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# Animated real-life case project Sydney Opera House: A Lesson in project management failure

Preface

This project report was made as a part of the project assignment in TPK5100, Applied project

management, to document our product. This report contains the details of the product, evaluation

of project management in the project and project success, factors for project success and finally,

the main message from the project.

Firstly, we would like to thank the professor, Bassam Hussein, for allowing us to work on this

digitalization project. We learnt a lot of valuable lessons during the project journey and gained

some invaluable experience. Next, we would like to thank our colleagues and friends for

reviewing our product and giving useful feedback. Lastly, we would like to thank each member

of our group for successfully finishing the project. We had lots of fun working together on the

project and enjoyed the journey thoroughly.

Group number: 18

#### 1. Digitalization projects

- A. Describe your product, its intended purpose and why you have selected to produce this product.
- B. After having the opportunity of working on a small-scale digitalization project, what are, in your, opinion the main challenges that your group has experienced with this type of projects?
  - A. **Product Description**: Our group has made an animation video for the digitalization project assignment in the course TPK5100, Applied Project Management. The animation video is about a real-life case study of the construction of Sydney Opera House. It is known as a globalized symbol of Australia and is also one of the world's most recognized and foremost architectural wonders. The animation video was made using the VideoScribe software as we found it to be easy to use for beginners.

**Intended purpose**: Sydney Opera house was chosen as the case-study topic because it is an example of project management failure but a project success. We believe that this case is quite unusual, and it helps the end-users of the product to understand the main characteristics of a construction project and the importance of risk management and project planning.

Reason for making the product: The animation video is made mainly to facilitate eLearning and to utilize the benefit of picture-superiority effect (Stenberg 2006). The picture superiority effect is the phenomenon where pictures and images are more likely to be remembered than words (Whitehouse, A. J et al. 2006). The animation video aids the end-user to understand the concept better and faster, and it is retained in their memory for a more extended period compared to a verbal lecture. The animation video creates a significant impact on the learning methodology of the end-users.

B. The first and foremost challenge that the group faced was the type of software application to be used to make an animation video. Since none of the group members had prior experience in animation, we had to find a software application that would be easy to use and gives the desired output. After trying out around 6 different software applications, we finally decided that the group will use VideoScribe. The reason being, it satisfied our needs and was very easy to use for beginners. Thus, the risk of not using a sophisticated software application was eliminated at the early stages of the project.

The second challenge that we faced was when creating the video. The requirements kept changing during the process of creation. We had to determine the access/use restrictions or copyright, condition of records and copy status of digital resources while browsing for the required images from the web(Initiative 2009). We divided our group into sub-groups, and sub-group 2 (consisted of 3 members) was in charge of video creation. The members of sub-group 2 broke down the video creation task into 3 mini-projects (or work packages), and each one of them worked on their part according to the planned work breakdown structure (Hussein 2018).

The next challenge we faced was quality checking and validation of the animation video. We reviewed our own product and tried to ensure that the video transition and audio were appropriately synced. Sub-group 3 which consisted of 1 member, was responsible for audio recording and syncing the audio with the video. Finally, we had to make sure that the video was accessible to everyone. So we exported the digital resource in an appropriate format from the software application and uploaded it online (Initiative 2009). A shareable link was also created, which enables the endusers to access and view our product.

## 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)? Are there any deviations between the stated success criteria and your final evaluation of the project?

In total it was a project management success, but few things could have been better. The reasons for this statement were discussed in the following paragraphs:

The project was started to find out what kind of product we want to deliver. This decision was based on the knowledge of our team members. Since nobody of us was an expert in programming, an animation video was the best solution. Because of that, we reduced the risk that we won't have a running product at the end. On the other side, we were able to create an interesting video where we teach a topic which is relevant for the course TPK 5100 and creates value. But first of all, our group was too big and therefore we had a small organizational problem. It was hard to find a date, where all of us had time. For that, clear responsibilities in our project team lead to

