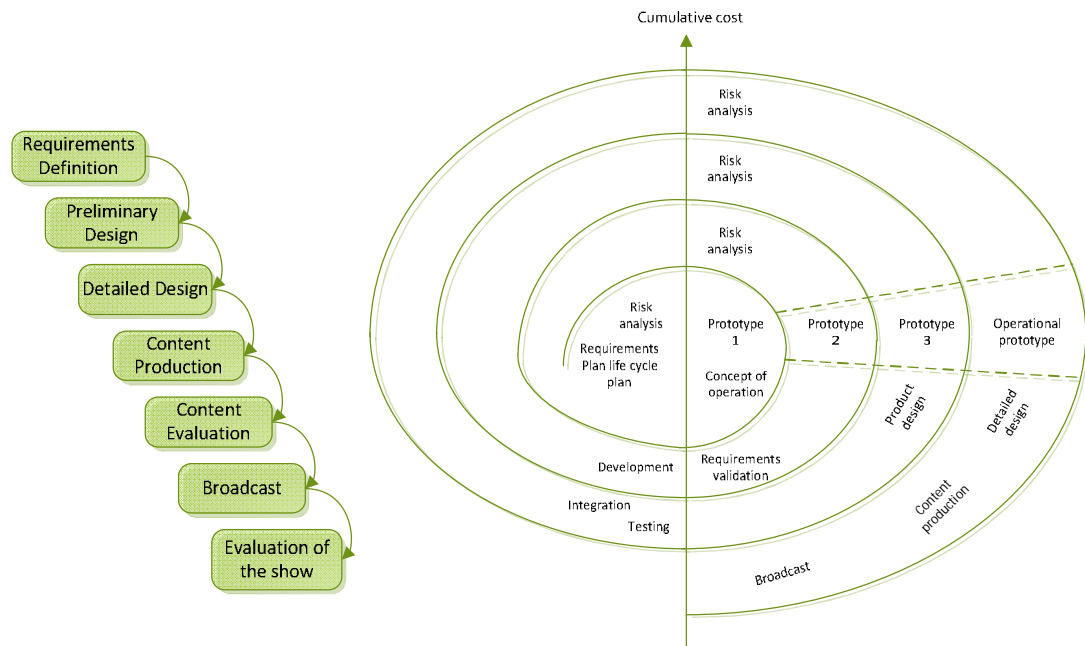


Figure 8. Waterfall and spiral model applied to Metro TV [4, 34-36]

Waterfall model shows the milestones of the project clearly and allows specialisation in each phase but if the analysis of the project is not done carefully the product might not meet the needs of the consumer. It also neglects Metro TV's property to be a series of processes (separate tasks) and does not show things being done simultaneously. In spiral model prototypes are created all the time, which is not very time-effective, at least in television productions. The phases in both models are difficult to name in case of Metro TV, but they can clarify the development of some other products.

### 4.3 Time Management

Schedules have three purposes: committing to the timeline, creating the psychological pressure and being a tool to measure progress. When workers promise to do a thing by a certain time, it is a contract that must not be broken. It shows everyone working in a project, how much work should be done by individuals. The psychological pressure is in this context a good thing, “a forcing function”, which naturally forces a variation in perspective, attitude or behaviour. Following the project progress is also easier, when there is a pre-created time frame for completing the tasks. [16, 22-23]

The six following features can be identified in industrial control system, when it comes to scheduling [9, 66]:

1. A plan should be made.
2. The plan must be available for the working group.
3. Activities, that are controlled, must be measured.
4. Results from measurements need to be compared with the plan.
5. Differences in measurements and the plan have to be reported.
6. An updated forecast (based on the deviations) must be made, actions taken to correct differences or in extreme case, a new plan must be made.

If these rules were applied to Metro TV the results would be:

1. Make a schedule for the upcoming show.
2. Publish it to the members of the team.
3. Everyone tells about their progress in their tasks.
4. Keep an eye on the deadlines.
5. If obstacles are met, inform the project manager.
6. Discuss the actions needed to be taken to meet the goal on time. If this is not possible think of a way to correct it (assistants to the task, simplify the goal, etc.).

