NTNU

"What kind of influence do we have?"

An animated project management case with an interactive video-quiz about stakeholders to aid student's self-testing and lecturer's evaluation.

GROUP 26

Preface

This report is an evaluative report about the digitalization project within the course 'Applied Project Management' (TPK5100) at NTNU in Trondheim in autumn semester 2019. The task was to plan, develop and produce a digital learning aid in project management. The product is supposed to have a significant impact on learning and must be usable on phone, tablet or PC.

Contributions to the project have been solely made by the members of the group, but we would like to thank some classmates, friends and the teacher's assistant, who have answered some questions for getting feedback. Also, we would like to positively emphasize the websites and facilities like Educaplay and Powtoon, which have made it easier to find solutions and results for the project.

Group number: 26

Student names and student number:

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1. Digitalization projects

Our digital learning aid is an interactive video-quiz, which explains one case of the lecture - namely the 'Ruben case' of the lecture about stakeholders - combined with a learning test. This video should be a facility for the students to better understand and memorise the content of the lecture.

The video-quiz should be used after the lecture so students can have feedback on what they have understood of the lecture, making them aware of the knowledge that they have already acquired on the one hand, but on the other hand in which areas they are still lacking knowledge. Another opportunity that our project provides is letting the teacher know whether the students have understood the content of the lecture or if he should revise and explain some concepts again, because sometimes students do not feel confident enough to ask when having questions.

In order to clarify why we have decided on this specific product, it is useful to introduce 'digitalization' more in detail. This term is defined as the adoption or the increase of the use of digital or computer technology by an organization, industry, country, etc. It is about value creation in the process, on which the goals of digitalization are based: they are first the improvement of the product or of the process, the automation of the processes and the simplification of the communication (Parviainen et al., 2017).

We have chosen to produce this specific learning aid within the digitalization project, because it digitalizes the Ruben case from a normal text into a video leading to an increased use of computer technology by NTNU as the organization in this context. In our opinion, it creates value by facilitating to get the content of the Ruben case by the animated video and supports learning by the integrated quiz. It automates the process of providing the content of the Ruben case and simplifies communication between lecturer and students. Indeed, the lecturer gets feedback about the learning success of the students by the quiz results without the need to talk to everyone. The last decisive factor for choosing this digital product was the fact that it was within the scope of our technological skills.

This leads over to our main challenges that arose during the project. There was on the one hand the lack of technological skills regarding IT and digitalization, since all members of the group are students in management and economics fields. On the other hand, combined with the latter restriction, it was difficult to create a product that adds value for the students, which was demanded by the task instructions and which is also a feature of the above mentioned definition of

digitalization. So we had to think of something that was technically not too advanced and within our limited capabilities but at the same time useful, easily usable and responding to student's needs.

Other challenging factors - after we have finally decided on creating a video-quiz implemented in an animated case - were the time limit and working with a budget of 0. These constraints resulted from the restrictions of the task instructions of this project, namely the final deadline of 11/12/2019, and the nature of university assignments, where usually no budget is provided.

These facts resulted in the following sub-challenges: it took a lot of time to acquire the necessary know-how to use Powtoon as a video creating website and Educaplay as a tool for implementing the questions into the video. It was inevitable to work through tutorials and user guides (for instance https://mahfuzah.weebly.com/uploads/1/1/7/5/117591906/powtoon__1_.pdf by Mohamad, n.d.) before finally starting to work. This contributed to the time-related stress. Plus, there were limitations due to the usage of free demo versions as consequence of the missing budget: firstly, not all the background slides and features, that were offered in the video animation programme Powtoon, were included in the demo version. Secondly, the video could only have a maximum length of three minutes and thirdly, the download of the video was not for free, which was unluckily detected during the execution of the project. For these challenges, we had to either stay within the restrictions or search for other solutions.

Finally, it was also challenging to find a good virtual voice to record the whole video that is clearly understandable and sounds as natural as possible. We aimed for finding a good male as well as a good female voice in order to make it easier for the listener to distinguish between the dean character and the narrator speaking.

So all in all, our challenges were mainly based on limited technical capabilities rather than on managerial or planning issues.

This can be transferred to the context of companies. As a result of the ongoing digitalization, they have to fill the talent gap of employees with excellent technological skills, which is vital for digital change, and which are still lacking in the majority of companies. The companies have to attract talents by offering a work package with compelling value proposition. (Caimi & Lancry, 2018)

2. Self-evaluation of the project management effort in the project: success or failure?

We think that the organization of the project group has been optimal; we have respected project breakdown structure (WBS) and our original plan project.