high project management success. We were able to break our project down into three main separate parts. Thus, we worked in small groups on our tasks together to profit from mutual ideas and discussions. Furthermore, no overlapping of the three parts saved time. We assigned the task according to the strength in the group. We addressed the animation part to guys who had already little experience in the creation of an animation video. The script part to people who are creative and already had a good idea about the chosen topic. Finally, we assigned the audio to the best Englishspeaking person. We also took care of our individual schedules and made sure that the small groups were able to meet during the week. After we had fixed our time problems, we made too many meetings. The preparation time for the meetings was too little. We found out that short jure fix via Whatsapp were more efficient if the tasks were not too complicated. The small groups kept always in touch to tell the status quo. Parallel working was also great identified. For example, during the script development, the animation team tested and decided which software is the best. In addition to that, suggestions for specific animations from the script group were useful to have a good handing over. Even though we had small problems during the creation phase, the project was finished on time. That was possible because all risks were identified in advance. In the following, it is shown how our group managed the upcoming risks.

To avoid choosing the wrong topic, we spent a long time to find a suitable topic and asked the former students which topic would be useful to teach. Their suggestion was to combine theory with an exciting story. Therefore, we used a famous example to teach our topic.

To avoid having a boring video, we asked people who already made an animation video, what nice animation could be. We considered their points, for example, to make sure to show only the images and texts on the screen which are relevant. We only spoke with few people to get intensive and useful feedback with suggestions in the creation phase instead of hosting an anonymous survey. Then real discussions about what could be improved were possible.

Wrong facts were excluded due to good and different literature.

The highest risk was that in the end, our video will not work. To minimize this risk to a minimum we took a software which other groups already used and were highly satisfied. In addition to that, we tested it in advance to know if it is also useful for us. We were rewarded with no complications and a running video.

The project results could be delivered. As described in the last paragraphs most of the success criteria could be fulfilled. In contrast, we had one deviation from the success factors because we did not stick to the project plan to 100%. Only one person made the audio and the synchro because sometimes he had to create a new audio file to make it fit. That lead to more efficiency. Sometimes it is better to have flexibility in the project plan and not fixed everything, especially for IT-projects were requirements can change quickly.

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	Neither agree nor	Agree	Strongly
	Disagree		disagree		Agree
Your				<b>√</b>	
respons					
e					

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

The group should make an overall evaluation of the impact of their own product on learners. The group should provide and support the evaluation with documentations. These documentations could include:

A) Describe your target audience and the learning objectives of your product

The main target audience and stakeholders of our animation project are the students of the course TPK5100 - Applied Project Management. However, whoever, interested in learning the concepts and methodologies of project management can also be the target for this product. As one of the requirements of the project, the product must have an influential and positive impact on learning, and therefore our animation video tries to communicate the importance of project management in projects.

B) A description of the method used to evaluate the final product.

In order to gather data for evaluating our project, we decided to conduct a survey. for doing so a questionnaire was prepared in which for understanding our target audience, we first asked whether they are students from TPK5100, students from other courses, employees, or individuals with project management experience. Then, by getting information about their level of knowledge about project management methodologies, we asked about their feedback for the concept and design quality of the work, as well as the level of impact it might have on conveying its desired points.

C) The number of informants who have contributed to the evaluation, and how these informants have been selected

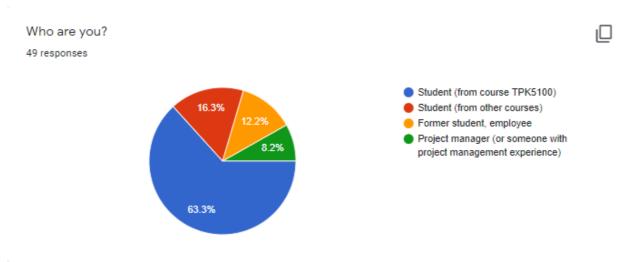
After distributing the survey (through the Blackboard) between the students of TPK5100 as our main customers, all group members tried to share it with their own families and friends so that we can target different community segments. As a result, 49 participants took part in the survey and helped us in creating a solid data resource for evaluating our project.