Following a precise timeline has its downside; if measurements are compared with to plan to frequently, it does not express all the important factors in a company. Producing a product is important, but so is the wellbeing of employees, their loyalty to the working place or their learning processes. The loyalty and information of the workers are the most important resources to a company. [10, 19]

One way to manage time would be a GANTT chart (bar chart) as seen in figure 9. This example of a GANTT chart represents two week's work for a routine episode of Metro TV. For a complete version, see Appendix 1.

Time / activity	Date											
	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	
Set	Brainstorming	Design three set designs			Voting for best design		Gathering the material			Building the set		
Insert 1	Scripting	Filming	Editing				Translation					
Insert 2		Scripting	Filming	Editing		Translation						
Insert 3			Scripting		Filming	Editing						
Insert 4				Scripting				Filming	Editing	Translation		
Interview 1	Invitation to the guest				Confirmation deadline							
Interview 2	Invitation to the guest				Confirmation deadline							
End credits						Gathering crew & guest info			Making the credits			

Figure 9. GANTT chart for a Routine Episode of Metro TV [9, 25]

Another way to display time for a project, is a flow chart. A flow chart based on the GANTT chart above, would look like the one shown in figure 10.

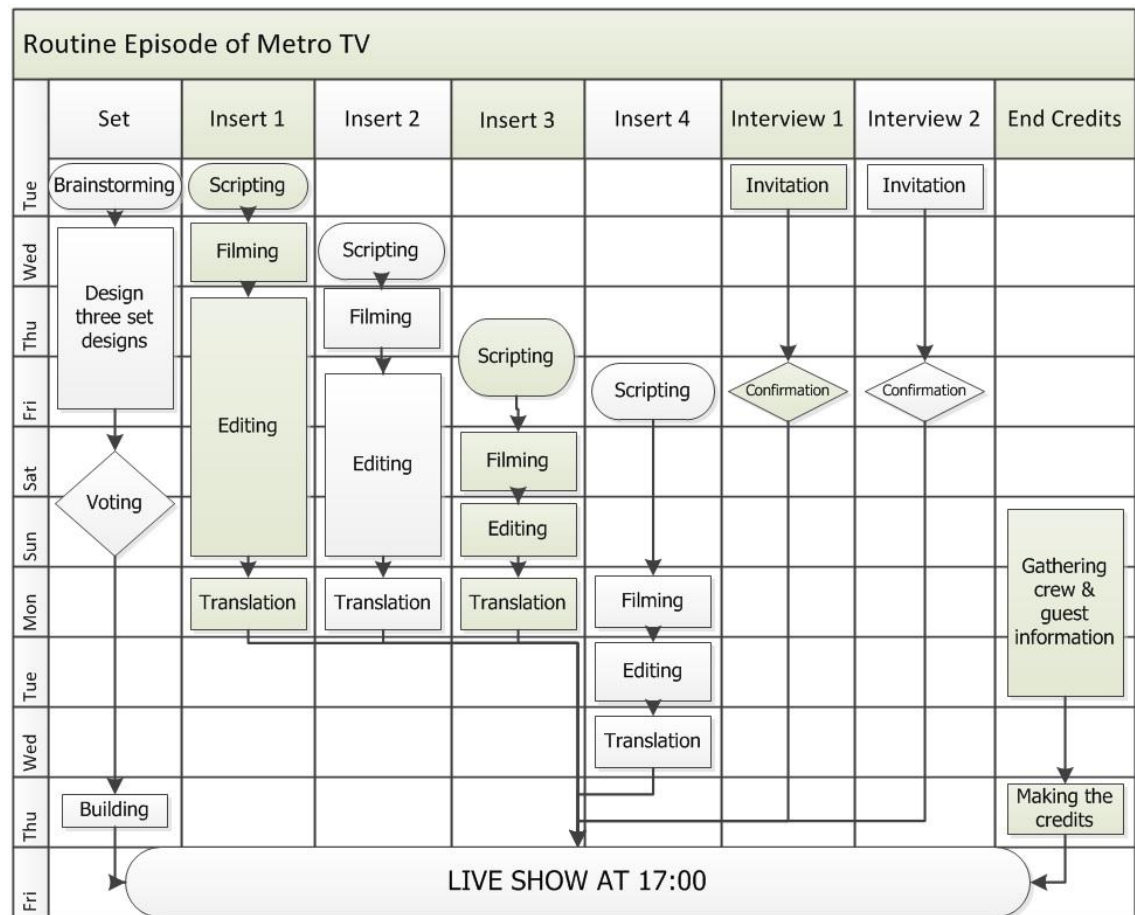


Figure 10. Flow chart representing production of a routine episode

Unfortunately no matter how well the time management is executed, it can always still fail. Even missing one deadline can affect the whole project, because the tasks in

processes sometimes have to be done in a certain order. If any of these phases are not done the preparation cannot be continued. When a project group is aware of the risks to the schedule and works to minimize them a schedule becomes more a useful tool, which helps to forecast the outcome of the project. [16, 29] A good example of a process, in which steps need to be taken in certain order, is preparing an insert for the upcoming show (scripting -> filming -> editing -> translation) (Figure 10).

Meetings can be considered time management on a small scale. They are worth more money though because an hour-long meeting with 10 persons attending costs 10 working hours. The art of facilitating is needed in order to go through all the relevant issues in the smallest amount of time.

