



Norwegian University of
Science and Technology

TPK 5100 - Project Planning and Control

Project Report : Animated real- life case on Development and Implementation of an Ordering Portal

Group number: 01

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Preface

This report was written during the autumn of 2019 as a part of the course, *TPK/5100 Project Planning and Control* at Norwegian University of Science and Technology(NTNU). This course is made to heighten the students when it comes to project management, planning, risk management and cooperative skills. This report is a part of project product that counts for 40% of the final grade for this course. The report was written Sadman, Farooq, Sarunas, Chenchen and Arslan.

The group who wrote this project report was a part of the project and had a target of making a product, this could be animation project based on real-life cases, including the use of Powtoon website and text to speech website. Each group member has equally contributed both for final product and report.

1. Digitalization projects

This digitalization project is completed as a part of the course, *TPK 5100 -Project Planning and Control*. The main objective of the animation project is to build a data-base that contains the best animation, and to use these animations in teaching the subject to facilitate learning process. This project is conducted in group of five students and the group has selected case 2.4 from the reference book '*The Road to Success: Narratives and Insights from Real-Life Projects [1]*' in order to develop and produce a short animation video (2.57 minutes) that demonstrate in the best possible way the challenges, the efforts made and insights gained from the project case.

This report reflects on the group development from the first day to the end of the project's work. The interdisciplinary in the group and the ease and difficulties encountered because of it during the period of the project. Moreover, the report also focuses on the type of project, project characteristics, stakeholders, initiation, success factors, planning, risk management, involvement and commitment in the group and how these factors affect the success or failure of the project.

From the beginning of the project planning, workload is evenly divided among the group members. Tasks are not specific member's sole responsibility. One can ask other members to help in process and they are expected to help. The aim of the team is to achieve grade A and to develop project management skills, and also to build up the ability to overcome the risk management throughout the project period. Group members are the stakeholders of the project. More precisely, the group is punctual in meeting times as well as maintaining the deadlines. Facebook messenger is used as a communication platform to work remotely when they are not together. The group made a Messenger Group namely TPK5100, which was used for sharing links and make conversation about project work. In addition, Google doc is applied as database where the group uploaded their respective tasks and reports. Usually, group members have attempted to take tasks they are expert in to try learning new disciplines.

In this project, the objective is to design an animation based on case 2.4[1] which is 'Development and implementation of an ordering portal'. In brief, the case demonstrates the outcomes of the inadequate project planning, insufficient description of the scope of the work, and proper documentation. In addition, the case also demonstrates how a committed leadership can have a positive effect on the final result [1]. The story line emphasizes the important and critical situations and events in the real-life case 2.4. The sequence of the animation is based on the case and demonstrated through image processing, subtitles and voices respectively. This concises the description of what happened in the project.

As each group member comes from different ethnicity, nations and technical backgrounds, it was expected from the beginning to have a lot of differences. According to the ABC group reflection [2], the group can thus be categorized as a heterogeneous group. One of the symptoms of being heterogeneous was that the group spent a long time on discussing ideas about the project and while doing so, it was difficult to understand and accept each other's opinions.

After releasing the project assignment announcement in the Blackboard, the group worked on finding an idea for the project. First and foremost, all were agreed to develop a brainstorming App for encouraging and learning aid. That App could be available on Google Play Store and it could be user friendly and beneficial for all. The group members discussed with Prof. Bassam about this idea, and he advised to switch to another idea because it will not be completed within the allocated project duration. Eventually, the group worked and completed this digitalization project of animation that demonstrates the core problems and solutions based on a real-life case.

When it comes to group reflections, it is crystal clear from their individual reflections that they have acquired a lot of knowledge and new experiences from Digitalization Project of the *course TPK5100*. The team feels that everyone involved and worked hard for the project, coordinated with each other and supported each other to solve the problems that arose during the process. As they did not select or elect a leader in the team, the working structure of their team can be inferred as Flat Structured. As the theory of *Flat structured* suggests [3], each of the members had more or less the same amount of responsibility. Each member in the group had different roles, but the roles were more informal than formal.

