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Introduction
Goals of the Theses
Theoretical Foundations
Current Situation Analysis
Proposals and Contribution
Conclusion
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List of Appendices

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Basic sources of information:

CARSTENS, D. S., G. L. RICHARDSON and R. B. SMITH. Project management tools and techniques: a practical guide. Boca Raton: CRC Press, 2013. ISBN 978-1-4665-1562-8.

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Abstract

This bachelor's thesis describes a way to use selected project management tools and processes in order to use project structure to improve current situation of Student Club Mozaika project. Analytical part describes the project's current situation and identifies the spaces for improvement within project management framework. Proposal and contribution part of the thesis proposes four scenarios. In two out of these scenarios, the implementation of the structure and tools is recommended. The final part evaluates the findings and potential benefits of using the project structure for the project and project team.

Keywords

Project, project structure, situational analysis, association, project processes, non-profit organization projects

Abstrakt

Tato bakalářská práce se zabývá způsobem implementace vybraných individuálních nástrojů projektového řízení za účelem vyvinutí projektové struktury pro Studentský Klub Mozaika. Analýza se zabývá popisem stávající situace a identifikuje místa pro zlepšení s pomocí nástrojů projektového řízení. V návrhové části jsou rozvrženy čtyři scénáře. Ve dvou z nich figuruje implementace nástrojů projektového řízení a navržení projektové struktury. Závěr shrnuje výsledky analýzy stávající situace a potenciální benefity použití navržené projektové struktury.

Klíčová slova

Projekt, projektová struktura, situační analýza, spolek, projektové procesy, projekty neziskových organizací

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Affidavit

I declare that the present bachelor's thesis project is an original work that I have written myself. I declare that the citations of the sources used are complete, that I have not infringed upon any copyright (pursuant to Act. No 121/2000 Coll.)

Brno dated 9th May 2022

…….

author's signature

Gratitude statement

First and foremost, I would like to express my thanks to Ing. et Ing. Pavel Juřica, Ph.D for his unending support, academic advice, and supervision of my thesis. Next, I extend my gratitude to my family, and to my sister, whose academic career inspired mine, and to my fiancée Lucie for her patience and support.

Table of contents

Introduction

This bachelor's thesis describes particular case of project development of Student Club Mozaika. The idea of Student Club was conceived several years before it took on any real form. The originators were my friend and I, about a year after we started a non-profit. At the same time, there was another organization with similar concept in mind, located in Hradec Kralove, and after moving the seat of the company to Hradec Kralove, we got in contact with them and started the discussion on how the project should look like, what is the goal, and which suppliers would be needed – and slowly yet steadily, the idea for the project was fully developed. Not so the project structures or project documents, which were developed poorly.

The main goal of the project was set as follows: to provide students – mainly the students of bachelor's degree programs at the universities in the area, and students in high schools – with safe space, where they can study and hang out, and purchase specialty coffee and tea drinks and snacks for lowest price possible, and to make the whole project self-sustaining.

However, due to lacking structure, the project tends to be stuck in one place, without means to take off to its place – to creating a community, and to the breakeven point.

The Student Club should also be foreigner-friendly since it is difficult for international students to find such places. After several discussions and adjustments, we launched the project that currently accommodates a small group of regular customers – students, and we are in negotiation process with the Erasmus Student Network in the city regarding the future plans.

Because the project was missing a backbone, I decided to develop a tools that can help to develop the project structure that would help the project to benefit in reaching their original goal.

1 Goals of the Thesis

The main aim of this thesis is to develop a project structure of the Student Club Mozaika using particular project management tools in order to create a backbone to help the already existing project to reach its full potential.

Theoretical part consists of several parts which create the theoretical background for the work. The parts contained are the brief history and development of project management, the current situation of project management as a tool to reach certain goals and transformations in an organization, and the last part, which is contextually the beginning of Current Situation Analysis, is the overview of Student Club theoretical background, which contains certain data, proposal of the goal, and the reasons behind launching the project.

In the analytical part of this work, I described the data obtained through interviews and focus groups with different project members. For the data description I utilized different templates from project management, as well as MS Project software. These data were important part that helped me to assess which tools would be the best to describe and implement into the current situation.

As a means to reach the set goal, I used scenario-based approach, where based on the current situation analysis I proposed four different scenarios. Within the proposed scenarios, I recommended three different tools, logical framework analysis, RIPRAN analysis, and Work Breakdown Structure within MS Project with detailed examples of utilization in developing the project structure in the scope of already existing project.

2 Theoretical Foundations

In the theoretical foundation chapter, the history and literature review including basic project management principles is described.

2.2 Definitions

To establish the background for this work, it is necessary to define the terms within which the thesis will be operating. There are several project management institutions, and each defines a project with a slight difference in wording.

Munns and Bjeirmi define project as *"…the achievement of a specific objective, which involves a series of activities and tasks which consume resources"* (Munns & Bjeirmi, 1996). Whereas this definition covers the project quite well, it does not suit the need for the definition of project management. The institutional definition is more thorough and detailed; Project Management Institute defines project as *"…a temporary endeavor undertaken to create a unique product, service, or result"* (Project Management Institute, 2017).

Another definition of projects states that they are *"…unique, transient endeavours, undertaken to bring about change and achieve planned objectives, which can be defined in terms of outputs, outcomes, or benefits"* (Association for Project Management, 2019). These endeavors are undertaken in order to fulfill goals by producing deliverables. In other words, projects exist in order to create something new, or improve already existing product, service, or another deliverable. According to Lester, projects can be **time-bound, cost-bound, performance-bound,** or **safety-bound.**

2.2 Brief history of project management

The history of project management cannot be exactly dated, however, the first projects were planned and executed as early as in ancient Egypt. The construction of the great pyramids of Giza or building the Great Wall of China are all quite sufficient examples of early-stages project management. These and many other projects were conducted in immense numbers throughout the history, however, the term **project management** was first used in 20th century – the *"earlier endeavors were seen as acts of worship, engineering, or nation building. And the people controlling the endeavors saw themselves as members of groups focused on specific callings such as generals, priests, and architects"* (Weaver, 2007). Historically, the tool that had the greatest impact on current form of project management is the Gantt chart. Gantt chart was first drafted by Henry Gantt, and its first industrial purpose was to plan and manage the production in batches.

The project management in its current form exists only for approximately 40 years, however, the modern era of project management can be dated to 1900s industrial era boom. (Weaver, 2007)

2.3 The need for project management

One of the most effective ways of creating a value in an organization is developing and executing a project. The project management ensures that the venture undertaken in the project will be successful. This is confirmed by following statement of AK Munns and BF Bjeirmi from the University of Dundee: *"... it [project management] is more efficient than traditional methods of management, such as the practice of functional divisions in a formal hierarchical organization, for handling such situations*" (Munns & Bjeirmi, 1996). Though Munns and Bjeirmi wrote their paper in 1996, this particular statement is becoming more and more actual nowadays.

Next, they stated that *"the process of bringing new projects on stream and into the market imposes demands on established organizations and necessitates different management techniques from those required to maintain day to day operations"* (Munns & Bjeirmi, 1996). While this statement seems to be quite obvious, from the practice I can say that not all companies or project managers observe this fact and act on it. However, since 1996 many things improved – including developing role of project management, and subsequently the role of project managers and their competences. Munns and Bjeirmi condition the successful use of project management by three variables: the venture must be **finite**, **unique**, and **unfamiliar.**

2.4 Project management and project life cycles

Project management is defined as *"…the process of controlling the achievement of the project objectives"* (Project Management Institute, 2017) Another definition describes the project management as "*the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements"* (Project Management Institute, 2017). It is achieved through using appropriate processes which were identified in the initial stages of project. The role of project management departments in the organizations is to ensure that the projects are finished in timely manner and with desired effect. However, with all that mentioned, project management is not only about the techniques, and methods – it is also a specific way of thinking, and a particular way of working, which is based on systematic analysis of issues combined with the attempts to divide problems into smaller, well-defined parts in order to resolve these newly existing issues faster and with higher precision.

Professor Kathy Schwalbe states that there are several **project attributes** that help the project to be defined more in-depth. These were illustrated well in Professor's Schwalbe's Introduction to Project Management, Sixth Edition (2017):

- To every project, there is **a unique purpose**. The foundational part for every project is clearly defined goal. For the most – if not all – project goals definition, the S.M.A.R.T. goal methodology is used.
- Every project – by its very nature – is **temporary**. As it is implied in first definition, regardless the duration, the projects have closely defined time scope of execution. To illustrate this, imagine you are a business that plans the relocation – the relocation process has in-detail defined beginning, and a date by which the company needs to re-launch their operations, which marks the end of relocation project.
- Another attribute mentioned by Dr. Schwalbe is project's **ability to drive change and to enable value creation**. Projects are usually initiated in order to facilitate change, which is expected to fulfill the needs and/or wants.

- Development of the project can be done in either **progressive** or **iterative** fashion. These two terms refer to **project life cycles**, which can be either progressive, iterative, or hybrid, combining the best of both ways. Schwalbe uses the comparison to house construction, where *"there are many decisions that must be made in planning and building a new house. It works best to draft preliminary plans for owners to approve before more detailed plans are developed"* (Schwalbe, 2017), which refers precisely to the **hybrid** fashions, described better by Project Management Institute. I will elaborate on the project life cycles – or development fashions – in the upcoming subsection.
- Since project leads to development of a deliverable, the **resources** are needed. Resources, or inputs, vary based on the required deliverable. Again, Schwalbe's example with the house construction can help to illustrate the resource need; *"Many different types of people, skill sets, and resources are needed to build a home"* (Schwalbe, 2017)
- As in every organization or event, there is someone managing it, or someone who requested the particular deliverable, and the projects are no exemption. There always should be a **primary customer, sponsor,** or **stakeholder**. Even if the project has many stakeholders, there must be someone pointing the project in direction of the deliverable. Schwalbe names this person **project sponsor**, and states that they *"usually provide the direction and funding for the project"* (Schwalbe, 2017).
- The last attribute mentioned by Schwalbe is **uncertainty** which is based on the uniqueness of the project. *"...it is sometimes difficult to define the project's objectives clearly, estimate exactly how long will it take to complete, or determine how much will it cost. External factors also cause uncertainty, such as supplier going out of business, or a project team member needing unplanned time off. Uncertainty is one of the main reasons project management is so challenging, because uncertainty invokes **risk**"* (Schwalbe, 2017)

There are different fashions or methods for the project further development. While Prof. Schwalbe talks about **iterative** and **progressive** elaborations, other publications offer different, more detailed definitions.

Project life cycle is *"the series of phases that a project passes through from its start to its completion"* (Project Management Institute, 2017). Project life cycle is usually divided into different phases of development of particular deliverable. According to Project Management Institute, the project life cycle phases can be either *iterative*, *sequential*, or *overlapping*.

The project life cycles can be either predictive, or adaptive. The predictive project life cycle defines the scope, timeframe, and costs of the project that are necessary to possess in order to create the required deliverable. The scope, timeframe, and costs are defined as early in the project's life cycle as possible.

According to Alby (2010), the predictive life cycle follows a series of sequential and/or overlapping phases. PMI (2017) recognizes following types of life cycles:

Predictive life cycle has the scope, time and costs defined in the early stages of the cycle. Any and all changes to the aforementioned attributes are carefully monitored and managed by project management team.

Iterative life cycle has its scope determined in the early stages of life cycle, but the timeframe and financial expenses estimates are modified – *iterated* – according to project development team's exponentially broader understanding of the deliverable development. The adjustments help to develop the deliverable through *"a series of repeated cycles, while increments successively add to the functionality of the product"* (Project Management Institute, 2017). The Association for Project Management defines iterative life cycle as a cycle *"where prototypes, timeboxes, or parallel activities are utilized to acquire new insights, obtain feedback, or explore high risk options"* (Association for Project Management, 2019).

Incremental life cycle produces the deliverable through a series of successive iterations that add different functions within a timeframe that has been defined in initial stages of project. The result of the project is considered finished only after the last change.

One of the most used project life cycles is **adaptive life cycle**, which can be **agile, iterative,** or **incremental.** This means that these life cycles do not have predetermined full project scope, but their scope is defined in detail before the start of each iteration. They are also referred to as **agile** or **change-driven** life cycles.

The last life cycle is a hybrid life cycle, which is a combination of a progressive and an iterative or an adaptive life cycle. This life cycle is a great combination of both, which allows the already known parts of the project to be predetermined in predictive style, whereas the elements that need further development follow the iterative or adaptive life cycle.