D) Results of tests, surveys or interviews with students or persons who have reviewed the final product

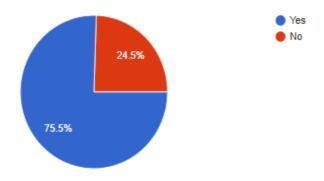
The surveys were sent out to students, after the video was done. In all 49 individuals answered the survey. Among the people who took the survey, most of them (63.3%) are students from TPK5100. Students from outside of this class take 30%. It was also sent out to individuals with experience in project management, they take up 8.2% of the participants. Among all the people 75.5% of them had a course related to project management. When asking how familiar they are with the project management methodologies are, most answers ranged between 4 and 6 (range from 1 to 6 from not familiar to expert level.) And nearly half of the participants believe the film does a good job in delivering the message of how importance a proper project management is for a large-scale project like the Sydney Opera House. When it comes to the quality of group 18's final product, the majority of people held a positive view.

In all the variety of the participant is great. People from both inside and outside of the course answered the survey. They also came with different background related to project management. Some people have little to no knowledge of project management and there are also answers form the professional level individuals. In all there are generally a good understanding related to project management within the survey group. People without knowledge introduced great dynamic of the survey. When it comes to the quality of the animation, people in general gave a positive feedback. In all 70 % of the people think the main message was delivered successfully and quality of the product is decent. Within the group 7 people took extra steps in the survey and left group 18's product their precious comments.

#### Result graphs and other feedbacks are shown below:

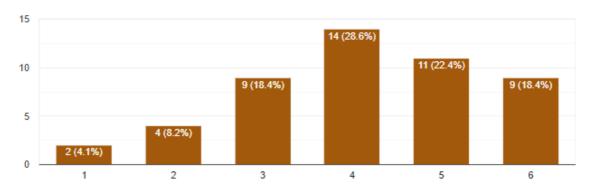


Have you ever had a course related to project management? 49 responses



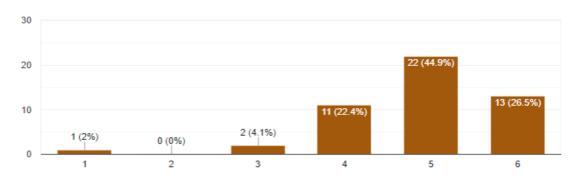
How familiar are you with project management methodologies?

49 responses



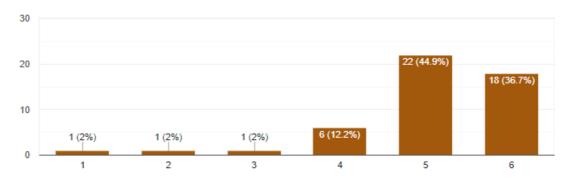
How useful was this tool in communicating the importance of project management in such big projects like the Sydney Opera House?

49 responses



How was the quality of the animation work?

49 responses



Amazing!! It was very informative

Ideas on PM seemed to be deeply internalized. Animation was concise, had a good pace, well narrated. I enjoyed it and learnt about one of my favourite buildings in the world. Congrats to you all.

That voice.... can't take the smoothness!

Good work

Very informative

Very clear message. Simple and useful. Good job.

Easy to understand the concept

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 learning aid in				
	project management				
Scale	Strongly	Disagree	Neither agree nor	Agree	Strongly
	Disagree		disagree		Agree
Your				✓	
respons					
e					

As a group we believe the main objective of the project was delivered. Not only the video was delivered on time, the group was on track with the project plan made previously. As for the quality of the product, the message was delivered clearly, as can be shown in the participant's answers. Our script is clear and easy for viewers to understand, it follows the building of famous opera house chronologically, which brings views along with the struggle of the project. The film is within a great time frame. The animation was clear and was of high quality along with the well-synced audio.

#### 4. Factors that have contributed to failure / success.

In this section students should list and elaborate on all the factors that they believe have contributed to the success or to problems of their project. Which factor was the most significant and why? Compare your identified factors with the factors listed in (Hussein 2018) pp-92.

First, the project team made a project plan which supposed an early planning. The report included the description of the main stakeholders and their influence, a project risk assessment, the roles of every member in the project group and other important aspects for the project. The most important thing was the clarity of roles and responsibilities. The group was divided in three different teams. Two groups of three people (script and video editing, respectively) and another group of one person (audio).