In our opinion, we have done a fully functional product which could be used in lectures of different study fields related to project management. We also think that this product is well comprensible and easy to use, for both teachers and students.

Each member was equally involved in the work. We did not have any argument between group members because every member had the same objective and motivation. Even if at the beginning we had some difficulties to find the proper product, we all shared our intentions and ideas to deliver the perfect product at the end. We identified some **risks** that could occur throughout the project:

1. The idea might be not realisable within the framework of our skills. We tried to minimize this risk by doing enough research before deciding on this project idea. Thereby, we found the website www.powtoon.com for the creation of the video and the website www.educaplay.com, where we could insert the quiz questions in the video. We had the challenge of downloading the final video because we could not do it within the free trial version, so we came up with the idea of recording the screen. Furthermore, because of this version, we could not properly add the voices and the music according to the action in the video, so we used another software (iMovie) to do this.
2. A second risk that we identified was to create an equal or really similar product made by another group, and this might represent a lack of uniqueness. However, we assessed the likelihood that another group would use the same case and would also combine the features of animating a video and integrating a quiz to be very low. And even in this case, the questions and the animation would probably be different. Moreover, the fact that every single student has to register on the platform of educaplay, might be a barrier to take part in the quiz. However, only a few data have to be filled in, so that the registration should not keep the students from participating in the quiz. During the project, it turned out that a participation without registration is still possible, however the teacher does not receive any feedback of the results of those participants.
3. Another risk is that the questions might provide incorrect content since we as “project manager” are students ourselves and have just learned the content a few weeks ago. But the

currently available slides of lecture 2 about stakeholders have helped us to provide only correct questions and to give the correct answer.

In addition to these risks that were already identified during the project planning, there are also a few **limitations** of the final product:

1. One question of the quiz is an open question so it is impossible for the student to answer it correctly (since you cannot name ALL of the stakeholders exactly as Educaplay expects that for the correct answer). But the focus lies on the learning: the students will see the correct answers and can evaluate themselves, how well they have answered.
2. Finally, one other limitation is the use of Educaplay with mobile phones because it has not any app so it may provide some difficulties not work correctly sometimes.

The final result of the project is mostly as we expected. The way of evaluating the result of our project was defined in the project plan with the following **success criteria**:

1. The quiz should be done by 80% of the attending students during the lecture and by 60% of the students who are registered for the exam before it. The number of attempts of each single student should at least be 2 (once during the lecture, and once before the exam).
2. The score of an individual student should increase within each attempt to show that the video quiz has helped him to improve his knowledge.
3. The quiz should be implemented into the lecture and for this, it has to be accepted by the lecturer.

This is not possible to evaluate at this point in time because the product is not yet implemented into the lecture.

The degree of our support to the statement “We evaluate our project management effort as successful” can be seen in the following table:

Scale	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
Your response				X	

All in all, the project management can be seen as success.

3. Self-evaluation of the value to the learners: success or failure?

In order to get the most truthful feedback and use an appropriate evaluation method, we have decided on providing simple and brief questions to students attending the Project Management course. It should be noted that we did not use the classic tools such as Google or Kahoot questionnaires, but rather showed our project work directly to the respondents under our distant supervision. We provided the questions at the same time like in a classic interview.

In this way, we received immediate answers that, according to our opinion, reflect what the interviewees sincerely thought without any filter or uncertainty.

Our target were fellow students from the same course as they might better understand the purpose of our digital product and could give feedback contentwise. This is why we did not ask for further opinions from students coming from other courses because their subject may not fit with this type of learning tool.

We also provided our questions to both the teacher of the course and his assistant in order to try to get authoritative feedback from another main stakeholder group of our project.

The questions that we provided in our survey were:

- Do you think this facility is useful for students?
- Do you think this facility helps to explain the lecture?
- Would you use it/participate in your lectures?
- Is it understandable?

The choice of questions was not simple: finding indicators (the questions in this case) that could give an objective evaluation without influence of any environmental factor proved to be a difficult challenge. The general goal was to formulate questions without incompleteness, ambiguity and narrowness. We believe that we have succeeded in this task.

In particular, by asking the above mentioned second question, our intent was to try to understand if the interviewees perceived an addition of value to their condition, a simplification of their learning and teaching habits with the help of a digitalized and easily usable system, both for students and teachers.