2.5 Goals

Goals, also known as **objectives**, are defined as *"outcome toward which work is to be directed, a strategic position to be attained, a purpose to be achieved, a result to be obtained, a product to be produced, or a service to be performed"* (Project Management Institute, 2017). The specification of the project objectives is not an easy task as it has to take into consideration the vision and mission of the company as well as the external factors, such as stakeholder interests. The word "temporary" in the first definition implies that regardless the duration, the projects have a given timeframe of existence. The termination of project is caused by one or more of the following factors:

- The project's objectives were reached
- The inability to reach the objectives

The inability to reach the project's objectives may occur for several reasons, for example exhausting the funding, loss of critical resources, or the legal termination. For the successful completion of the objective, the objective needs to be defined clearly. Usually, the **S.M.A.R.T.** methodology is used for the goals definition. **S.M.A.R.T.** is a mnemonic acronym, and it stands for **S**pecific, **M**easurable, **A**ttainable, **R**elevant, and **T**ime-related.

Each of these goal attributes are of immensely important in order to define the objective well enough. This methodology was developed by G. T. Doran in 1981 and it was first described in Management Review journal. Since then, many institutions and individuals drawn from Doran's idea and changed over time, however, for the purpose of this work I will use them as written above. Each of these letters defines different attributes of acronym as follows:

- **Specific** means to *"target a specific area for improvement"* (Doran, 1981). This means to define the objective in the most specific way possible.
- **Measurable** Doran defines as *"quantify or at least suggest an indicator of progress"* (Doran, 1981). The objective is considered measurable if there is a set scale or a clear way of measuring the success or achievement of project objective.

- **Attainable** stands for the ability of project team to attain the objective and deliver the goal. In original work of Doran, the "A" was defined as *assignable*, which was specified as the ability to specify the particular project member responsible for task completion.
- **Relevant** refers to the relevance of the goal set to overall context of the project. Again, Doran's original definition of "R" was *realistic*, which, if compared to *attainable* seems the similar, and thus redundant.
- **Time-related** specifies when the deliverable can and should be achieved. The time-sensitivity of each goal should be considered beforehand.

Projects may exist as a stand-alone venture, but they may exist within programs or portfolios. There may be multiple projects needed for achieving the businesses or organizational objectives, which then group the projects into programs. There are organizations that can group programs into project portfolios for the reason of more effective project and program management. *"A portfolio is defined as projects, programs, subsidiary portfolios, and operations managed as a group to achieve strategic objectives"* (Project Management Institute, 2017).

Project phase is *"a collection of logically related project activities that culminates in the completion of one or more deliverables"* (Project Management Institute, 2017). These attributes are measurable, and they can be different for each phase, and obviously for each project. Project Management Institute lists as the attributes the following:

- Name
- Number
- Duration
- Resource requirements
- Entrance criteria for a project to move into that phase, and
- Exit criteria for a project to complete the phase.

Name of the phase can vary from *Phase A* to descriptive name of the phase dependent on type of activities that will be executed during the phase. **Number** refers to number or amount of all phases included in project. **Duration** defines the timeframe of phase. **Resource requirements** cover all the resources needed for successful completion of the phase, for example human resources, buildings, or equipment needed. **Entry criteria** define the criteria that have to be met in order to move into the next phase. The example of entry criteria may be specific documents completed, specific components developed, or specific resources gathered, which is then proved in documentation. Then, the **exit criteria** are defined in order to complete the phase. The example of such can be the document approvals, completed and documented deliverables, or gathered the resources defined at the beginning of the phase.

Project phase gate is also known as **stage-gate process**. During phase gate *"the project's performance and progress are compared to project and business documents…"* (Project Management Institute, 2017). These documents can contain project business case, project charter, project management plan, etc.
During the different phases of the project, there is a variety of project documents used. These documents can be physical and/or electronic.

2.6 Project Manager and their roles in the project management

Project manager owns a paramount part in project's success. Lester defines the project manager as *"The individual or body with authority, accountability, and responsibility for managing a project to achieve specific objectives"* (Lester, 2014). The task of the project manager is to effectively lead the project team in order to ensure timely objective delivery in required quality. The project manager also *"organizes testing of component deliverables as part of implementation in a safe, non-operational mode"* (Association for Project Management, 2019).

In most organizations, the project managers are involved in the project from initiation phase until the closing phase, however; in certain cases, the project managers may be involved in feasibility study process prior to initial stage of the project. *"Ultimately, the project management role is tailored to fit the organization in the same way that the project management processes are tailored to fit the project"* (Project Management Institute, 2017).

The Project Management Institute's publication uses quite fitting comparison of project manager's role to that of an orchestra conductor: *"A large project and an orchestra each comprise many members, each playing a different role. A large orchestra may have more than 100 musicians, who are led by a conductor. These musicians may play 25 different kinds of instruments placed into major sections such as strings, woodwinds, brass, and percussion. Similarly, a large project may have more than 100 project members led by a project manager. Team members may fulfill many different roles, such as design, manufacturing, and facilities management. Like the major sections of the orchestra, they represent multiple business units or groups within an organization. The musicians and the project members make up each leader's team"* (Project Management Institute, 2017). The analogy continues further with comparing the project manager's responsibility for the team to the conductor's responsibility for the outcome of performed piece. Similarly, the conductor does not know how to operate all of the instruments in the orchestra.

Neither is the project manager expected to know each team member's role into detail, but *"...should possess project management knowledge, technical knowledge, understanding, and experience. The project manager provides the team with leadership, planning, and coordination through communications"* (Project Management Institute, 2017).

2.6.1 The spheres of influence, competences, and skills of project manager

Since the project management is defined as *"The planning, monitoring, and control of all aspects of a project and the motivation of all those involved in it, in order to achieve the project objectives within agreed criteria of time, cost and performance"* (Lester, 2014), it is necessary to find a way to motivate the project team in order to meet the project's goals. Project manager's competences and skills vary based on the type of project, however, there are certain skills that every project manager should have. Lester states that these skills are divided into **hard skills** and **soft skills,** and states that though different publications say so, *"the division is not exact, and some are clearly independent"* (Lester, 2014). The examples of **hard skills –** in my work I sometimes refer to them as to **technical skills** – are work breakdown structures, project organization, network analysis, et cetera. The examples of **soft skills** are health and safety, stakeholder analysis, negotiation, communication skills, marketing, et cetera.

As stated by McNamara, *"Successful project managers have the ability to demonstrate the unbiased fairness of a judge, the skills of a diplomat, the authority of a general and the understanding of a parent"* (McNamara, 1999). Project managers have several spheres of influence, pictured in *Figure 1*. These describe more it detail the spheres which project manager directly influences.

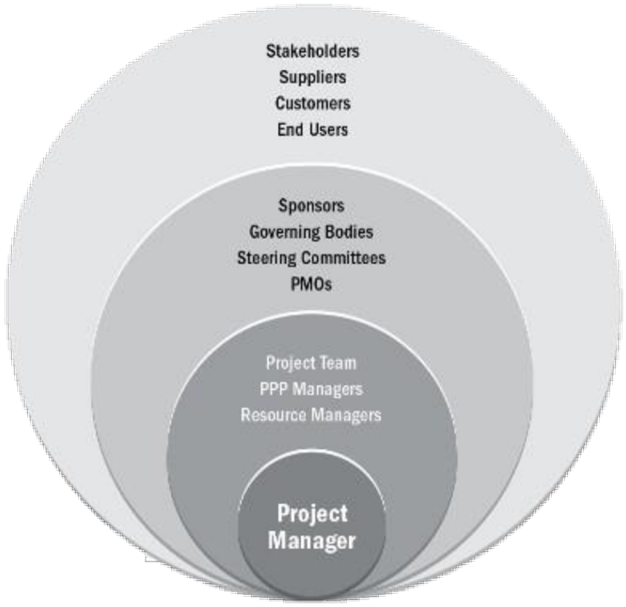


Figure 1.: The spheres of influence of a project manager according to Project Management Institute (Project Management Institute, 2017)

In this work, the spheres of influence of project manager are the stakeholders, the suppliers, customers, end users, sponsors, and the project team. The rest of the spheres is not applicable to this work.

Other skills can be divided between variable and technical. The variable skills are dependent on the field of the project, whereas the technical capabilities are more or less the same for every project manager. The proper leadership, planning, and coordination are dependent on communication skills of project manager. *"The ability to communicate with stakeholders, including the team and sponsors applies across multiple aspects of the project… "* (Project Management Institute, 2017).

The communication is a key to everything. *"The project manager also performs communication roles between the project sponsor, team members, and other stakeholders. This includes providing direction and presenting the vision of success for the project"* (Project Management Institute, 2017).

Different organizations define project manager's competencies differently. Project Management Institute divides the competencies into three areas:

technical project management skills, strategic and business management skills, and **leadership skills.** *"While technical project management skills are core to program and project management, PMI research indicates that they are not enough in today's increasingly complicated and competitive global marketplace. Organizations are seeking added skills in leadership and business intelligence"* (Project Management Institute, 2017).

PMI defines the **technical skills** as *"the skills to effectively apply project management to deliver the desired outcomes for programs or projects,"* and that there are *"numerous technical project management skills"* (Project Management Institute, 2017)

For example, there is the **ability to determine and assess the critical success factors for the project, ability to generate, report, and present the selected financial reports,** and **the ability to schedule.**

Strategic and business management skills *"involve the ability to see the high-level overview of the organization and effectively negotiate and implement decisions and actions that support strategic alignment and innovation"* (Project Management Institute, 2017).

Since the project managers are involved in the business, they should present the knowledge enough to *"explain to others the essential business aspects of a project; work with the project sponsor, team, and subject matter experts to develop an appropriate project delivery strategy; and to implement that strategy in a way that maximizes the business value of the project"* (Project Management Institute, 2017).

Regarding the **strategic** part of the skills, it is essentially obvious that the project manager should be well aware of company's **strategy, mission, goals and objectives, operations,** et cetera. *"Strategic and business skills help the project manager to determine which business factors should be considered for their project"* (Project Management Institute, 2017).

Last skill that Project Management Institute lists are **the leadership skills.** Association for Project Management defines the leadership as *"the ability to inspire, persuade, or influence others to follow a course of action or behaviour towards a defined goal"* (Association for Project Management, 2019).

The same publication then defines the difference between the leadership and management. *"Leadership is about motivating, influencing, and setting examples to teams and individuals, while management is concerned with the administrative and organizational facets of a project or company"* (Association for Project Management, 2019).

2.7 Project process groups

According to Project Management Institute, there are six project process groups: **initiating, planning, executing, monitoring and controlling,** and **closing.** These process groups contain altogether 49 processes, which are categorized in 10 knowledge areas. A process is defined as *"a series of actions directed toward a particular result"* (Schwalbe, 2017). The reason why the Project Management Institute divided the project management processes into aforementioned groups is that by the *"Applying these process groups in a consistent, structured fashion increases the chance of project success"* (Schwalbe, 2017).

These processes are all useful in large scale projects. This project does not require all of the processes due to its small scope. As the Project Management Institute states, *"the needs of the project determine which components of project management plan and which project documents are necessary"*, which implies customizability of the project processes as well. However, the interdependence of individual projects must be ensured.

Figure 2 shows the division of the processes according to 10 knowledge areas:

Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring and Controlling Process Group	Closing Process Group
4. Project Integration Management	4.1 Develop Project Charter	4.2 Develop Project Management Plan	4.3 Direct and Manage Project Work 4.4 Manage Project Knowledge	4.5 Monitor and Control Project Work 4.6 Perform Integrated Change Control	4.7 Close Project or Phase
5. Project Scope Management		5.1 Plan Scope Management 5.2 Collect Requirements 5.3 Define Scope 5.4 Create WBS		5.5 Validate Scope 5.6 Control Scope	
6. Project Schedule Management		6.1 Plan Schedule Management 6.2 Define Activities 6.3 Sequence Activities 6.4 Estimate Activity Durations 6.5 Develop Schedule		6.6 Control Schedule	
7. Project Cost Management		7.1 Plan Cost Management 7.2 Estimate Costs 7.3 Determine Budget		7.4 Control Costs	
8. Project Quality Management		8.1 Plan Quality Management	8.2 Manage Quality	8.3 Control Quality	
9. Project Resource Management		9.1 Plan Resource Management 9.2 Estimate Activity Resources	9.3 Acquire Resources 9.4 Develop Team 9.5 Manage Team	9.6 Control Resources	
10. Project Communications Management		10.1 Plan Communications Management	10.2 Manage Communications	10.3 Monitor Communications	
11. Project Risk Management		11.1 Plan Risk Management 11.2 Identify Risks 11.3 Perform Qualitative Risk Analysis 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Responses	11.6 Implement Risk Responses	11.7 Monitor Risks	
12. Project Procurement Management		12.1 Plan Procurement Management	12.2 Conduct Procurements	12.3 Control Procurements	
13. Project Stakeholder Management	13.1 Identify Stakeholders	13.2 Plan Stakeholder Engagement	13.3 Manage Stakeholder Engagement	13.4 Monitor Stakeholder Engagement	

Figure 2.: The division of processes within the Knowledge areas (Project Management Institute, 2017)

2.7.1 Initiating process group

Initiating process group *"consists of those processes performed to define a new project or a new phase of an existing project by obtaining authorization to start the project or phase"* (Project Management Institute, 2017). In other words, during the initiation stages of the project, the task of the team is to define the initial scope, time, and initial financial cost of the project, and get the stakeholder's agreement to launch the project. Usually, in this stage the project manager is appointed. In this process group, the project charter is developed, and the stakeholders are identified.