When hosting a meeting you should establish a host position. Introduce people, go through the agenda (sent to participants in advance) and begin the discussion. Select your seat carefully; in the corner you are likely to have the least sense of authority. Listen to and reflect on comments. Keep in mind that it is hard to be a good facilitator, if you are driven by your personal agenda. Directing the conversation is the main task for a facilitator, everything relevant should be found in the agenda and everyone should have a say to that. Do not let two persons dominate the discussion, but listen to everybody's opinions. Everything said in the meeting should be documented in a Meeting Memo. [16, 199-200]

Meetings can be divided into three categories: highly interactive discussions, reporting and status review. Interactive discussions require active participation from the participants. A good example to this category is brainstorming. Reporting or moderate discussions mean that one person presents and the others understand this content. The goal is to get feedback or share knowledge; small presentations represent these kind of meetings. Status and project reviews goal is to summarize the status. Scott Berkun calls these meetings "often the most boring experiences", because everyone has to listen to reports, which might not have anything to do with their work. [16, 200-201]

One should plan the meetings carefully: who will be invited, where the meeting should be held and when. You know that the right people are in the room, when they are not busy with laptops and gadgets. If someone crucial to the meeting is not present, the most useful option generally is to cancel the meeting. When you need information from

only one or two persons, e-mail or telephone conversation might be enough. Meetings can be held in hallways too; this forces to communicate time-effectively. Everyone should be on time and the agenda should be followed. These two pieces of advice can cut off at least half an hour from meeting durations. The goal for the meetings is to have a clear plan for the future and if something did not go as planned, more preparation for the next meeting should be considered. [16, 202-203]

Some think that meetings are an effective way to make employees think what the manager wants. That is not true, because most of the thoughts are formed while conducting a hallway discussion. If the atmosphere in the meetings can be matched with the mood in hallway discussions it is more likely to be successful. [10, 17- 18]

#### 4.4 Managing Risks

Lockyer and Gordon state that a risk in a project is “an uncertain event or set of circumstances that, should it occur, will have an effect on the achievement of the project objectives” [9, 47]. Usually in the beginning of the project risk analysis is completed. The task of project managers is to monitor the risks regularly so that they do not affect the project negatively [17, 11].