We have received 24 feedbacks. We are aware that this is not enough and cannot be a complete indicator to have a significant overview of our work, but several factors have affected this. For example, having only one week available, the absence of many people in the classroom during the

penultimate lesson of the course and the rejection of some individuals to contribute to our evaluation for unknown reasons lead to this low number of answers.

The proportion of the participating students is around 14%, comparing the number of responses to the number of students enrolled in the course last year (under the assumption that the number of students attending is constant). This obviously cannot allow us to verify what the common thought of the class, which is an important stakeholder, relative to our work is. However, the responses provided by the interviewees, who all seemed satisfied with the product, were highly positive.

First of all, the responsible teaching assistant for this project, Kristin Hafseld, appreciated our product and made us satisfied regarding our work. She stated:

"I liked this product very much. From my (the teacher's) point of view, I believe your video quiz could function well as a teaching aid. It is short and "to-the-point", covering a specific topic (stakeholders), is engaging and interactive. From my perspective, it will be a useful tool to use at the end of the lecture (as the students can test themselves)."

The fact that an important stakeholder has fully understood our initial purpose and supports our product makes us satisfied but also eager to finally implement a project like this in the future; or we can suggest future students in the Project Management course to support an implementation of this idea that we have undertaken.

Going on with some relevant comments of the interviewees, Vittorio T. considers "*this tool useful for providing instant feedback both to the teacher, testing the students' attention, and also for the latter as they can verify what they have learned during the lesson"*. Furthermore, he adds: *"I would use it as an additional material along with a textbook"*, being a proof of the fact that obviously this is a complementary learning aid in addition to further material. Then, Abilash A. states *"This idea is unique as it helps the student to pay more attention and allows him to grasp the main points of the lesson quickly",* confirming our positive sensations about the product.

Among all the answers received, the testimony of Marta B. best reflects all the pros and cons of our work:

> *1) I think this facility is useful for students because it is interactive. It is also useful because it supports the student.*
>
> *2) I think it can be good for a few minutes. As this is different from the class, the students will show more interest.*

3) If I was giving a lecture about this topic, it is really likely that I would use this.

4) I think the video is well done. The voice is understandable and not too fast. The pictures are nice. It is very important for me that the main information shows written on the screen. The only thing I found less understandable was how to answer the first question (about the stakeholders). I made a list separated by ',' with some stakeholders, but the hole answer was wrong. Apart from this, really intuitive to use.

The degree of our support to the statement "Our product is of high quality and we recommend it to be used as learning aid in project management" can be seen in the following table:

Scale	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
Your response				X	

We would like to recommend our product as a support element but not a substitute for the textbook, as the purpose of our tool is primarily to provide a practical and fast solution to classic learning methods. To summarize, the product successfully adds value to the learners.

4. Factors that have contributed to success

First, it must be considered that at this point of time, the project is not fully completed, since there was no implementation phase yet. However, the product itself is completely designed and ready for use. After reflexion, we have identified some factors that have contributed to the success of our project, but also a few problems.

In project management, there are different success clusters: project management success, process success and project success.

We can explain these three **success clusters** with the following definitions. The project management success measures the degree of satisfaction that the project has managed to achieve. The process success is about how certain stakeholders such as participants, line-managers, end-users and suppliers, has perceived or experienced project implementation phase. Lastly, the

project success measures the project ability to achieve the intended goal, and the ability to create an impact on business. (Hussein, 2018, pp. 92)

Project Management Success

Firstly, the time management of the project was a success. We have respected the planning and even finished one week before the deadline, that permitted us to clarify a few details. So we were good on the estimation of the time that we needed for executing our project.
Another factor was the clarity of project purpose and objectives. Before starting Ruben's case video, we had clearly identified the purpose of our video and the objectives of it. We all agreed on the following points that the video must fulfill:

- Very clear illustrated animation of the Ruben case
- The Ruben case should then be perfectly understandable
- The student should then be able to answer the questions about the Ruben case
- The video should be of high quality in order to facilitate the lecture about stakeholders next semester/year
- Exploiting the digital tools available

Process Success

We had a cooperative and collaborative team, that permitted us to produce a good work during harmonious team meetings. We never had any arguments about taking decisions for the project. Everyone's ideas were highly appreciated and were further elaborated in objective discussions. Everyone was highly involved and committed in the project. We were glad to work together and benefited from this group work with members of four different countries. It helped us to get inputs and ideas from different points of view.

Project Success

Thanks to the different factors mentioned in the paragraphs about project management success and process success, we have achieved the goal of our digitalization project: animating the Ruben case to facilitate the teaching and understandability of the lecture about stakeholders. However, we will not know whether this product will finally be implemented and thereby impact future teaching methods.