Project charter is a document that *"formally authorizes the existence of a project and provides the project manager with the authority to apply organizational resources to project activities"* (Project Management Institute, 2017). The template used in this document consists of basic description of foundational elements of the project.

Stakeholder is *"…an individual, group, or organization who may affect, or be affected by, or perceive itself to be affected by, a decision, activity, or outcome of a project"* (Project Management Institute, 2017).

Stakeholder identification is "…the process of identifying project stakeholders regularly and analyzing and documenting relevant information regarding their interests, involvement, interdependencies, influence, and potential impact on project success. The key benefit of this process is that it enables the project team to identify the appropriate focus for engagement of each stakeholder or group of stakeholders" (Project Management Institute, 2017). As stated above, the reason for proper and detailed stakeholder identification is to ensure the project's success.

"To be classified as a stakeholder, the person or group must have some interest or level of influence that can impact the project. We would benefit not only from understanding their interests, but also from understanding the potential project impact if a need were not met" (Smith, 2000). The tool used for stakeholder identification and their analysis in this work are **Power and Interest Grid.**

Power and Interest Grid was developed in 1999 by Johnson and Scholes based on their previous works. The matrix *"…examines the degree of interest that each stakeholder group has in impressing their expectations on decisions about the project, together with the extend of power they can exercise"* (Caputo, 2013). It is illustrated by figure 5 below: g

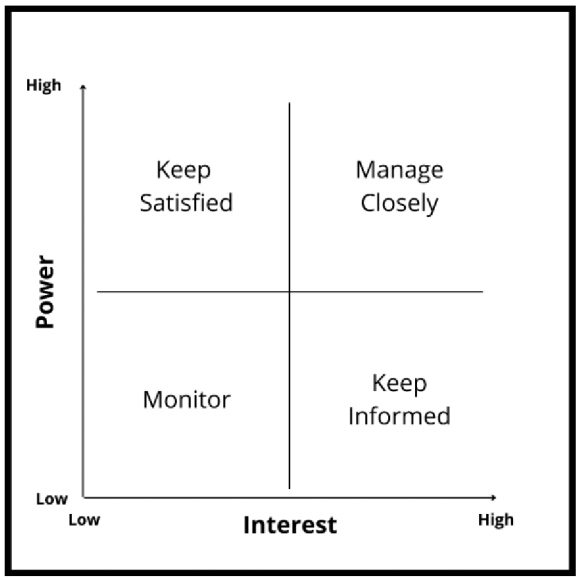


Figure 3.: Power - Interest Grid

2.7.2 Planning process group

Project Management Plan

This process group *"consists of those processes that establish the total scope of the effort, define and refine the objectives, and develop the course of action required to attain those objectives"* (Project Management Institute, 2017). In this stage, the **Project Management Plan** is developed.

The **project management plan** is *"...a comprehensive document that defines the basis of all project work and how the work will be performed"* (Project Management Institute, 2017). In order to create the project plan, it is necessary to **Collect Requirements** for the project. This process consists of *"determining, documenting, and managing stakeholder needs and requirements to meet objectives"* (Project Management Institute, 2017). This process is also known for providing the foundation for defining project scope. Next step is then defining the scope of the project. This process develops *"a detailed description of the project and product"* (Project Management Institute, 2017). and the description of the service provided.

Logical Framework Matrix

Logical framework matrix is a tool that can be used to help develop the project management plan, and that can help the project team to realize the importance of individual processes, activities, milestones, and outcomes in the grand scope of the project.

Logical Framework Matrix is a project management tool that contextualizes important details of the project, and thus develops the project further strategy. Using the matrix, lean project plan, spoken about in theoretical foundation, can be developed. I recommend this tool due to its simplicity and wide use in variety of projects.

It allows the project team to perform define activities process, to identify the goals and benefits of the project, it helps with setting objectively verifiable indicators of achievement, and it helps to perform basic risk identification process.

Logical framework matrix contains three logic directions: vertical, horizontal, and left-to-right logic. Each of these directions verifies the interconnection between the individual windows in the matrix. *Figure 4* illustrates the logics direction:

	PROJECT SUMMARY	INDICATORS	MEANS OF VERIFICATION	RISKS / ASSUMPTIONS
Goal	10% increase in the number of Grades 5-6 primary students continuing on to high school within 3 years.	Percentage of Grades 5-6 primary students continuing on to high school.	Comparison of primary and high school enrolment records.	N/A
Outcome	Improve reading proficiency among children in Grades 5-6 by 20% within 3 years.	Reading proficiency among children in Grades 5-6	Six monthly reading proficiency tests using the national assessment tool.	Improved reading proficiency provides self confidence required to stay in school.
Outputs	500 Grade 5-6 students with low reading proficiency complete a reading summer camp	Number of students completing a reading summer camp.	Summer camp attendance records.	Children apply what they learnt in the summer camp at school.
Activities	Run five summer reading camps, each with capacity for 100 Grades 5-6 students.	Number of summer camps Run.	Summer camp records	Parents of children with low reading proficiency are willing to send them to the camp.

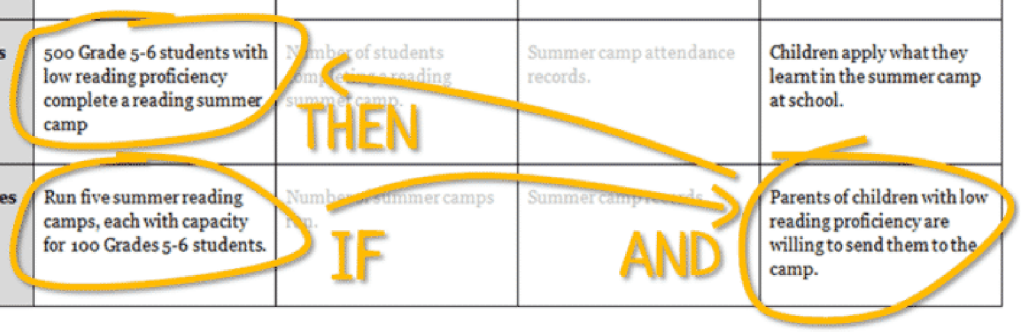


Figure 4.: Logical framework matrix reading and filling logic (Bullen, 2021)

The project summary column is usually defined as a "goal description", as it will be shown in the exemplary matrix on *figure 13* in the chapter 4 Proposal and contributions. The logic that is not shown in the figure above is vertical logic, which creates the relationship between the goals – in case of *figure 4* the project summary relationship.

The **activities** define different activities groups needed in order to achieve **outputs,** which describe the methods and ways of how to reach the **outcome**. Outcome is defined as *"description of what exactly would the project like to change"* (Ježková, Krejčí, Lacko, & Švec, 2013) or achieve. The **goal** or **benefit** of the project bracket describes the reason why is the project realized.

Top horizontal brackets of the matrix consist of **goal description, objectively verifiable indicators, sources of verification,** and **risks and assumption.**

Work Breakdown Structure

A part of the project management plan is **Work Breakdown Structure (WBS)**, which divides the project deliverables into smaller pieces in order to manage them properly. A project Work Breakdown Structure is *"a product-oriented grouping of project work elements that organizes and defines the total scope of the project"* (Devi & Reddy, 2012).

As Carstens et al. state, *"there is a need to translate this into something more akin to a structured technical work definition. This translation process is reflected in the WBS box structure and embedded in the box definitions is both a requirements and a corresponding work relationship"* (Carstens, Richardson, & Smith, 2013).

They further elaborate on benefits of WBS, such as it being a *"good communication tool between user's plain language requirement statement and the technical work required to produce those requirements"* (Carstens, Richardson, & Smith, 2013). For the purpose of this thesis, I used the Work Breakdown Structure example provided by MS Project software.

Within the Work Breakdown Structure, it is necessary to **Define Activities. Define Activities** *"is the process of identifying and documenting the specific actions to be performed to produce the project deliverables."* (Project Management Institute, 2017). This process *"decomposes work packages into schedule activities that provide a basis for estimating, scheduling, executing, monitoring, and controlling the project work. This process is performed throughout the project"* (Project Management Institute, 2017).

When the activities are defined, it is necessary to **Sequence Activities** properly. This is necessary in order to achieve comprehension and logical sequence of tasks. It ensures the most effective work of the project team. **Sequence Activities** is *"the process of identifying and documenting relationships among project activities"* (Project Management Institute, 2017).

Activity time scope determination and plan

After sequencing the activities properly, it is necessary to create the estimate the duration of individual activities. **Estimate Activity Durations** *"is the process of estimating the number of work periods needed to complete individual activities with estimated resources"* (Project Management Institute, 2017). It provides each activity with the proper time frame. Following process puts the activities into the schedule. This is covered by process called **Develop Schedule** which is defined as *"the process of analyzing activity sequences, durations, resource requirements, and schedule constraints to create a schedule model for project execution and monitoring and controlling"* (Project Management Institute, 2017).

Plan Cost Management

After schedule development it is necessary to define the costs and budget. These are defined in **Plan Cost Management** and **Determine Budget** processes. **Plan Cost Management** process is *"the process of defining how the project costs will be estimated, budgeted, managed, monitored, and controlled"* (Project Management Institute, 2017). This process is followed by determining the budget for the project, which is defined as *"the process of aggregating the estimated costs of individual activities or work packages to establish an authorized cost baseline. The key benefit of this process is that it determines the cost baseline against which project performance can be monitored and controlled"* (Project Management Institute, 2017). During the project execution, there are many different resource types to be used. *"These essentially are categorized by human labor, material, cash expenses, reserves, and overhead. Some of these items are controllable by the PM, while others are less so"* (Carstens, Richardson, & Smith, 2013). Carstens et al. further state that there are four critically visible resource categories, such as direct labor, level of effort expenses, third-party contractual expenses, and various types of overhead.

Plan Resources Management

Next process used in this work in the planning process group is **Plan Resource Management**, which is defined as *"the process of defining how to estimate, acquire, manage, and utilize physical and team resources"* (Project Management Institute, 2017). It provides organization with resource use and its optimization. This plan helps the project management team with allocating and using the resources.

Risk planning

Another crucial part to plan and allocate is risks. The reason why is it so crucial is that if *"…done properly, risk management provides a way to reduce project outcome uncertainty through providing awareness of risks that are present, thereby minimizing future threats, seizing opportunities, and achieving optimum results"* (Carstens, Richardson, & Smith, 2013). *"Time spent in producing the risk management plan before execution allows those involved to not be in a crisis mode when identifying the best way to manage future project risks"* (Carstens, Richardson, & Smith, 2013). The planning and risk identification and allocation is done in several steps, including performing two types of analyses introduced by PMI – qualitative and quantitative.

The processes applicable are **Identify Risks**, which is defined as *"…the process of identifying individual project risks as well as sources of overall project risk and documenting their characteristics"* (Project Management Institute, 2017). The risks in project described in this work are defined using **qualitative** analysis.

The process directly connected to the risk assessment is called **Perform Qualitative Risk Analysis,** which is defined as *"…the process of prioritizing individual project risks for further analysis or action by assessing their probability of occurrence and impact as well as other characteristics"* (Project Management Institute, 2017). PMI guide sees the main benefit of qualitative risk analysis in focusing on risks with high priority.

The next step after risk identification is to develop and plan appropriate risk responses, which is done in **Plan Risk Responses** process. It is *"…the process of developing options, selecting strategies, and agreeing on actions to address overall project risk exposure as well as to treat individual project risks"* (Project Management Institute, 2017). In other words, risk response plan *"…develops options and actions to enhance opportunities and to reduce threats for selected events"* (Carstens, Richardson, & Smith, 2013).