A group is a collection of different people who coordinate their individual efforts. A team is a group of people who share a common goal and face the challenges together. The members of the team are mutually committed to the goals and to each other. This mutual commitment also creates joint accountability that leads to form a strong bond and motivation to perform [4]. The group feels they have developed into a team in order to accomplish their digitalization project in due time successfully.

2. Self-evaluation of the project management effort in the project, success or failure? And why?

A) The group should make an overall evaluation of their own project. This is an evaluation of how well the group managed the project, how well was the organization of the project group. How well the group identified and managed risks. Did the group managed to deliver the project results according to your originally stated success criteria (according to your original plan)? Is there any deviations between the stated success criteria and your final evaluation of the project (300-600 words) (1-2 pages)

The overall group management was very effective; leading to project success ultimately. From the very beginning of this project, all the available resources were viewed by project team in terms of their own personal skills related to IT, computer skills required for digitization project. For example, all the members of the project team had necessary basic computer skills and knowledge which could be used for making animation video. But none of them had advanced, professional IT skills which could have been used to make advanced digitalized product such as interactive learning website or mobile app. In addition, time constraint of project delivery and the stakeholders interest also played a vital role in deciding the project to be made in the form of an animation video of a case study. This also helped the group in identifying the potential risks associated with the digitization of the project.

Moreover, all the members of the project team were being made responsible related to certain activities, tasks in the project. Furthermore, schedule meetings were held every week during the entire project duration. This helped the project team to keep track of the project progress and also its members progress related to their assigned responsibilities. In addition, this also minimized the uncertainty of being deviated from project outcome and it's associated goals. So this resulted in the project been made what was originally planned.

Furthermore, the group also used the messenger chat group effectively other than scheduled meetings for better communication and information flow. This also leads to clarify some misconceptions about the project to the stakeholders, individuals involved and also kept the members updated in real time about any changes related to project.

However, there were some delays in project due to uncertainty about the type of software/program to be used to make the animated video and to learn that software/program interface and tools. Furthermore, there was a risk of paying high cost to use the software which was not addressed during the risk management process. But, luckily the tools required for making the animations were free of cost and the output video was of good standard quality.

B) Please evaluate the degree of your support to the following statement (group-based evaluation):

We evaluate our project management effort as successful

Scale	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
Your response				As a team, we planned our project to execute perfectly, but there were some shortcomings as we had some lacking to make time for group meetings in a schedule based manner.	

3. Self-evaluation of the value to the learners? (evaluation of project success) Can you document your assessment?

A) Our target audience for this project was mainly students that are taking this subject and are looking for an alternative method of learning about one of the cases presented in the book. Even though our product was mainly targeted towards other students, we were fully aware throughout the course of the project that any person with any interest towards project management could get use out of our product.

B) To evaluate our final product we surveyed several people with different educational backgrounds. The reasoning behind that was mainly to see if our way of presenting the case and information about it were understandable for everyone, not only people who have experience with project management. During these surveys we asked some questions to the people regarding our animation. The questions and results we received will be discussed later in this section.

C) Two reviewers were picked at random from different study fields namely from business studies and engineering background to assess the final product. The reason why we have selected these informants from a diverse background is that we wanted to see if it is understandable for everyone no matter which study area they belong to.

D) From the first reviewers comment, it was certain that he was not very clear about the success criteria of the case. What we understand from that is that, we should have specified the criteria for project success in the case.

The second reviewer find the speech of the animation a little bit fast and little bit difficult to understand. Both of the reviewer found the quality of the animation to be very good.

E) Please evaluate the degree of your support to the following statement (group-based evaluation):

	Our product is of high quality and we recommend it to be used as a learning aid in project management				
Scale	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
Your response					We are really confident that our product successfully represents the whole idea of the case 2.4 and thus makes it digitalized to use for further study in project management.