Risk management consists of six factors. Risk planning is planning for risk events and process. Risk identification is done at the phase where the project definition is written. It means identifying the possible sources of risks. Risk analysis looks deeper to the risks and risk events and qualifies them. Risk response planning is designing what to do, when a risk event takes place. Risk monitor and control is carried out throughout the project by the project manager. Risk closeout is the documentation of risk events and the lessons learned from them. [17, 11]

Sources of risks can be related to timing, technology, people, finances, management or politics. By reducing uncertainty, one reduces risk. For example technological problems may take place particularly if the application used is a new one. [9, 48-51]

In Metro TV, the likely risks were shortage of personnel, lack of motivation from the students, a small budget and unawareness among the target audience.

The risks in Metro TV, or the things to hinder its success, were being minimized by the personnel working on the project. To improve the motivation of students, everyone working on the project had a say on important things, which were discussed at weekly meetings. The structures of Metro TV, including pre-production and actual broadcasts were designed to match the working life experience, so it could be used as a reference in CVs. To motivate and challenge the workers is always better than demanding something, as Berkun mentioned in his work [16, 180-183]. John Adair compliments this by saying, that a good leader evokes forth leadership from the group [15, 54]. Students were also granted credit units; the only demand for it was a personal log on work tasks related to the project.

Financing was considered to be the biggest problem for some group workers. However, successful motivating seemed to minimize that factor for most of the students.

To fight the unawareness of Metro TV's existence marketing needed to take place. The students who had experience in design and printing technology were much needed at this stage to conduct traditional marketing through print products. A Facebook fan page was also founded to keep track of spreading awareness. The fan page also enabled us to use the word-of-mouth. As the number of active group members decreased, marketing was left in the background, as regular broadcast times were more important to us.

Scott Berkun suggests the following steps for a project leader, when something goes wrong [16, 206-208]:

1. Calm down.
2. Analyse the problem and scale it to the project.
3. Calm down again.
4. Contact the people responsible for or capable of fixing the problem.
5. Study alternatives to act.
6. Simplify your recovery plan.
7. Execute the simplest plan.
8. Debrief.

#### 4.5 Importance of Communication

90% of projects fail because of communication problems [17, xxix]. Molchina also states that communication and coordination must be effective in multicamera television production [14, 5]

Managing the communication consists of three parts: communication planning, distribution of information and management of the recipient's information. Communication is extremely important, because it covers every aspect of the project [17, 10]. One could think, that communication in a group, which consists of persons with similar background would be relatively easy. However, at least in Metro TV the communication was not only to distribute information, but also to teach. That leads to the conclusion, that every group member had a responsibility to receive and forward information.

An individual's earlier experiences reflect on relationships and projects depend on relationships. A good start for a project would be to discuss everyone's roles and tasks in the project, including common tasks. [16, 178-179]

Communication was difficult in the beginning of the Metro TV project, because we tried to find a common online environment from all the available platforms. The requirements for our platform were user-friendliness, fast access and the possibility to share documents. The services we tried out were Google Docs, TeamLab Office, Tuubi, and finally we ended up using Facebook. Facebook turned out to be the most successful service for us, because almost all of the group members logged in daily in any case.

Spoken or written; communication is not necessarily easy. Common problems with communication have to do with assumptions, lack of clarity (especially in written communication, see table 2), not listening, dictation, problem mismatch, personal attacks, derision, ridiculing and blaming. These problems can occur between two or more persons. [16, 175-177]

Assumptions usually stem from different backgrounds. Something you might consider chatter can be performance evaluation or teambuilding for others. Smalltalk does not exist in all cultures or it is handled differently. The importance of certain task also varies

from person to person, depending on the moment if they are thinking about their private tasks or the benefit for the whole group.

In the projects, which I have worked in, the lack of clarity has proven to be a big problem. Customers' definitions for products might be complete gibberish for engineers. My advice would be to write all tasks and definitions in such a way, that they can be objectively measured.

The problem of not listening is a harmful communication flaw and in worst case essential information does not reach everyone. Ignoring e-mails or project documentation is harmful for every party. The project manager assumes that everyone knows at least the essential information distributed to the workers, but it is also his or her responsibility to make sure that the workers are not suffering from information overload. In face-to-face communication the key advice is to take time for the person you are communicating with: eye contact is something to begin with.