RIPRAN methodology

RIPRAN is an acronym that stands for **RIsk PRoject ANalysis.** It is a methodology developed at Brno University of Technology, used for project risk assessment known

for its simplicity and accuracy. As of now, the methodology resources are not available in English. Basic processes on which RIPRAN builds are the risk identification, risk quantification, and the reaction to these risks. RIPRAN methodology was developed in order to comply with PMI guides and certifications.

Plan Procurement Management

This process regards the acquisition of resources and their management, it *"is the process of documenting project procurement decisions, specifying the approach, and identifying potential sellers"* (Project Management Institute, 2017). Procurement management follows a logical order, where the first item in the sequence is identification of resources needed to contract, and subsequently the plan of acquisition is being drafted.

2.7.3 Executing Process Group

Executing process group is a group that consists of ten project management processes. In comparison to the other process groups, this one This group is where "it happens". *"This Process Group involves coordinating resources, managing stakeholder engagement, and integrating and performing the activities of the project in accordance with the project management plan"* (Project Management Institute, 2017). For the purpose of this thesis, I will define only the processes used in the work.

Of the processes currently put to use in executing process group, the first is **Direct and Manage Project Work.** This process is described as *"the process of leading and performing the work defined in the project management plan and implementing approved changes to achieve project's objectives"* (Project Management Institute, 2017).

Next important process is **Manage Quality**, which *"is the process of translating the quality management plan into executable activities that incorporate the organization's quality policies into the project"* (Project Management Institute, 2017). This process also helps with determining the ineffective processes, quality planning, and quality assessment. It translates the **Plan Quality Management** process into individual actions.

Another crucial step is to **Acquire Resource**, which means to obtain *"team members, facilities, equipment, materials, supplies, and other resources necessary to complete project work"* (Project Management Institute, 2017). This process includes human resources acquisition, movable and unmovable assets acquisition, et cetera.

Regarding the human resources, there are two processes within the execution process group. For the purpose of this thesis, the process **Manage Team** is paramount. It consists of *"tracking team member performance, providing feedback, resolving issues, and managing team changes to optimize project performance"* (Project Management Institute, 2017).

The next step is to **Manage Communications.** This process ensures *"timely and appropriate collection, creation, distribution, storage, retrieval, management, monitoring, and ultimate disposition of project information"* (Project Management Institute, 2017).

2.7.4 Monitoring and Controlling Process Group

Processes within this process group focus on monitoring and controlling the performance and optimalization of the project. They are *"required to track, review, and regulate the progress and performance of the project; identify any areas in which changes to the plan are required, and initiate the corresponding changes…the key benefit of this process group is that project performance is measured and analyzed at regular intervals, appropriate events, or when exception occur in order to identify and correct variances from the project management plan"* (Project Management Institute, 2017).

The process number one in this process group is process called **Monitor and Control Project Work.** It is defined as *"the process of tracking, reviewing and reporting the overall progress to meet the performance objectives defined in the project management plan."* (Project Management Institute, 2017). Next process is *"the proves of reviewing all change requests, approving changes and managing changes to deliverables, organizational process assets, project documents, and the project management plan, and communicating the decisions"*, which is called **Perform Integrated Change Control** (Project Management Institute, 2017).

These processes are concurrent, as well as the process **Control Costs**, which *"is the process of monitoring the status of the project to update the project costs and managing changes to the cost baseline"* (Project Management Institute, 2017). This is done by collecting actual costs and comparing them against the approved budget plan.

The last process of this group implemented in the project is **Monitor Stakeholder Engagement**, which is *"the process of monitoring project stakeholder relationships, and tailoring strategies for engaging stakeholders through modification of engagement strategies and plans"* (Project Management Institute, 2017). Stakeholder Engagement is monitored during the weekly meetings.

2.7.5 Closing process group

Closing Process Group is a group of processes that are performed at the end of the project. PMBoK guide states that this process group *"consists of process(es) performed to formally complete or close a project, phase, or contract. This Process Group verifies that the defined processes are completed within all of the Process Groups to close the project or phase, as appropriate, and formally established that the project or project phase is complete"* (Project Management Institute, 2017).

At the moment, this process group is not applicable to this work.

3 Current Situation Analysis

This part consists of brief description of current Student Club Mozaika project, introduction of involved entities and further deconstructing current situation of Student Club Mozaika project within Project Management Book of Knowledge framework adjusted for scope of the particular project. In particular it means the documents are not as detailed as they could be in order to fit into thesis. I included documents and processes I considered paramount to the project. These documents, though adjusted, are based on Project Management Institute guide.

The analytical part includes the pre-initiation stage, initiation stage, planning stage, and execution stage of the project. These are presented by different documents, or by general process description. Initiating and planning stages are described to give a context to the current situation, which is described in subsection 3.7 Execution stage.

Resources and information obtained for the current situation analysis chapter originated from two sources: from several interviews with representatives of both organizations involved in the project, and from rather scarce project documentation.

3.1 Student Club Mozaika project

This part describes the context of Student Club existence and upbringing, including the description of documentation's state.

3.1.1 Student Club – brief introduction

The Student Club Mozaika project is a joint project of two associations, Mozaika HK, z.s. and Nadeje z Popela, z.s. . The project aims to create a stable community of students in the city of Hradec Kralove, to provide students with calm place to study and relax, and to provide artisan coffee and other drinks and homemade snacks to students under the regular market price.

This project was first thought of in May 2021, however, according to the project members, the initial talks and planning stage started between June 2021 and July 2021.

3.1.2 Documentation

Overall, the documentation connected with the project is kept either on official documents, or in the personal archives of the founders, consisting of their notes and drafts. The information found in this thesis is the result of several interviews conducted over the past two months. I only included the information crucial for understanding of development and current situation of the project, and to understand the reasons that led to proposed project changes in proposal and contribution part.

3.2 Description of involved entities and their roles in the project

This subchapter describes the entities involved in the project, and introduces their background.

3.2.1 Mozaika HK, z.s.

Mozaika HK, z.s. is a social entity with Christian values, belonging to *Církev Křesťanská společenství.*[1] Apart from regular church activities, they focus on connection with people, community service, and support of charity project. This entity is not using any government grants to run their operations. It relies solely on financial gifts and other forms of fundraising from its members.

Currently, the role of Mozaika HK, z.s. in the project of Student Club Mozaika is that of one of two entities. They provide the project with space, some of the legal coverage connected with events, space use, and operations as well as providing some of the staff and financial support. They are also using the power of their brand built in city's community, which is mostly positively perceived by the locals.

Their interest in the project is the same as that of the other stakeholder entity, Nadeje z Popela, z.s. – to provide local students with community, comfortable space, and snacks to study and create the stable community of students. Currently, there are two members of their community involved in the project: Marketing and Legal Advisor, and Space Manager/Mozaika Representative.

Although Mozaika HK, z.s. would like to connect more of their members to market the Student Club Mozaika project, they have been so far unsuccessful in catching the interest of their wider community in the project.

[1] This Christian church denomination belongs to evangelical churches. **Invalid source specified.**

3.2.2 Nadeje z Popela, z.s.

Nadeje z Popela, z.s. is a social entity based on Christian values of help, however, in comparison to traditional Christian church, it does not belong under any particular label. The main mission of the entity is to help non-government – mainly Christian organizations – with their projects. Nadeje z Popela, z.s. can provide business advice, creative teams, and manpower in form of either paid or unpaid volunteers. All of the services mentioned above are provided by professionals with education and practice.

Current role of Nadeje z Popela, z.s. as the entity in the project is to provide the day-to-day operation of the Student Club. This is done by two members of the entity, and one volunteer working under a part-time contract. Due to current scope, Nadeje z Popela, z.s. has no need to increase the members connected to operations. The day-to-day operations include monthly supply orders, communication with other stakeholders, marketing function, and service of the clients.

The interests of Nadeje z Popela, z.s. in the project are two: to fulfill the need to serve the local student community and fulfilling their initial mission: to help non-government Christian entities to develop their own community service projects.

Currently, there are three members of the entity and one part-time volunteer involved in the project: Project Leader, Food Manager, Operations Manager, and Business Advisor.

3.3 Pre-initiating stage

During the pre-initiation stage, the ideas of both organizations were discussed and aligned. This stage included brainstorming of the services provided, potential resources and needs, and the customer types. Simply put, the pre-initial stage brainstormed what will be provided to who under which conditions.

3.4 Initiating Stage

In the Initiating Stage of the project, usually the project charter would be developed, and stakeholder analysis would be performed. The project charter and stakeholder analysis below were developed post-launch in order to structure the current situation of the project. These documents were obtained based on focus group interviews with founders of the project, as well as Student Club Mozaika project's physical documentation. The leftover of physical documentation is currently archived.

3.4.1 Project Charter

This part describes and analyzes Goal statement, Key Metrics, and Estimated Financial Benefits, and shows the artificial depictions of structured project charter on *figures 5*, and *6.*

3.4.1.1 Goal statement

There were two goals set, with attempt to comply with the S.M.A.R.T. framework. However, they do not fully comply with it. These goals were as follows:

1. To provide local and international students at local high schools and universities with peaceful place to study, relax, and work within next 12 months,
   and
2. To create a healthy, community of students, which will be financially independent from both organizations within next 24 months.

The goals set above meet the criteria in the specificity, measurability, and attainability of the goal, however, according to Project Leader, the relevance was based on fulfilling the needs of community service of representatives of both organizations and perceived demand rather than hard data evidence.

Student Club Mozaika - Project Charter			
Problem Statement - A brief description of the problem or business		**Goal Statement** - Define the mission and the target of the project	
1) Fulfillment of mission and vision of Mozaika HK, z.s. and Naděje z Popela, z.s., and 2) insufficient cheap café space for studying for local and international student community in the city of Hradec Kralove,		1) to provide local and international students at local high schools and universities with peaceful place to study, relax, and work and 2) to create healthy community of students and fulfill internal missions and visions of both organizations.	
Project Leader			
K***** D. L*****			
Project Team		**Support Personnel** - e.g. project sponsor, finance advisor, process owner, etc.	
Name	Role	Name	Role
V******* K********	Operations Manager	J**** L***	Space and networking manager
P***** S*****	Legal, marketing, and space manager	M********* D********	Business advisor
C****** S. L****	Food manager	K***** D. L****	Head barista
Voice of the Customer - Identify key customers and their needs		**Risk definition**	
According to focus group interview, the potential customers are students of last grades of high schools and students of universities in Hradec Kralove and nearby surroundings. Their needs are the comfortable spaces, different options of seating, affordable specialty drinks, and small, mostly home-made snacks.		Based on initial interviews, potential risks perceived by the stakeholders are the lack of customers caused by customer's unawareness, the lack of capable potential volunteers, and lack of financial and other resources as a result of lacking customers.	

Figure 5.: Project charter - illustration 1 (data source: project leader interview, 2022)

3.4.1.2 Key metrics

The key metrics were set as follows:

1. Customer growth,
2. Sales revenue,
   And
3. The number of days per week in operation.

These metrics were not stated explicitly at the beginning of the project. They were developed post-launch as a response to analytical need to measure the growth and success of the project.

Customer growth measures the growth in total number of customers per day in operation and per month since the launch of the project.
Data were calculated retrospectively based on income divided by average price of drinks. Furthermore, the formula used to calculate the number of customers is **(the number of weeks opened in month x the number of days in a week opened) x the average number of customers per day.**

This number is measured against the total seating capacity of the premises. Currently, the Student Club Mozaika can host up to 30 customers.

Sales revenue measures the growth of income in connection to operation of project. Higher income, however, does not indicate the higher number of customers. Sales revenue metric does not count with the income from event space rental due to their non-existence in the time when the metric was set.

Daily operation measures the demand and overall development of the project. If the demand increases, the premises of the club will have to stay opened more than two days in the week due to its popularity within customer population. This metric was not used in this work nor in practice yet, as the establishment of the project remains opened as planned and there has been no extension to more days other than planned.