4. Factors that have contributed to failure / success.

The most significant factor that has contributed to success is clarity of roles and responsibilities. In order to make sure that each group member understands his duties, we made a detailed work breakdown to clarify every task we would face and assigned them to the group members clearly when working on the project planning at the first place. One of the biggest challenges in this project is that some group members had to work on other projects simultaneously from time to time. However, we successfully avoided priority confliction by early planning. At this stage, we spent plenty of time to discuss about the capabilities and available time we have to guarantee that all the group members could be assigned the proper tasks. As a result, every group member was loyal to the assignment during the implementation. But meanwhile, we are willing to help each other through the whole period, which is also a basis of good cooperation. Although some of us were not able to attend every meeting, we still did our tasks well and conducted our project on schedule in the critical path.

Adequate risk management is also a success factor of this project. It is one of the key factors that influenced our decision about the form of our product. We chose to take a more conservative approach, which ensured that we can make a relative complete product on time. At the beginning of planning, passions and ambitions made us want to design a learning tool with a wider range of applications, such as an application for brainstorming. However, after inquiring Bassam who have experience on this project in the last few years and more discussion at the practical level, we did a risk assessment including highly probable delays, lack of specificity for learning tasks, difficulty of competing with similar products in the market and etc. We realized that it was not a wise choice and turned our direction to the animation, which has already proved its possibility of success. When looking back and reviewing now, we know this may not be the best strategy to deal with the risks. But in another way, through this we avoided risks and made a qualified product.

During the production stage, proper resource and tool selection can be considered as a success factor in this project as well. Since the majority of the group did not have experience of professional animation making, we chose an online program called 'Powtoon' after comparison with several popular animation programs. Its user-friendly interface makes sure it is easy for amateurs like us to get started with while offering creators enough operating possibility. Moreover, it is essential for our decision making that it has an enormous library which is able to provide diverse materials. By using this program, the process of animating went very smoothly.

There are also shortcomings. Insufficient participation of other stakeholders is a significant factor that limits the project. It directly caused the project purpose was made in a narrow scope and cannot totally avert biases in the whole period. At the planning stage, we did not establish any routines for change controls with our other stakeholders. In terms of content, just investigation among competitors and successful examples online is inadequate. We only involved the project owner into discussion as well. The most important thing is that we were supposed to make our research based on a broader population of end-users for seeking requirements. Instead, we basically play roles of both end-users and project manager at the same time to simplify this process. In the production stage, we also miss the chance to adjust our directions since we rarely ask other stakeholders' opinions. The only formal feedback we got is in the final test stage. However, we were only able to polish some details due to the time limit.

Lacking professional knowledge and skills is a negative factor in this project as well. On the one hand, although we took the advantages of the program 'Powtoon', our final product was still rough when evaluated by professional animation standards. We unavoidably reduced the attraction and narrative that an animation was supposed to have. On the other hand, we were only capable to transform the case to a script from the perspective of a student because of lacking teaching or script-writing experience, which is not an ideal solution for making a learning media or tool.

Comparing with the form 'Summary of the success factors from the examined project cases', what we did best is highlighted in blue and what we almost ignored is highlighted in yellow. Besides the factors mentioned before, it is still worth mentioning that we did realize the importance of factors like 'Clarity of purpose and objectives' or 'Selection of optimized solutions/deliverables' and devoted our efforts on it, but because of the limit of our experience and scope, we still have a lot of room for improvement. Moreover, since we did not have a particular head of our group due to the small size, everyone participates in the management tasks. The good side is that all the members are included in each steps while the bad side is that no one actually took the ownership of management and took the responsibilities to control everything. Therefore, the assessment of some factors related to top management or line management is not clear.

Table 1. Summary of the success factors from the examined project cases [1]