On the other hand, we identified two different categories that could contribute to **problems**. These are: final evaluation by the end-users as well as technology knowledge and tools, which are part of the success factors by Pinto and Slevin's literature. (Hussein, 2018, pp. 92)

Concerning the first one, we only tested our project by ourselves, by other classmates and by one teaching assistant. So evaluation is covered only by a small and homogenous sample. Since the product is not yet implemented, we cannot determine if we have entirely achieved project success. The evaluation needs to be continued, in case this product will be applied next semester, in order to observe the long-term success.

The second factor that could contribute to potential problems is about the technology knowledge and tools used. At first, as already mentioned, we had limited technological abilities. We met some difficulties also because we were restricted to the demo version of our digital tool Powtoon, that only allowed us a 3 minutes video, 20 seconds per slide, and not all the possibilities to design the slides were included. However, we still managed to finish the product properly. We also had troubles with adding the voice according to the text and action in the video. We tried to record by ourselves but it was not well audible, so it took us a long time to find an appropriate and understandable voice.

About the problem for the downloading, a solution with screen recording was found. Another problem, which could not have been fixed, is the adaptability of our video on mobile phones. It is possible to use it on the phone but however with some problems (for example, the questions could appear not at the right time). Finally, the teacher can get the report about student's answers only if the student has logged in. Otherwise, a group in Educaplay can also be created to facilitate the access and to collect comments, discussion and results.

To sum up, we can say that most of the problems were fixed. The most important cluster was the project management success. The teamwork was efficient and productive and could profit from the adequate project planning and realistic estimates.

Comparing to Pinto and Slevin's success factors, we are also coherent for instance with the clarity of project purpose and objectives. However, the technologies, on which the project was based, the evaluation and approval by the end-users are part of our factors that have triggered us some problems.

5. Most important lessons from the project

During the project, we have gained first experience regarding project management.

In our group, no one had any technological skills applicable in a digitalization project. So, we thought about what we could do with our previous knowledge and capabilities. Indeed, we tried to remember some similar projects or tools that we have used before in order to get some ideas. Since no one of us had done anything like this before, we decided to reread the slides and the book in addition to follow the lectures of the course for knowing some tools that we could use in the project. We can recommend this because it was very useful: it is always better to study the content of the lecture before applicating it to a case.

First of all, we wanted to create something with value for teaching and at the same time helpful for the students. In fact, with our product they can better understand the lesson that they have already attended and they can find out how much they acquired and what they should review.

We focused on the second lecture about the stakeholders, in particular on the Ruben case. In our product we tried to merge all the types of learning: visual, listen, reading, logic… However, a quick poll within the course has revealed that the visual and logic learning methods are the mostly used ways to acquire knowledge on which we have focused in our project. Precisely for this, our product is divided into two parts: the first one is the video about the Ruben case (visual); the second part is related to the logic part that is about questions and answers suited to the video, in order to make it more understandable.

This division has brought us to try to find one “expert” per each work task: one was focused on Powtoon and another one on Educaplay in order to comprehend how the respective tools work. Indeed, before starting to do something, in our opinion, it is better to know if you are really able to do it. Therefore, after understanding how the websites works, we had to figure out if it would be feasible and we did some tests to verify it. Our advice is to do a test of the product before finally deciding on it in order to minimize the risks and wasted time on something that you are not able to realise. It is better that the final work is simple and well done rather than badly made because it is too complicated for your skills: from this we learned to do not exceed our limits.

Another thing that we learned from this project work was to think about possible risks and problems that might occur in advance and try to avoid them or to limit the risks before deciding on the final product and starting to create it. We found this problem at the end of the first part, when we finished the video on Powtoon and had to download it to use it for the second part: we had to pay (and we

had no budget). The tests we had done in advance were to verify our ability to create the video, but obviously we had not considered all the risks. For this and the other difficulties that we have encountered, our experience highly suggests regular group meetings. They are really useful because there are many ideas to rely on and so, it is easier to find a solution. For the example of the download problem, we decided to record the video from our computer's screen: it was not a huge challenge, but being in a group helps you to solve many kinds of problems.