Key Metrics	**Estimated Financial Benefits**
Customer growth	According to focus group interviews, during the first year, the estimated financial benefits are close to zero due to initial customer insuficiency. At the end of Year 1 the estimated financial benefit is to cover montly expenses, which will be varying based on amount of customers. During Year 2 the income is expected to gain a small percentage of profit which will be used as reserve fund. This small percentage will be gained via growing customer number and occassional financial injections from founding organizations.
Sales revenue	
The number of days per week of business in operation	
	Expected monthly expenses: up to CZK 2000,-
	Expected monthly income: up to CZK 2000,-
Project Scope - What is in and out of scope	**Other Project Information** - e.g. project description, CTQ characteristics, assumptions, constraints, risks, deliverables, issues, roadblocks, resources requirement, budget requirement, etc.
Student Club Mozaika is operated in the premises of Mozaika HK, z.s.	Initial budget requirement: CZK 100 000,- in order to p
The people with no student status proved are allowed in, with entry fee of CZK 20,-. The fee is to be collected upon arrival. This is to avoid overcrowding the space. Student status is proved by showing student ID.	Resources and process requirements: all the food and drinks has to be from high quality resource and prepared exactly according to head barista recipe. This is to be ensured by Project Leader and Operations Manager.
Student Club Mozaika mainly provides space, drinks, snacks, and small student services	Potential roadblocks: Customer unawareness, processes inefficiency and adjustments, financial strain, stakeholder unsatisfaction.
Prices are set as low, without large profit margin. The prices reflect market movements.	
In the future, the project plans to provide students with part-time employment. This is conditioned by the income sufficient to supply salaries.	
Start Date	**Estimate Completion Date**
6/1/2021	N/A

Project stages	1	2	3	4	5
Description:	Pre-initiation stage - first mention, idea talks	Initiation stage - goals, mission, individual entity scope definition, project manager appointed, milestones defines, key growth metrics identified	Planning stage - processes/activities plan, supply chain set up, equipment purchase plan, finance management plan, volunteer training and onboarding	Execution stage - operation launch, performance monitoring, volunteer training and onboarding	First customers and first paid volunteers
Start date:	6/1/2021	7/1/2021	7/6/2021	10/5/2021	10/5/2021

Figure 6.: Project charter - illustration 2 (data source:project leader interview2022)

3.4.1.3 Estimated Financial Benefits

Estimated financial benefits of the project according to the project charter are to break even with the expenses. In case of income not covering the expense, the project counts on occasional financial aid from founding organizations, which also act as project sponsors. This was confirmed in an interview with the project leader.

The wage for current paid volunteer was risen in fundraising campaign launched by Nadeje z Popela, z.s. in order to financially help the project. Another source of income incorporated into the project is renting out premises for private or public events, during which the coffee bar is operational, and guests of these events can purchase the drinks for the prices offered to students without extra fee. This offers two income streams:

1. **Fixed rental price,** which is changed due to the type of the event and expenses of the project connected with the event,
2. **Refreshment sale,** which can be fluid, depending on the number of guests at the event.

According to the project leader, the income from single one of these events can cover current monthly expenses, which are below the level of expected expenses.

3.5 Stakeholder identification

In practice, the stakeholders of Student Club Mozaika project were identified earlier than they were mapped. This means that the stakeholders were known about naturally, however, they were not mapped, nor they were properly assessed. The scatter map image below represents the stakeholders and their position in the Power/Interest Grid.

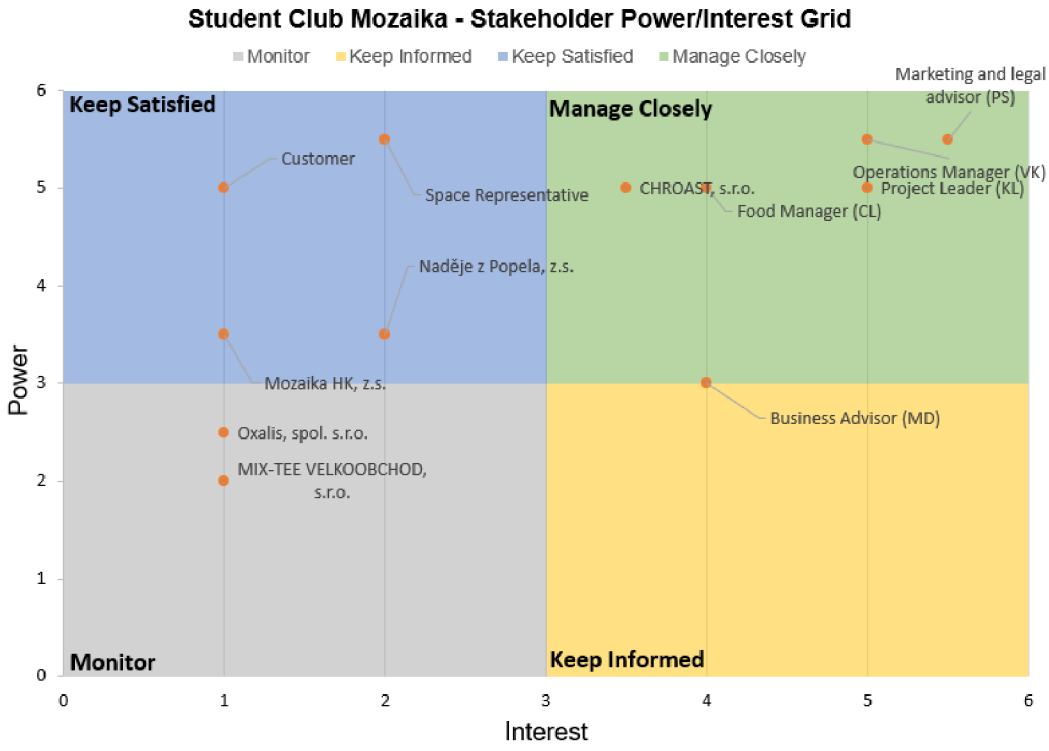


Figure 7.: Stakeholder position in context of their influence and interest in the project (data source: focus group research with Nadeje z Popela, z.s. representatives, 2021)

The stakeholder map above was processed in regard to the project rather than in regard to entities involved in the project. It is important to distinct that despite the fact that there are individuals from both entities involved, the entities mentioned in the map are represented without these individuals to avoid bias.

3.6 Planning and preparation stage

This subchapter contains the general planning and preparation stage information structured within the adjusted PMBoK schemes. As stated by the project team member, during the planning meetings, both organizations set the activities and the deadlines for planning activities. Originally, they included only a draft of budget plan, and several paper drafted to-do lists. As a part of this thesis, I restructured some of already existing physical documents[2] into readable, simpler, and digital form, parts of which will be described below. Most of the information regarding These include originally set project milestones, generalized work breakdown structure created post-launch in order of easier understanding of the scope, Gantt diagram illustrating the placement of individual tasks and milestones in time, and budget situation description.

3.6.1 Milestones

Based on the interview conducted with the project team, the milestones set at the initial meetings were different. The project would be defined by acquisition of equipment and supplies rather than the timely perspective. Based on the interviews with the project team, I defined the milestones in the project as follows:

- Initial stage start,
- Initial stage completed,
- Planning stage start,
- Planning stage completed,
- Execution stage started.

I defined these milestones in order to depict the project development in time, and to assess the current situation, which is based on *Execution stage started.*

[2] To my knowledge, these documents are located in personal archive of Nadeje z Popela, z.s. representative.

3.6.2 Schedule description

The tasks in work breakdown structure are developed retrospectively by myself with the aim to map the development processes in time until the current point. The tools used for this retrospective analysis is generalized WBS tool, illustrated in Gantt chart within MS Project software. The schedule of different tasks is developed in less detailed resolution[3], with regard to the retrospective characteristic of the activity and scope of this thesis. Data for the schedule description were obtained during several interviews with the project leader and other project representatives.

The task summaries do not show correct time duration of all tasks, rather they show the total amount of hours between the beginning of first task in the summary until the end of the last tasks in the summary, which creates a biased duration. The number at the summary represents the total amount of working hours, including the number of hours that were not spent working on the project. This number is to be disregarded. The numbers of individual tasks represent their approximate duration. The accuracy is biased due to retrospective character of the illustration. The beginning milestone is marked with orange highlight, and the end, completed milestone is marked by green highlight.

As it can be seen, there were no attempts made to create communication plan, or develop risk analysis according to the project management structure.

[3] More generally than it would be expected in such large project. This is due to inability to map the detailed tasks, reason being the non-existence of some of project documentation at the time of development of this thesis as well as memory insufficiency of interviewed project representatives.

3.6.2.1 Initial stage start

On *Figure 8*, the initial stage of the project can be seen:

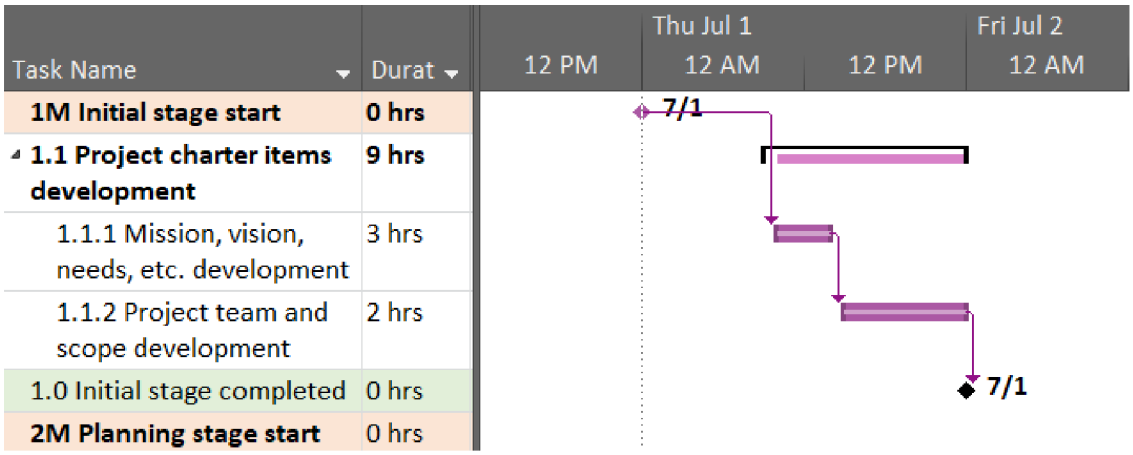


Figure 8.: Initial stage time schedule (data source: Interview with the project leader, 2021)

The initial meeting took approximately 9 hours. During this meeting the "project charter items" were developed, however, they were not documented. Illustration above serves as a depiction of time sequence of project team meeting.

3.6.2.2 Planning stage

The approximate general time schedule for the planning stage is shown on *figure 9* below:

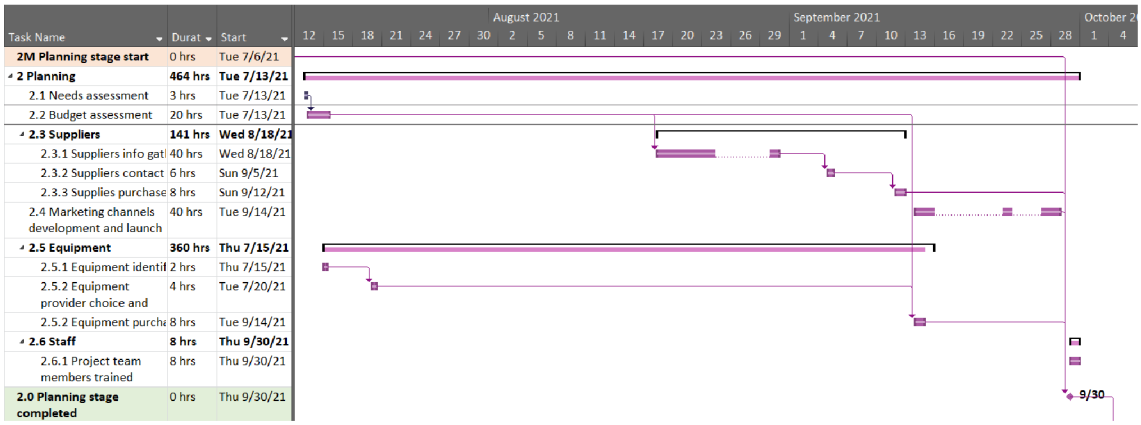


Figure 9.: general Planning Stage overview (data source: interview with the project leader, 2022)

From the chart above, it is apparent that the planning stage took up several months of preparation. During this stage, the suppliers were identified, and supplies purchased, similarly so with the equipment.

Budget assessment consisted of verifying the total service budget of Nadeje z Popela, z.s. against expected initial costs, as described in subchapter 3.5.3 Budget situation description.