Commitment (project manager, team, top management, project owner)	Adequate early planning	Oversight / follow up by top management
Clarity of roles and responsibilities for those involved in the project	Loyalty to decisions	Use of appropriate project execution model (agile, adaptive, plan driven)
Project manager / management has adequate business insights (understand the needs of various group, understand the impact of the project on the users)	Project manager with adequate decision-making authority / appropriate project organization structure	Collaboration between stakeholders/ contractors / line management and project
Inclusive project manager	Honesty in reporting	Follow-up and feedback by project manager
Mobilization and provision of support from project owner / line management / top management	Clarity of priorities and structured requirements process	Creativity of the project manager / team
Mindfulness about biases, heuristics such as overoptimism, narrow focus and assumptions	Experience (project manager, contractor, and team)	End-user/ client/stakeholders involvement
Skills, knowledge and competence (project manager and team)	Use of lessons learned from previous projects	Clarity of purpose and objectives
Alignment of organization to project purpose/ Communicate the importance of the project to the entire organization	Structured risk management process	Transparency (open and inclusive communication on all levels)
Motivation of project team / project manager	Flexibility (adaptability, autonomy, address problems as they arise)	Proximity to end-users, management and human resources
Adequate documentation and reporting	Adequate and timely information flow between project and stakeholders	Established routines for deviation / change control
Trust (within team or between client and contractor)	Stability / continuity of project organization	Collaboration within the project organization (One team)
Continuity of project development (short waiting time between phases)	Balanced project group that represent the interests of all the units/ stakeholders that will be affected by the project	Selection of optimized solutions/deliverables

5. Most important lessons from your project

A project work of this sort is surprisingly demanding and will require a lot of precise planning and thinking ahead to be able to successfully both lead the project and manage to deliver a project that satisfies the requirements of the project.

First and foremost, the group should study the requirements and expectations for the final product before deciding what the product is going to be. A familiarization like this will help you a lot in both designing and producing the final product. A thorough analysis of the expectations and requirements makes the whole course of the project significantly less viable to any major changes.

During the planning stage of the project most of the weight should be put into detailed explanations, especially in the description of the product itself and in the expectations for the group members. Avoiding ambiguity is an important thing for the whole duration of the planning stage which the group will benefit greatly from during the later stages of the project. Clear and descriptive explanations of what is expected from the different members, the deadlines and the vision of how the product is supposed to be will help greatly to every single member involved with the project.

Finally comes the production stage. In my experience, possibly the easiest part of the whole project. If the design and planning stages went ideally, the production stage will be a breeze to go through. There are however still a couple of potential problems that may appear during this stage. One of them could possibly be lacking the knowledge or skills assigned to you during the planning stage.

The final point worth mentioning is the importance of constant communication between the group. The importance of keeping the rest of the group up to date with where the project is, is vital for the success of it. In addition to that, the aforementioned potential problem of lacking knowledge may be fixed or at least have its effect on the course of the project minimized by informing the rest of your group about it. Keeping your group up to date with whatever is happening on your end of the project could potentially save the group a lot of time and make the final product significantly better than it otherwise would be.

6. References

- [1] Hussein,B.(2018). The Road to Success: Insights and Narratives from Real-life Projects.
- [2] Berg-Nielsen,T.S (2015). The ABC Group of Psychology.
- [3] Colette L. Meehan (2019). Flat vs. Hierchical organizational structure.
- [4] Jim Sisson,J(2013) The difference between a group and a team.

Peer-review report

What is the name of the group you are assigned to evaluate: Group 8

Strengths

Whilst the idea for the project may not be something revolutionary or groundbreaking, it is nonetheless a product that has a use and will potentially provide great value to learners that prefer learning through visual or aural methods. Regarding the technical quality of the project it is of a higher than enough quality. The animation slides backed the text being read very well and were varied enough not to make the whole thing feel stale. The addition of info graphs and bullet points on some of the slides helped a lot to underline some more difficult points of the case. The group also deserves extra credit for not opting for a text-to-speech device which in most cases leads to a boring and difficult to follow audio.

Weaknesses

As mentioned before there is nothing special about the idea behind this project. It is something that has been done before a plethora of times leading to the video and most importantly its content being barely memorable. Another point worth mentioning is that whilst extra credit for not using text-to-speech is deserved, the reader was still fairly monotone and therefore somewhat difficult to follow along with.

	The product we reviewed is of high quality and we recommend it to be used as learning aid in project management				
Scale	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
Your response				The lack of creativity in the idea behind the project and the small technical shortcoming regarding the voice bumps the score down from strongly agree	

On a scale from 0 to 10. **What grade would you recommend for this product?**

As a group we agreed that the product produced by group 8 is worthy of a grade *7.5 out of 10*.