Dictation becomes a problem when a project manager puts their own needs in front of the group's common goals. At this stage the discussion turns into giving orders. All the questions or comments are rejected ignored or lead to an insult. This is by no means an act of communication.

Problem mismatch refers to a situation where persons communicating are not "on the same page". It might be caused by feelings about other issues and if left unnoticed the situation will be frustrating to both parties. Someone has to bring the discussion back on track, or address the problem lying beneath.

Personal attacks, derision, ridiculing and blaming can be put under one category. All of these are by no means productive, especially in a working environment.

To set specific goals is sometimes difficult. The following table (table 2) presents some bad ways to communicate in television production [16, 54]



Table 2. Bad ways to communicate in television production [16, 54]

Bad way	Example	Why it happens	The problem
We will do what we did last time.	"Our next episode will be the same, but better!"	Lack of motivation in the development process.	The project is more useful in the future, if it involves some research.
We will do something we forgot the last time.	"Let's make fancy titles to the next episode!"	Partially completed work is an easy place to start.	Is this work the best usage of resources?
We'll do what our competitor is doing.	"Let's make our show to look like another campus TV!"	No analysis is required; it's the simplest marketing strategy.	Competitor's reason to do something might not be a good one.
If we build it, they will come.	"We'll develop the web environment to have flashy lights and shadows!"	Without research, you don't have an idea what the customers actually need.	Developing a "cool thing" might be nice for workers, but clients want something useful to them.

In hallway discussions, the manager needs to gain the workers trust as a leader, not as a friend. To enable conversations between different sections in an organization makes informative talk more likely, which creates a learning experience for workers. The official documents of the project are also evaluated while chatting with co-workers; a manager should be present to explain choices being made and to acknowledge when a document needs to be varied. To lead the organizational culture, a manager should practice what they preach, which means following official guidelines also in unofficial communication. [10, 24-26]

Ekman describes the benefit of communication to transform silent information into visible information. Silent information is information that is not formed into words and the individual does not necessary know that they possess this kind of knowledge. In

situations where silent information is talked over with someone else, it takes a conceptual form (visible information) in which it can be forwarded to other persons. This procedure is easier to understand in visual form, as in figure 11. [10, 84-85] Therefore, an unofficial conversation can lead to a learning experience for both speaking and the listening party.

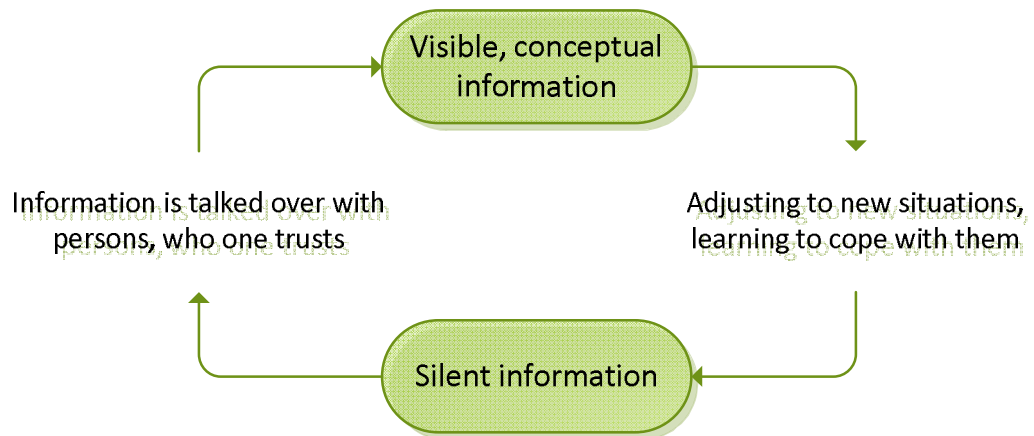


Figure 11. From silent information to visible information [10, 85]

## 5 Conclusions

One of the conclusions that I came to quite quickly is that documentation in any project is crucial. By concentrating on Project Definition, risk analysis can be done for the project and the most obvious obstacles can be tackled before the project working actually takes place.