According to the *figure 10* below, the critical task was to assess the budget in order to launch the rest of the project. The connections of Budget assessment task to the start of next tasks are pointed out by red arrows:

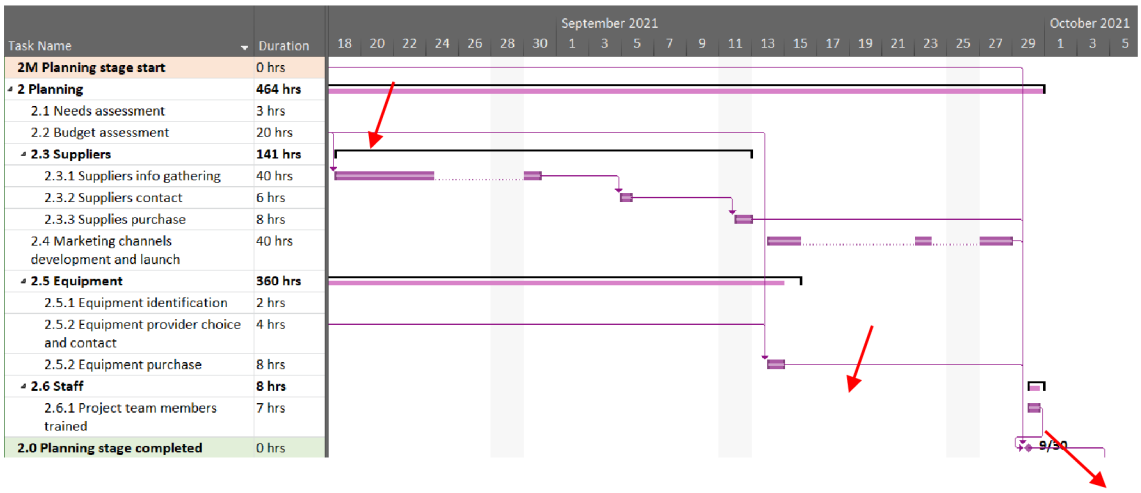


Figure 10.: Illustration of critical importance of Budget assessment task (data source: interview with project leader, 2022)

3.6.2.3 Execution stage started

This task group illustrates the current situation of the project. It tis shown on *Figure 10* below:

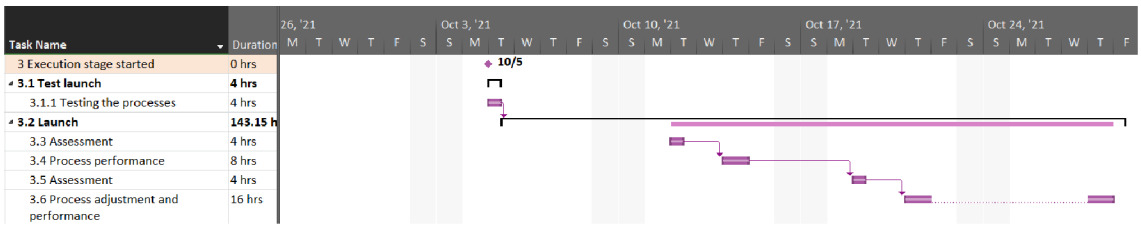


Figure 11.: Illustration of Execution stage of the project (data source: interview with project leader, 2022)

As the *figure 11* is an illustration, it is only showing one cycle, which occurs in the month. Based on observation, these cycles repeat every two weeks, though the times spent on individual tasks may vary as the tasks adjust to their final form.

3.6.3 Budget situation description

Currently, the budget for the Student Club Mozaika alone is not set. According to the project leader, at the beginning of the project the initial purchase cost cap was set. It was

defined by the amount in total service budget, meaning that the initial costs of the project would be covered to any amount up to the limit of the total service budget.

One of the goals of the project mentioned during interview is to be self-sustaining by certain point in time. This point was explicitly stated by the project leader either as soon as possible, or 12 months since the launch of the project.

According to the project leader, the initial purchases were finished at CZK 100 000,- and in this amount 100% of initial project costs were covered. The division of initial purchases and costs of these purchases is depicted in *Figure 5* on the next page.

According to the project leader, further operational costs are to this date almost covered by the income. As mentioned above, the goal is to be self-sustaining. This term in context of the Student Club operation means that the volunteers working at the club will be paid certain, insofar unidentified[4] amount of money per hour as a reward.

Currently, the income consists of four main income streams; these are **sales income, space rental,** and **financial injections** from both organizations – thus two different streams - which try to fundraise in order to expand the services of the Student Club.

[4] There was certain verbalized projection on side of the project leader, however, these reflected rather set amount per month than regular hourly wage. The hourly wage would differ based on the hours worked by the volunteer.

Student Club Mozaika - Budget description			
Budget status:	Unknown	item description	
Budget item	Amount set apart	Amount spent	Difference
Espresso machine	CZK 40,000.00	CZK 40,000.00	CZK 0.00
alt. method equip.	CZK 25,000.00	CZK 25,000.00	CZK 0.00
Init. Material	CZK 30,000.00	CZK 30,000.00	CZK 0.00
Misc.	CZK 5,000.00	CZK 5,000.00	CZK 0.00
Total:	**CZK 100,000.00**	**CZK 100,000.00**	**CZK 0.00**

Figure 12.: Illustrated spent initial budget description (data source: interview with Nadeje z Popela, z.s. project leader, 2021)

In the table depicted on *Figure 12,* the budget items mean following:

Alt. method equip stands for alternative methods equipment[5], **init. material** stands for initial number of consumables[6], and **Misc.** stands for other expenses connected to initial launch of the project[7].

[5] This means equipment used for alternative preparation of coffee and tea drinks, such as V60 tool.
[6] This means the initial amount of consumables such as coffee, tea, and homemade snacks.
[7] Such as hygienic items, extra lights for marketing purposes, et cetera.

3.7 Execution stage

Start of the execution stage is marked by opening the establishment to the customers. At the moment, the project is fully launched and in operation.

3.7.1 Operation

Student club opened every Tuesday and Thursday during the semester, and during the final period, the opening days extend to Saturday. The establishment is opened from 14:00 to 21:00 with the possibility to extend the time to 22:00. The current offer consists of specialty coffee drinks prepared with regular or alternative method, the rest of the offer is specialty tea, soft drinks, and homemade snacks.

The project team is currently working on an option to rent out the premises to different public or private events, with the offer of fully operational café, where the guests of these events will be able to purchase the drinks. There were already events performed and the benefits, either financial or networking, were a motivation to accept rental proposals, and to market the space out even more. In case of these rentals, the project team's goal is to be able to open the premises to events any day in the week, which is currently possible only if the staff is available.

The project team meets at least every 14 days in order to communicate upcoming events and changes, and to discuss the performance of the project, however, there is no existence or set channel of communication other than these meetings.

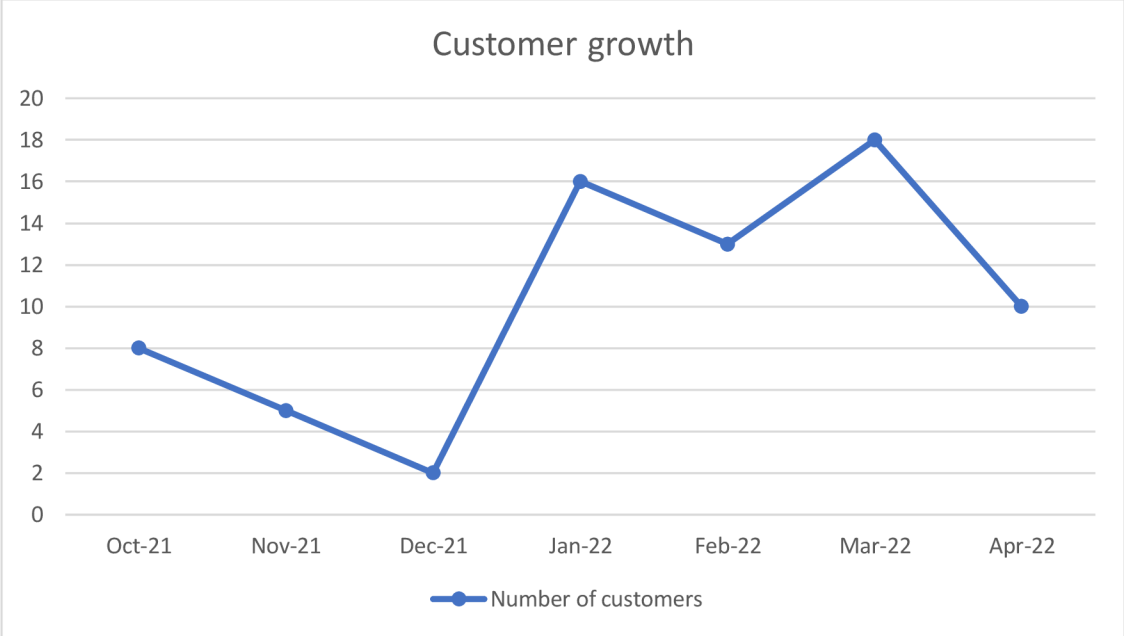
3.7.2 Marketing

Regarding the marketing situation, the project team relied on two methods. First method is regular social media marketing, using the Facebook and Instagram connected marketing tools. This proved effective mostly in case of paid campaign, which was tested in April 2022. The second method implemented and expected to bring results was the word-of-mouth marketing, which backfired after one of the customers stated that they will not talk to anyone about this place, since it is not crowded, and they can work in peace. This statement confirmed the expectation of the project team regarding the students looking for a quiet place to study and stay in, however, from the marketing standpoint it was a failure. The team is currently looking for a new way to market the project.

3.7.3 Metrics results

According to set key metrics, the analysis of these metrics was performed. The data for these measurements were collected during a focus group interview with the project team members.

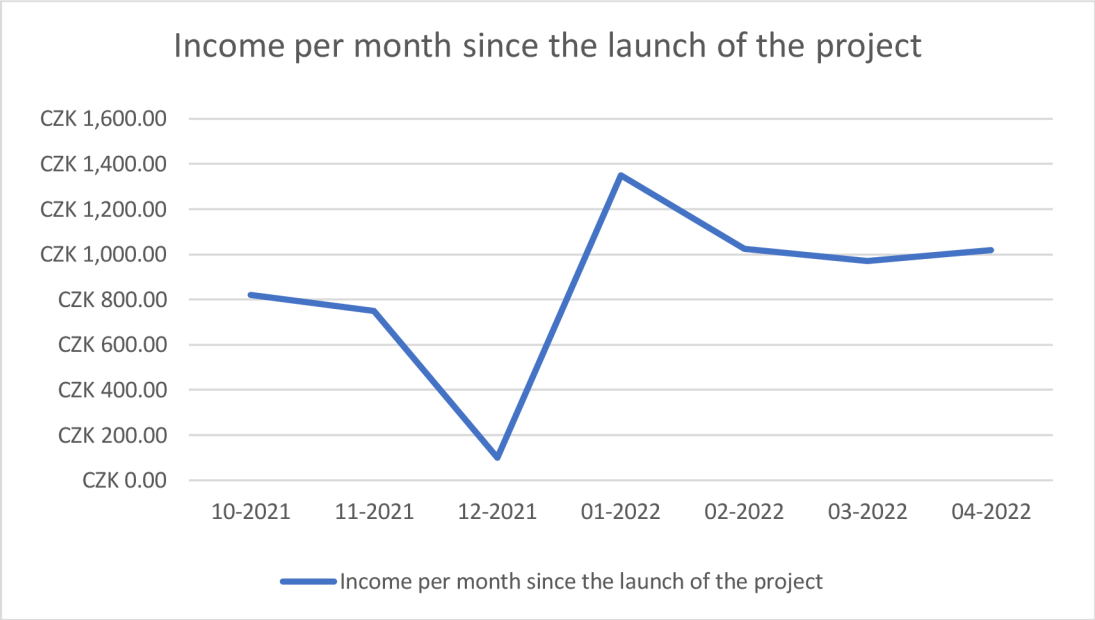
These metrics were calculated solely to use in this work, and are descriptive in nature, rather than accurate. The data for the graphs below were obtained during the interviews with the project leader.



Graph 1.: Customer growth (data source: project manager interview, 2022)

Graph 1 describes the development of customers in time in one month. From the graph it is apparent that the customer growth occurs. Based on the interview with the project leader, the primary customer retention is sufficient enough to fill the place perfectly, if the growth in customer population occurs, however, based on the data given, there is no evidence for such assumption.

The next metric according to which the project measures its success is the financial income. The data for this graph were obtained in the interview with the project leader.



Graph 2.: Monthly income measure (data source: project leader interview, 2022)

It is important to note two facts that have influence in data accuracy in the *graph 2*. The first fact is that the data do not include the sales made during events, just the sales made during the regular opening days. The second fact is that the numbers collected were rounded up to next 10 in order to make the graph more descriptive.

According to the project leader, in the next months the project team hopes to illustrate the financial balance with the income from events included in the projections.