6. References

Caimi, G., Lancry, O. (2018). How can we build a workforce for our digital future?, World Economic Forum, Available at: https://www.weforum.org/agenda/2018/09/what-employees-today-future-really-want-personalization/ (Accessed: 11/13/2019)

Educaplay, Available at: https://www.educaplay.com (Accessed: 11/05/2019)

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

Mohamad, S. N. M. (n.d). Powtoon. Available at: https://mahfuzah.weebly.com/uploads/1/1/7/5/117591906/powtoon__1_.pdf (Accessed: 10/17/2019)

Parviainen, P., Kääriäinen, J., Tihinen, M., Teppola, S. (2017). Tackling the digitalization challenge: how to benefit from digitalization in practice. International Journal of Information Systems and Project Management, 5, 63-77.

Powtoon, Available at: https://www.powtoon.com (Accessed: 11/02/2019)

The peer-review evaluation report

Name of the group we are assigned to evaluate: Group 24

Based on our evaluation, we identified the **strengths** and the **weaknesses** of the final project of the group 24. The digital project is a revision tool for the students to supplement the course. More precisely, it provides support to review the content of the lectures with key contents, it gives important definitions and it allows students to have access to quizzes to test themselves before the exam.

We found interesting the fact that the group has asked students about their learning habits before building up the tool. They identified the needs through a practical way to better satisfy the final users, and that is a good point to start a project. Indeed, it gives more credibility and facilitates success of the final digital product. It is even more interesting to see that this project was built on previous digitalization projects: they took different learning tools to make it one. We could finally say that the starting point of the digital project is a **strength**: we believe that the project might provide a real value to the learner because it apparently responds to student's needs.

By going further into the digital tool, we identified some **other strengths**. Separated by chapter/lectures, we can see the main elements highlighted to master a specific lesson. In fact, by using "course materials", it provides an overview of the most important things to know about the chosen lesson. In this way, we could imagine that this kind of tool reassures students. It makes sure that all students registered in the course get all the elements provided by the teacher, and it is especially useful when a student could not attend a specific lesson (due to sickness or personal reason for example). We regard the "key content" section as really useful that synthesis the objectives and the main elements that students should know and understand about the lesson and more precisely, they clearly identify what the teacher expects from them. It is a good tool to be updated with the lecture, to be sure that everyone get the same chance to succeed for the exam.

Moreover, this tool is a good way to challenge student's knowledge. With the "quiz" section, users can challenge themselves on specific subjects mastered or not by the student and be finally prepared for the final exam. There is a really good training in this section with different exercises and even a case study. This training section is a perfect way to have a good command on the subject if students are rigorous and use all elements that the product delivers.

We think that changing the way to learn and revue lectures could be motivating for users. Students get access to a different learning tool and they will be more likely to go deeper into a subject or simply be well prepared when the tool provides them a new appreciable experience of learning.

In the meantime, we found some **weaknesses** that can negatively impact this new experience of learning. The main element that we identified is the use on mobile phones that is not comfortable. If we compare it with the use on computer, it is quite different and less qualitative. Some visual elements are missing. For example, the titles for the different section disappeared and only the description of each section is presented, which makes the comprehension more difficult. It does not catch the eyes. In this way, the visual interface could be better. Speaking about visual elements, we think that adding more colours or simply highlighting important key words, bold titles or words could be useful, especially in the "course materials" section. Moreover, having the possibility to add personal notes could be a significant added value for the product.

We could question if it is a fully functional product because it delivers only one completed lecture so far, even if we noticed 4 others lectures but they are not yet accessible. Therefore, what is the capacity of the product? Is there only space for 5 lectures maximum or will the student have access to all of the lectures?

Finally, we can say that the product provides a great helping tool for students with a lot of advantages. The negative elements correspond to the visual presentation interface that could be improved with more quality.

The degree of our support to the statement "The product we reviewed is of high quality and we recommend it to be used as learning aid in project management" can be seen in the following table:

Scale	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
Your response				X	

This product is a really solid but not completed product, which is useful, has a friendly interface for users (on computer), full of the main key words and sentences which allow to refresh the course's content in an easy and not superficial way. The purpose of the digital product led by group 24 is clear. We would recommend to work on improving the product aspect: visually attractive, user-friendly on phone. According to our evaluation, the grade we would recommend for this digital project is a **7/10.**

Attachment

Project plan (as submitted on 10/05/2019)

1 – Type of product you will be producing:

We will produce a video quiz, in which we will combine an animation of the Ruben case with a learning control for students in the form of a quiz. Questions will appear during the video at the respectively fitting position in the video (the video will stop for the question).
To be used in the lecture, the teacher has to send the invitation to all the students, who are registered for the course, via email by selecting the 'invite' button (unfortunately, before participating, every student has to register on the website www.educaplay.com). The students have to click on the link in the email for joining the group. Then, they can see the video and can reply to the questions on their own. Finally, the teacher can see the results of every single participant and also the average result of the total group (further information on this in the 'success criteria' part).
The digitalization project step by step :

Step 1:

The teacher has to register in educaplay to create a profile.