Communication, regardless of the group, is also extremely important. This has been mentioned in almost all the references. Especially in groups that consist of people with different backgrounds, it is essential that everybody respects each other and tries to overcome cultural misunderstandings.

While writing this study I found words and theories to the thoughts I had been having as a project leader. It was comforting to notice that other people who had experience of project management had come to the same conclusions before me. Not once did I find a source which I would have completely disagreed with. This shows that engineer's character and communication skills with a touch of common sense help people manage projects successfully without browsing through tens of books.

## References

1. Aalto E, Director of the Degree Programme of Media Engineering. Written interview. 8.4.2013-15.4.2013.
2. Helsinki Metropolia University of Applied Sciences. Metropolia UAS - About Us [online]. Helsinki Espoo Vantaa, Metropolia University of Applied Sciences; 4 June 2012.  
URL: <http://www.metropolia.fi/en/about-us/>. Accessed 29 January 2013..
3. Eriksson J, Laboratory Engineer. Written interview. 8.4.2013-24.4.2013.
4. Gardiner P. Project Management : a strategic planning approach. 9th edition. Houndmills, Basingstoke, Hampshire; New York: Palgrave Macmillan; 2005.
5. Aalto E. Metrotv-studio. 2012
6. Lahti J, Producer. Excursion at YLE studios. 22.4.2013.
7. Eastman S, Ferguson D. Media Programming. Boston, USA: Wadsworth; 2013.
8. Krajewski L, Ritzman L, Malhotra M. Operations Management Processes and Value Chains. 8th edition. Upper Saddle River, New Jersey: Pearson Prentice Hall; 2007.
9. Lockyer K, Gordon J. Project Management and Project Network Techniques. 7th edition. Harlow, Great Britain: Pearson Education Limited; 2005.
10. Ekman G. Johda enemmän, hallitse vähemmän - epäviralliset keskustelut esimiehen työvälteenä. Juva, Finland: WSOY; 2004.
11. Lamminaho E. Ryhmädynamiikka Audiovisuaalisessa Tuotannossa. Joensuu, Finland: Pohjois-Karjalan Ammattikorkeakoulu; 2012.
12. Helsinki Metropolia University of Applied Sciences. Metropolia UAS - Apply for admission - Media Engineering, BEng [online]. Helsinki Espoo Vantaa, Metropolia University of Applied Sciences; 2012.  
URL: <http://www.metropolia.fi/en/apply/studies-bachelor-technology/media-engineering/>. Accessed 9 April 2013.
13. Rundblad K, Grappone T. Student-Driven Innovation [online]. UCLA Library; 28 December 2012.  
URL: <http://www.slideshare.net/rundblad/studentdriven-innovation>. Accessed 9 April 2013.
14. Molchina E. Television Production. Riihimäki, Finland: HAMK University of Applied Sciences; 2012.
15. Adair J. Effective Leadership. New revised edition. London, Great Britain: Pan Books; 2009.
16. Berkun S. The Art of Project Management. Sebastopol CA: O'Reilly Media Inc.; 2005.

17. Dow W, PMP, Taylor B. Project Management Communications Bible. Indianapolis, IN: Wiley Publishing, Inc.; 2008.

**Appendix 1. GANTT Chart for a routine episode of Metro TV**

Time / activity	Date											
	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	
<b>Set</b>	Brainstorming	Design three set designs			Voting for best design		Gathering the material			Building the set		<b>LIVE SHOW AT 17:00</b>
<b>Insert 1</b>	Scripting	Filming	Editing				Translation					
<b>Insert 2</b>		Scripting	Filming	Editing			Translation					
<b>Insert 3</b>			Scripting		Filming	Editing	Translation					
<b>Insert 4</b>				Skripting				Filming	Editing	Translation		
<b>Interview 1</b>	Invitation to the guest				Confirmation deadline							
<b>Interview 2</b>	Invitation to the guest				Confirmation deadline							
<b>End credits</b>						Gathering crew & guest info				Making the credits		