4 Proposals and Contribution

In this chapter, the proposals based on the analytical part are described and developed. The main shortcomings are that the project lacks the basic project structure, project documentation, and analyses. The project team did not document the development of the project in any tool, nor did it divide the main tasks into subtasks in order to create work breakdown structure The project is also lacking risk analysis. In this chapter of thesis, I describe four potential outcomes of the project, two of which recommend incorporation of project management processes in form of individual project management tools in order to develop a project structure. In detailed description of these possibilities, I chose tools that I consider the most suitable for creating the structure missing from the project. Each of these tools is described in detail with examples of use. Implementations of these tools will be proposed alongside with their potential benefits, however, without deeper project status assessment, the implementation proposal may contain critical failure points.

Since this thesis describes and analyzes the project from project management standpoint, the marketing plan will be omitted.

As of now, the viability of the project is questionable. It lacks the backbone structure and documents to expand to the desired scope and it makes certain tasks impossible to track. This may also potentially cause the confusion in case of expansion of days in operation and enlarging the team, which is, according to the project leader, one of the ultimate goals[8].

Based on these findings, there are four possibilities for the project's future development:

1. **Scenario 1** – to keep the current form of the project without project structure
2. **Scenario 2** – to close the project
3. **Scenario 3** – to pause the project, assess its future viability, and implement proposed project structure tools
4. **Scenario 4** – to alter and implement the proposed project structure tools during the operation of the project

Each of these possibilities has different pros and cons, and they are categorized subjectively according to my recommendation. In the introduction of every subchapter there is a possibility brief description, proposal of expected outcome, and preference level, which indicates subjective preference level of each contribution proposal.

Preference level description

The preference level scale consists of four points, where the option number 1 is the most preferred and recommended option, and the option number 4 is the least preferred and recommended option.

[8] According to the project leader, the goal is to operate the establishment 5 days in a week, and 6 days in a week during the final exam period at the local university. This goal was omitted during the development of the project.

The tools recommended for creating the structure and re-development of the project are mainly digital, however, for example logical framework matrix, and certain simplification of work breakdown structure as well as financial logs may be kept in physical form, though I do not recommend it due to insufficient shareability.

These tools are logical framework matrix to develop the general project structure, MS Project tool, Work Breakdown Structure tool, which can be used within the MS Project, or outside of it, and RIPRAN analysis for risk assessment

4.1 Scenario 1

Possibility no. 1 chiefly consists of maintaining the status quo without project management structure implementation.

4.1.1 Scenario description

Keeping the current form of the project is, in my personal opinion, counterproductive regarding reaching the goal of the project. This counterproductivity occurs in not fulfilling the original vision for the project, which was to create and serve the community of students.

Under current conditions, the project is not successful in gaining enough customers over expected period of time, which was set by the project leader as 6 to 12 months following after the official launch.

Current situation allows very limited options of tracking the progress of the project, which may result in not knowing the real status and success of the project. Continuing with this bias may result in unrealistic understanding of project scope and its options, risks, and opportunities.

As of now, the only known way to reliably track the project under the current circumstances is to remember the number of customers that visit each time, and to remember the total costs of customer purchases. As it is generally known, average human memory is limited regarding long-term numerical memory retention, thus this way of gathering and analyzing the data is inaccurate.

4.1.2 Assumed outcome

If the status quo will remain and no project structure or processes will be implemented, there is a high possibility that the project team members will be discouraged by the lack of customers, which may result in frustration regarding the inability to fulfill the goal set and one by one will depart from the project, until it will be dissolved.

However, this seems to not be the case, since there were alterations happening to the project already at the time of submission of this thesis.

4.1.3 Recommendation

Preference level: 4

I do not recommend this option to the project team since it may cause deterioration from current goal and waste the resources of both involved organizations. The side effect of this deterioration may be aforementioned frustration, which may cause the project team to stop the attempts to reach the goal set by them in the first place.

4.2 Scenario 2

Scenario no. 2 counts with closing the project without attempting to restructure the current form of the project. Essentially it means that the project team gives up the effort in reaching the original goal.

4.2.1 Scenario description

This possibility contains complete dissolution of the project. During this phase, the project evaluation is conducted and analyzed, which may be difficult, considering the non-existent data collection system, and no project structure for the evaluation Reason for choosing this possibility is non-existent backbone structure of the project, as stated in chapter 3 Current Situation Analysis, as well as insufficient number of customers to fully sustain the project just on sales themselves.

4.2.2 Assumed outcome

The project goals are at this point completely disregarded, thus the only benefit in closing the project is saving finances and energy that would be put to waste, if the possibility no. 1 would be used and implemented. According to the project leader, this option would be considered a failure. I agree with their statement that from technical point of view, choosing this option would be a failure in following through with the goal stated.

4.2.3 Recommendation

Preference level: 3

I do not recommend this option, as it totally disregards the goal initially set by both organizations. Also, without the project management structure, the project team will experience difficulties in correct assessment of project benefits and mistakes. However, my opinion is that it is still better to close the project and count the losses, as to continue in unsatisfactory manner, because the energy and other resources would be saved for future projects.

4.3 Scenario 3

Scenario no. 3 calculates with the option of pausing the project in order to develop the project structure needed to reach the goal. This scenario subchapter describes different tools and their usage and certain project management processes connected to them.

4.3.1 Scenario description

This possibility involves utilization of chosen project management tools and processes, and The use and scope will be recommended with each tool in following subchapter.

The difference between scenario 3 and 4 is that the scenario 3 allows more time and less energetical strain on the project team to develop the project structure in higher detail. Scenario 4 allows the similar detail resolution; however, it may take longer.

On the other hand, the possibility no. 3 may take longer, causing the originally set time scope for self-sufficiency of the project to alter. This, however, may not present a problem. It also allows for presenting the tools and their usage and utilization to the project team, with detailed description of utilization of presented tasks. Another difference is in tools recommended for particular possibilities.

This option was created as an alternative to the scenario 4, which may potentially cause chaotic reaction in the project if the implementation of proposed structure will not be performed gradually, carefully, and sensitively.

4.3.2 Recommended tools and processes

The list of recommended tools to use is in accordance with missing project documentation and project processes. Since the project is already launched, initial project documents will have to be developed post-launch, similarly to my descriptive attempts in the chapter 3 Current Situation Analysis. Rather than that, I recommend developing Logical Framework Matrix for individual strategic goals for the upcoming season, Work Breakdown Structure connected to these tasks, and to conduct a comparative status analyses before and after project structure tools implementation.

4.3.2.1 Logical Framework Matrix

In the theoretical foundation part, the logic of the matrix reading, and filling is explained.

Figure 13 presents

The first column consists of **goal description,** which summarizes the activities, outputs of these activities, outcomes of summarized outputs all the way to the main goal of the organization.

Example: *to develop student-friendly establishment with low-priced snacks and specialty drinks*

Second column describes **objectively verifiable indicators**, which prove reaching the goals. These indicators are verifiable after reaching the proposed goal, or proposed deliverable. It is recommended to have at least one objectively verifiable indicator per goal summary.

Jezkova, Krejci, Lacko & Svec (2013) state that a good way to define these indicators is the quantity – quality – time

Example: *Created space can seat up to 40 people to study and relax at, it has enough power outlets, and stable internet connection (10-20mbps), etc.*

Third column contains the sources according to which the objectively verifiable indicators are measured against.

Example: *checking the internet connection settings, visual inspection of described indicators*

Fourth column contains listed perceived risks, and requirement assumptions for the next activity, output, outcome, or goal. In the exemplary use, I divided the assumptions and risks, so there would not be potential mix-up.

Example: *high quality goods and service, high quality internet connection, comfortable space; Risk: insufficient customer awareness*

Logical Framework Matrix - Student Club Mozaika				
Project name:	Student Club Mozaika	**Responsible:**	The project team	**Date:** N/A
	SMART goal description	**Objectively verificable indicators**	**Sources of verification**	**Risks and assumptions**
Benefits (Goal)	1) to provide local and international students at local high schools and universities with peaceful place to study, relax, and work and 2) to create healthy community of students and fulfill internal missons and visions of both organizations	1) the establishment has its own space 2) community is created via special events held by the club 3) the exclusivity is enforced by showing student ID, otherwise the premises entrance is conditioned by CZK 20,- fee per daily entrance.	1) premises rental or purchase contract, premises existence 2) satisfied customers - customer feedback 3) Price presentation / price log	N/A
Outcome (Purpose)	1) & 2) & 3) to develop student-friendly establishment with low-priced snacks and specialty drinks 4) Risk prevention 5) Success assessment 6) Upholding the time scope of individual tasks, structure them to eliminate the chaos	1) created space can seat up to 40 people to study and relax at, it has enough power outlets, stable internet connection (10-20mbps/s, etc.) 2) the students are in the premises 3) to have 150% profit margin at the maximum 4) project team satisfaction	1), and 2) visual inspection of described indicators, checking the internet settings 3) Ensure and change based on the market price 4) regular project team meetings	1) high quality goods and service, high quality internet connection, comfortable space Risk: insufficient customer awareness
Outputs	1) peaceful, attractive, and relaxing space 2) recipes for temporary and permanent drinks and snacks 3) gaining awareness and more customers 4) potential risks list and elimination strategies 5) measures with which the success can be measured 6) project schedule and tracking plan	1) positive space feedback, e.g. "we like it!", tips, etc. 2) recipe compiled into one usable document 3) marking 200% social media follower and interaction growth 4) sales revenue, customer growth, the number of days in operation 5) project schedule and tracking plan created and published	1) Verbal customer feedback, overhead (tips) against expected daily profit 2) positive social media feedback 3) Social Media Business Analytics tool 4) sales log, customer growth log 5) the existence of project schedule and tracking plan	1) sales log developed 2) social media campaign paid for - enough $ Risk: lack of financial resources, lack of human resources Risk: Inability to use the scheduling software
		Sources	**Time frame**	
Main groups of activities	1) create peaceful space 2) specialty drinks and snacks development 3) create a good marketing strategy in order to attract customers based on the research 4) analyze potential risks and adjust 5) set the success metrics 6) Define and schedule the aforementioned activities using MS Project and WBS tools	1) the space 2) project team 3) goods 4) equipment 5) Iteration meeting notes 6) MS Project from Business Suite for NGOs, already set up, WBS - project team meetings	10/5/21 - launch of the project 5/10/22 - meeting in order to assess the state of the project 5/10/22 - propose the implementation of proposed structure 5/20/22 - 5/30/22 - implement the structure and conduct the overall status analysis 5/10/22 - 5/30/22 - assess and re-develop marketing strategy 5/20/22 - create the schedule, define the activities within WBS	1) Good project team Risk: unrealistic timeframe settings? Risk: learning to use the tools can take up too much time.
Outside of the project			**Pre-conditions**	
Situation in the city - analysis, feasibility study results, customer research results, entrepreneurial environment analysis...			1) existence and willingness of project team 2) sufficient financial resources to purchase resources and equipment 3) access to project management tools. 4) existence of customers	

Figure 13.: Example of Student Club Mozaika logical framework matrix use

Be advised that the logical framework matrix depicted on *figure 13* is supposed to serve as an example of use of the tool in Student Club Mozaika project context. In order to fully develop the matrix, the requirement is to involve the whole project team and spend enough time to develop the logical framework matrix. This would include assessing the current state of the project documentation and developing aforementioned missing documentation and log systems.

The bracket **time frame** is also scheduled as an example, the schedule may vary according to needs of the project.

Benefit of this approach is in its relative simplicity. If the project team can follow the logic of the matrix, it can help them to define the strategy of the project. And to assess and define every part of the project in relatively simple way.

My recommendation is to use structure of logical framework matrix as a way to reiterate the current status of the project as a whole in order to simplify and structure the goals according to the SMART methodology so that the main goal of the project may be achieved.

I recommend starting with checking the definition of the project goal and proposed activities of how to get to the goal. I do not think the process revision will be necessary, however, the necessity to restructure certain parts of the project will be necessary in order to track progress.

Within sources of objectively verifiable indicators, I recommend developing the finance income/expense log in MS Excel and developing the project schedule with individual tasks and subtasks. These can be defined using another recommended tool, and that is Work Breakdown Structure, which function is described in upcoming subchapter.

4.3.2.2 Work Breakdown Structure and MS Project

Work Breakdown Structure serves as the tool that – as the name indicates – breaks down the task groups into individual, smaller tasks, and subtasks.

MS Project software is a project management software coming with the extended business office package from the Microsoft company. The downside of using this software is its overly complex user interface. This project management tool allows the user to develop particular processes, specifically **define activities, sequence activities, estimate duration** and it also allows to perform the process of **schedule development**. For further details regarding these processes, see theoretical foundation chapter.

For the purpose of the recommendation, only the basic functions of the system will be demonstrated, in order to present potential benefits of use. These include creating exemplary Work Breakdown Structure, visualization of task summary and individual tasks representation in time via Gantt chart tool, and the completion status visualization.