Step 2:

The teacher has to create a group and decides all the specifications related to this group.
Name: e.g. Project manager
Private or public group: private group with all the students attending Project Management courses.
Description of the group: explain the goal of the group
Who can comments the videos: everyone, nobody or only the administrator

Step 3:

The teacher has to send an email to all the students to give them the access to the group - send them an invitation by email to join the group. It's very important that the teacher is inviting the students first because otherwise they will all have to request the access to him, then it could get very messy because the teacher has to accept all the request one by one.

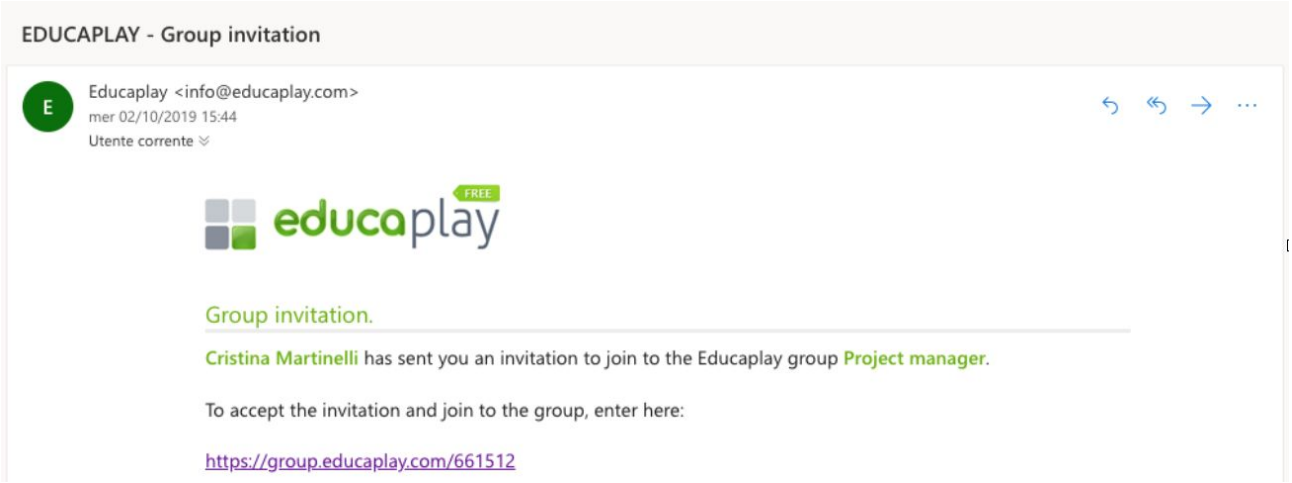

Figure 1: Email invitation received by the teacher to join the group.

Step 4:

All the students have to register - create their own profile to have access to the "Project manager" group and accept the teacher's invitation.

Step 5:

The students have to click on "My groups" and choose "Project manager". Then they have two options to have access to the teacher's quiz : either they click on the link that the teacher posted in the chat; or they go in "Members", click on the name of the teacher, and click on the quiz ("Ruben Case Quiz"). If the chat is too crowded, they can still see only the teacher's chats and see the link.

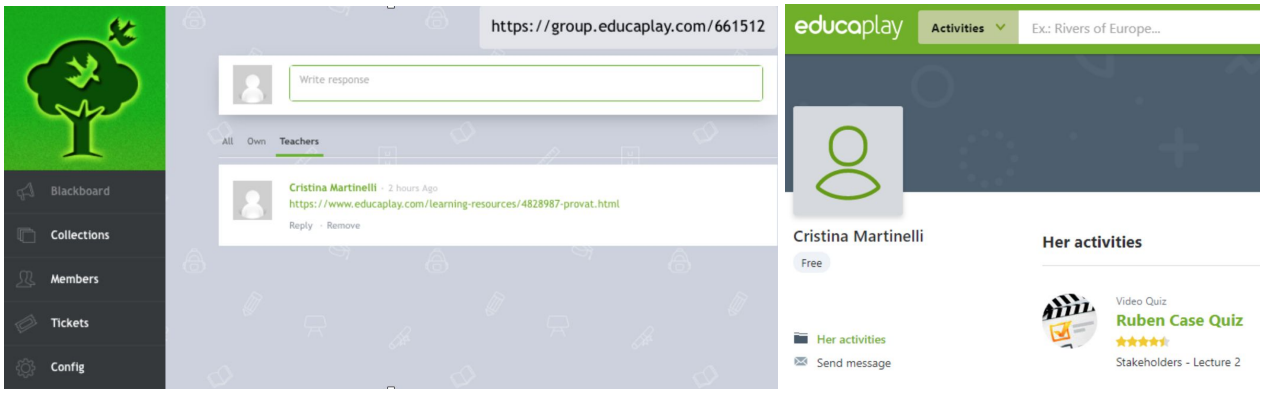

Figure 2: Two option to have access to the quiz

Step 6:

The students can do the video quiz.

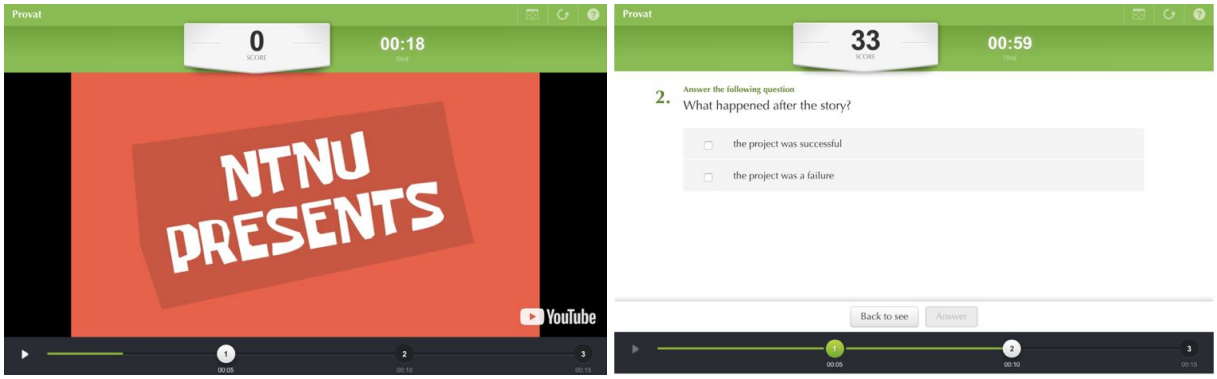

Figure 3: Presentation of the quiz structure.

Step 7:

The teacher can have access to the results (average time of, total players, average score, date and so on).

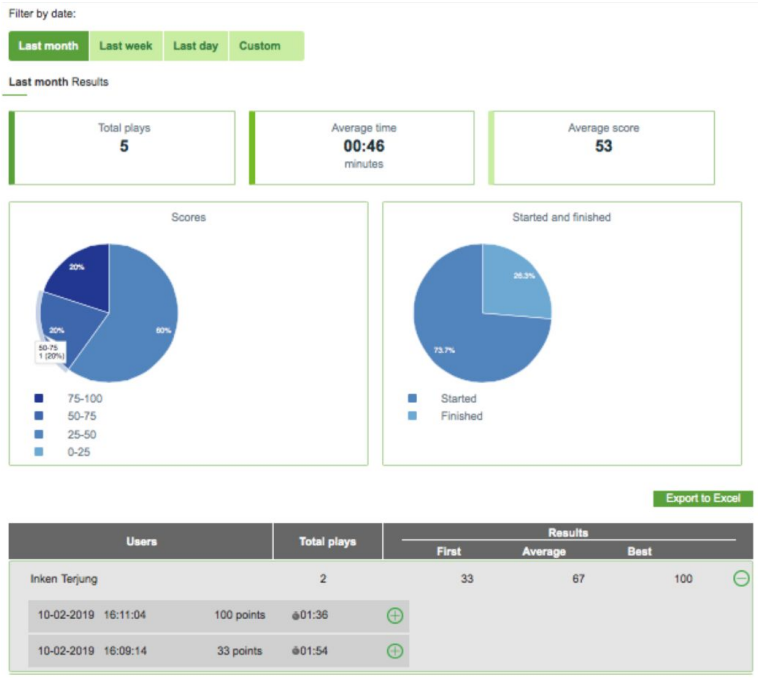

Figure 4: Representation of the results after each students answered the quiz.

2 – The expected benefits of the product (the learning outcome):

The students of the course Applied Project Management will profit from the video, since the case of Ruben will be reproduced and summarized in the video, so that the student does not have to read through all the slides and at the same time, the student can get feedback about his level of learning and understanding of the course content.
Since the six members of this group are predominantly visual learners (and the Kahoot that another group within the course 2019/20 carried out showed the same tendency for the whole course), the video provides a helpful learning aid.
Plus, the lecturer can see whether the students have understood the content of the lecture about Stakeholder and are able to apply the newly gained knowledge.