Since the project started there was a dependency on every team but dividing the project group into three smaller teams gave us flexibility within the group. The dependency followed was a finish-to-start dependency. The first group did the script and the second group was dependent on the end of the script. Nevertheless, the second group started the research for a good video animation software before the end of the first task (script).

The first group divided the script in two meetings. After the first meeting, they created a 'google docs' document to share the intermediate result. This developed a good communication and gave feedback to other teams.

The second team had several meetings to discuss requirements, testing and decision. Furthermore, they met one entire day to create the animation video. Afterwards, the group members made improvements on their own. The third team added the audio at the end of the second task. A minor problem appeared with the communication between groups. A group member of the video-editing team asked the script team to arrange a meeting to create the animation video together. The script team explained to him that it was a task exclusive of the video team and roles were explained again to the whole group, so the problem was solved within one day.

The whole group worked well together without complaining about the structure of the teams and the roles they had. At the beginning, the whole group had one, and the only, meeting together. It was a problem for the group to find spare time because every group

member has a different study program. To solve this problem, the group created an excel document with the spare time of every single member on every single weekday. The three groups were created based on this excel table. The requirement for applying the spare timetable was that everyone was able to work together with different group members to perform the task. Trust and loyalty were created thanks to the different assignment of roles.

The purpose of the team was to create a learning aid to give some impact on end-users (future students). Nevertheless, the motivation of the group was to pass the course and have a good grade. Thus, the group paid for an animation software tool, in order to create a good product.

Other problem that appeared was the lack of experience and skills producing an animation video and audio recording. The team worked hard to solve this obstacle and they were able to deliver a good quality video on time. Furthermore, all the group members put a lot of creativity in producing the video and writing the script. For instance, to write the script a lot of different videos about the topic of the project were analyzed and discussed. The group project also watched some learning aid videos of previous years. Several methods to produce the video were considered.

The lack of project manager could have posed a problem but the good working climate of all the group members reduced the risk. Moreover, there was no involvement with the stakeholders, mentioned on the project plan report, during the project development. It posed an obstacle to get feedback for the survey of question 3 at the beginning. Nevertheless, during the last week, the group managed to get enough answers through the survey published on blackboard and some other external stakeholders.

To conclude, it can be said that it was a successful project and a successful project management with minor problems that were solved during the development of the project. The team worked well together, and a good communication existed in all phases. The most significant success factor was the structured organization with clarity of roles. It gave the project group the possibility to solve problems and work together with a good communication, as explained above.

To summarize, a table is attached with the most significant factors and problems that contributed to the success of our project. The list consists of the factors listed in (Hussein 2018) pp-92.

FACTORS TO SUCCESS	PROBLEMS
Early planning	Little knowledge at the beginning:
	Solved with hard work
Clarity of roles and responsibilities	No experience
Loyalty to decisions	Proximity:
	Difficult to communicate with other
	groups. Solved with the feedback from
	the survey.
Impact on users:	
learning aid	
Appropriate project organization structure	
Honesty on reporting	
Clarity of priorities and structures requirement	
process/ purpose and objective:	
Pass the course and have some impact on future	
students. Make a good animation video.	
Creativity of the team	
Use of lessons learned from previous projects:	
book, videos of past years and video of Opera House	
Structured risk management process:	
first report (Project Plan)	
Good communication but with some problems	
Motivation of the team:	
pass the course and get a good grade	
Flexibility:	
Division of the group in smaller groups and follow a	
finish-to-start dependency	
Adequate report at the beginning	
Trust:	
friendship	
Stability/continuity of project organization	
Continuity of project development:	
smooth transition among tasks	

#### 5. Most important lessons from your project

Working on projects in a team is always associated with a number of challenges. To help students who will be working on similar projects in the future, I would like to give some advice below. The advice is all based on the experience we have gained while working on our project.