3 – Potential stakeholders and your plan to involve these stakeholders during project development:

Students attending Project management courses.
The lecturer who will present Ruben's case in the course "Applied Project Management".
Department of Mechanical and Industrial Engineering which could be interested in feedbacks about the quality and progress of the course.

4 – A project risk assessment plan, indicating the main risks and how are you going to address these risks:

One risk is that this idea is not realisable within the framework of our skills. We tried to minimize this risk by doing enough research before deciding on this project idea. Thereby, we have found the website www.powtoon.com for the creation of the video and the website www.educaplay.com, where we can insert the quiz questions in the video.
A second risk could be the creation of an equal or really similar product by other groups, and this could represent a lack of uniqueness. However, the likelihood is very low that another group will use the same case and also combines the features of animating a video and integrating a quiz. And even in this case, the questions and the animation will be different.
Moreover, the fact that every single student has to register on the platform of educaplay might be a barrier to take part in the quiz. However, only a few data have to be filled in, so that the registration should not keep the students from participating in the quiz.

Another risk is that the questions might provide incorrect content since we as "project manager" are students ourselves and have just learned the content a few weeks ago. But the currently available slides of lecture 2 about stakeholders will help us to provide only correct questions and to give the correct answer.

5 – What skills do you need to acquire in order to produce your project? How you will acquire these skills?

First of all, we need video maker and photo editing capacities to create the planned final product. These abilities are already owned by some members of the group, so we believe we will not face many difficulties during its development. In any case, we will learn and improve the above mentioned abilities by ourselves and collaborate within the group. Moreover, the realization of this type of product also requires creativity and understanding the students' needs in order to create a friendly platform for students and for teacher as well. Since the time framework is quite narrow, we will need good skills in time management in order to finalize the product until the 12th of November. Here, the project schedule will help us to keep track about which task has to be fulfilled until which date so that we finish the project in time.

6 – Project breakdown structure indicating the major deliverables, sub-deliverables and work packages:

Finding a suitable video animation tool (done)
Preparation of creating the video animation
Acquiring video animation skills
Collecting idea about how to animate the case
Creating/animate the video of the Ruben case
Finding the right questions (and also figuring out the correct answer)
Loading up the animated video on educaplay.com and integrating the questions
Doing the organizational part (creating the group on educaplay.com, inviting all the students and telling them to register)

7 – Project schedule. Produce a time-estimate of each task (build and produce) in the project:

17.09-26.09.	Individual reflexion about a project idea
27.09.	Collection of the group members' ideas - "brainstorming" process
02.10.	Deciding on a Project Idea and writing the base of the project plan
02.10.	Creating a test video quiz
04.10.	Finalization of the Project Plan
05.10.	Upload the Project Plan
05.10.-30.10.	Animation of the Ruben case (including several group meetings)
31.10.-05.11.	Uploading the video in educaplay.com and implementing the quiz questions
12.11.	Presentation of the final product

8 – A list of the most important success factors that you should adhere to in order to succeed in the project:

Number of students who use the video quiz (not only during the lecture but also before the exam):
during the lecture 80% of the attending students
before the exam: 60% of the students who are registered for the exam
The number of attempts of each single student should at least be 2 (once during the lecture, and once before the exam).
The score of an individual student should increase within each attempt to show that the video quiz has helped him to improve his knowledge.
The quiz should be implemented into the lecture and for this, it has to be accepted by the lecturer.
(see Figure 4: Representation of the results after each students answered the quiz)

9 – Your project can be classified as Digitalization project. Reflect on the characteristics of this type of projects (use the literature):

The literature about digitalization suggests 3 main features of digitalization projects (Berha Presentation - Digitalization Projects) :

1. Improvement of the product/process: our digital project can improve the content of the lesson by helping to better understand the subject of the course. Moreover, it gives feedback about the level of learning and also about the ability of applying the gained knowledge (to the student and also to the lecturer) → see expected benefits of the project

2. Automation of the processes: So far, the case of Ruben was just presented by a text and some figures on the lecture slides. By the video, this will be automatized and processes easily managed and controlled.

3. Simplification of communication: Communication is made possible by the overview of results which the 'teacher' of the video quiz can see. He gets feedback of the comprehension of the students and can react by giving more explanations in case the answers are predominantly false.