At the beginning of the project, it is important to obtain comprehensive information about the goals and basic conditions of the project. I recommend that you ask the client at an early stage if something is unclear, so that you do not lose time on that during the project. When deciding on a product type, you should consider which type has the greatest benefit for the end user. Keep in mind that complex products are not always the best. In my experience, even simple products can be very useful.

After you have decided on a product type, you should start working on the project at as early as possible. From experience, too little work is often done at the beginning of a project because there is still a lot of time left. This leads to time pressure at the end of the project and there is no buffer time for unexpected things. My recommendation is to set up a time schedule at the beginning, which should be checked regularly during the project. In addition, you should designate a project manager who will, for example, organize team meetings. My experience is that the lack of a project manager results in nobody taking the initiative and everyone waiting for someone else to do it.

In order to work efficiently, I recommend dividing the team into small groups. When dividing up who works in which group, it makes sense to consider the previous knowledge and talents of the individual team members. Decisions of minor importance should be made in the small groups. Questioning the entire team every time is often not really necessary and only leads to time delays.

I suggest you make clear arrangements. Everyone in the team needs to know clearly his tasks. The processing of subtasks should always be associated with a time schedule. It does not make sense to hold a team meeting for presenting intermediate results if not everyone has completed the own tasks by this deadline.

Finally, I advise you to not only see the project as work, but also to consider the learning effect. Of course, working on a project means more work than just sitting in a lecture. However, in practical project work you acquire important skills for your later professional life. Through the project I have not only trained working in a team, but also solved a problem about which I did not know in the beginning whether and how we should solve it. Looking back, I consider the experience I gained on the way to the final product to be very valuable.

#### 6. References

Hussein, B. (2018). <u>The Road to Success: Narratives and Insights from Real-Life Projects</u>, Fagbokforlaget.

Initiative, F. A. D. G. (2009). Digitization Activities: Project Planning and Management Outline.

Stenberg, G. (2006). "Conceptual and perceptual factors in the picture superiority effect." <u>European Journal of Cognitive Psychology</u> **18**: 813-847.

Whitehouse, A. J., Maybery, M. T. and Durkin, K. (2006), The development of the picture-superiority effect. British Journal of Developmental Psychology, 24: 767-773. doi:10.1348/026151005X74153

#### 1) Peer-review report

Each group is assigned a peer-review group. The list of the assigned groups is shown in the following table. The table shows for instance that the product produced by group 1 will be reviewed by group 11, and the product produced by group 2 shall be reviewed by group 22.

Before writing this review report, you need first to view/test the product produced by your test group. In your evaluation you should be **objective**, **fair and use to time to fill in the report.** The grade you assign based on your evaluation **is a guide** to the instructors when they grade the project assignment.

1 5 C	
	Shall be Peer-reviewed by
Product produced by Group	group
(Test group)	(Peer-review group)
1	11
2	22
4	8
6	5+12
7	4
8	1
9	10
10	12
11	13
12	14
13	15
14	16
15	17
16	18
17	19
18	2
19	20
20	24
22	25
24	26
25	27
26	33
27	34
33	36
34	6
36	7
5+12	9

### Your peer-review evaluation report

#### What is name of the group you are assigned to evaluate: Group 16

A) Based on your evaluation (as a group) please indicate the strengths and weaknesses of the final product.

**Strengths** (what are the good things about the product) this might include; the idea, there is a need for that, you believe that the product provide real value to learner, or that the product is of high technical quality (for example excellent video quality)

- Good concept
- Creative
- Good narration
- Good handwriting
- Easy to grasp the concept of stakeholder mapping in construction industry

**Weaknesses** (what are the features in the product, that you believe has impacted negatively your evaluation) that might include quality issues, lack of aiding text, lack of user-friendliness, tedious, and so on

- Background music was a bit loud and is distracting
- Writing was illegible to read in the beginning
- Hard to follow in some parts of the video because the narration was fast

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

	The product we reviewed is of high quality and we recommend it to be used as learning aid in project management				to be used as
Scale	Strongly	Disagree	Neither agree nor	Agree	Strongly
	Disagree		disagree		Agree
Your				✓	
response					

C) On a scale from 0 to 10. What grade would you recommend for this product? 8/10