Proposed benefit is easier manageability of tasks. Work Breakdown Structure also includes the resources used, the costs of the resource and the task performed, and the duration of the task and subtasks.

For the demonstration of the tool, I chose to develop the activity no. 2 from logical framework matrix depicted in *figure 13* – specialty coffee and drinks development. The depiction of the Work Breakdown Structure in *figure 14* shows the process of brewing coffee with the subtasks necessary to successfully finish the task.

	Task Name	Duration	Start	Finish	Pr	Resource Names	Responsible
26	**2.1.2 Filtered drinks preparation**	**300 mins**	**Thu 9/30/21**	**Thu 9/30/21**			**Head Barista**
27	2.1.2.1 Choose the beans	1.5 mins	Thu 9/30/21	Thu 9/30/21		Coffee[1]	Head Barista
28	2.1.2.2 Heat the water	5 mins	Thu 9/30/21	Thu 9/30/21	27	Electricity [1],Water[1]	Head Barista
29	2.1.2.3 Grind the beans	5 mins	Thu 9/30/21	Thu 9/30/21	28	Coffee[1]	Head Barista
30	Water heated	0 mins	Thu 9/30/21	Thu 9/30/21	29		
31	2.1.2.4 Set up the pour over station	3 mins	Thu 9/30/21	Thu 9/30/21	30	Filters[1]	Head Barista
32	2.1.2.5 Brew the coffee	5 mins	Thu 9/30/21	Thu 9/30/21	31		Head Barista
33	2.1.2.6 Track the time	5 mins	Thu 9/30/21	Thu 9/30/21	32		Head Barista
34	Coffee brewed	0 mins	Thu 9/30/21	Thu 9/30/21	33		

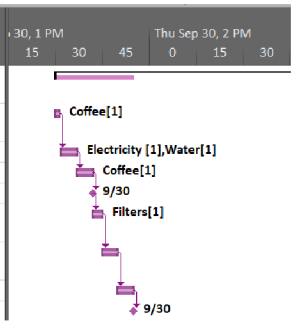


Figure 14.: Example of Student Club Mozaika WBS use

As we can see on *figure 14,* the activity 2.1.2 Filtered drinks preparation was broken down into several smaller steps the completion of each helps to reach the Coffee brewed milestone. The activities were named and defined – MS Project allows further notes into the brackets – then, the activities were sequenced logically in numerical order, and scheduled, as we can see on Gantt chart on the right. The WBS can be found in *appendix 1.*

As depicted, system itself assigns the resources used to the individual activities in the Gantt chart tool for easier understanding and clarification.

The resources are compiled in the resource sheet under another tab in the software. Once compiled, the project manager can track the prices of use of individual resources. As shown in *figure 15*, the resources are assigned individual price rates. These are assigned by the project manager.

	Resource Name	Type	Material	Initials	Group	Max.	Std. Rate	Ovt. Rate
1	Water	Material		W			CZK 2.00	
2	Electricity	Material		E			CZK 2.00	
3	Head barista	Work		H		100%	CZK 0.00/hr	CZK 0.00/hr
4	Filters	Material		F			CZK 1.00	
5	Coffee	Material		C			CZK 18.00	

Figure 15.: Example of Student Club Mozaika resource sheet use

Another style of Work Breakdown Structure use may be physical, where during the project strategy meeting, the project members develop Work Breakdown Structure either on a piece of paper, or on the board. This particular Work Breakdown Structure may be leaner, as depicted on *figure 15,* but in physical form it lacks the shareability and even in digital form it lacks the resource assigning option.

This option is in the form of a hierarchical tree, in which the goal is structured into different categories of processes needed to achieve the goal. These categories are divided into individual activities and subactivities into as much detail as necessary in order to manage them well.

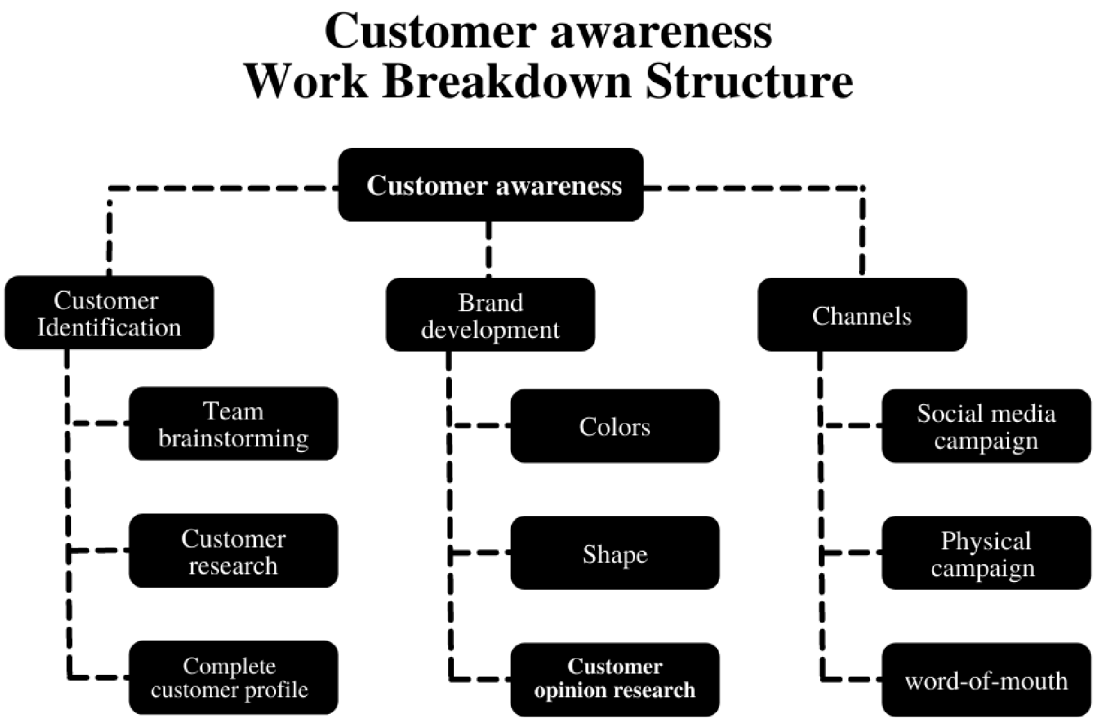


Figure 17.: Example of Student Club Mozaika marketing WBS use

I recommend using Work Breakdown Structures in cases of individual project goals achievement tracking, such as preparation of events in the premises of the club, or in case of preparing the marketing campaign that requires more complex solution than just posting a photograph on social media accounts.

4.3.2.3 Risk analysis

One of the most crucial processes while developing any project structure is the risk identification process. Though listed as last, I consider conducting the risk analysis as none the least for this particular project. Personally, my opinion is that without the risk analysis, the project team may navigate the unknown waters of project and not know about the stones waiting to drown their ship. Conducting the risk analysis can be paralleled with creating a map for safe passage of the project ship to successful harbor, which is reaching the project goal.

Complex risk analysis includes the identification of risk, its description and evaluation, and subsequent elimination process proposal. It may sound complicated, however, there is a tool that I will recommend, that I believe allows the risk analysis to be done in relatively simple manner, proving useful even in small-scale projects, which the Student Club Mozaika undoubtedly is.

RIPRAN risk analysis tool is a tool developed at Brno University of Technology, and it presents relatively simple risk analysis tool, that may prove useful. Following system of use is drawn from the publication of Jezkova, Krejci, Lacko & Svec (2013):

First off, it is necessary to create pairs of threat – scenario. The basis for this pairs can be a simple answer to following question: *What may have a negative impact on development of the project?*
Example: *robbery – equipment loss*

Followingly, the reason for occurrence of described scenario is thought through. This is due to the fact that the threat may have several scenarios.
Example: *robbery – property damage, loss of goods, loss of income, etc.*

Next step, according to Jezkova, Krejci, Lacko & Svec (2013) is to divide the risks according to CSN/IEC 62 198 norm, which divides risks into several categories. In my opinion, this step may be omitted due to size of the project. However, I recommend the project team to brainstorm every possible area of risks. This is the only benefit or form use, that I see as useful for this particular project.

After creating the pairs, another necessary step is to quantify the risks, and estimate the impact of the risks. The risks are written down to the table, where the rest of it is filled out. The table can be seen on *figure 17* below:

ID	Threat description	Probability of occurrence	ID	Scenario	Probability of scenario occurrence	Total probability	Impact	Risk value	Preventive measures
1	Robbery	0.2	1	loss of equipment	0.1	0.02	80 000,-	x	Locking up the space, Monitoring the space, withdrawing the financial income as often as possible
				property damage	0.8	0.16	200 000,-	x	
				income loss	0.9	0.18	2 000,-	x	
2									

Figure 17.: Example of Student Club Mozaika RIPRAN Risk analysis tool

Final probability is calculated by multiplying threat probability of occurrence by scenario probability occurrence. These probabilities are expressed in percentages in numerical syste, (e.g., the 25% occurrence is noted as 0.25). These values are supported by combination of internal metrics, statistics, and overall economical situation of the project and the economic environment. In practice this means that the assessment of the risk probability value should be analyzed by using as much information as possible.

It is also important to use common sense regarding the risk occurrence value. For example, the probability of drowning in the premises of the club is close to zero, since there is no pool or another deeper water tank.

Jezkova, Krejci, Lacko & Svec (2013) later note that RIPRAN analysis method developed several types of risk elimination with the purpose to help the project teams. These are:

1. Alternative solution – find a solution that does not contain the risk
2. Elimination of the risk source
3. Protection from the threat – to deflect negative influence of the threat
4. Scenario modification – modify the scenario of the threat
5. Decreasing the probability of scenario occurrence – influence the probability value
6. Decreasing the impact – lowering the consequences of the impact on the project

7. Mobilization of reserves – creating the reserve in order to cover the risk costs
8. Carry over the risk – insurance
9. Divide the risk – divide it onto several smaller “subrisks”

I recommend conducting the analysis as soon as possible, during upcoming team meetings. This may help to understand the issues the project currently faces and may face in the future. If the issues and threats will be understood, they may be avoided, or the project may react accordingly when the expected risk or threat occurs.

4.3.3 Project structure proposal – implementation breakdown

The implementation sequence is shown on *figure 18* below:

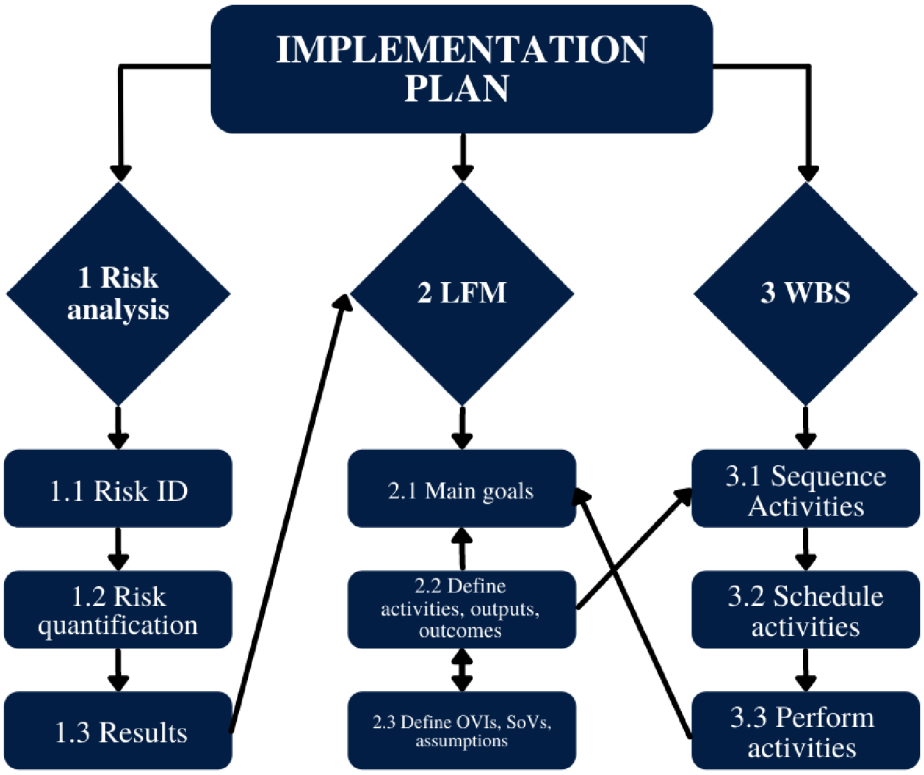


Figure 18.: Implementation structure of indiviual tools use for Student Club Mozaika project

This implementation structure lacks the time measurement for individual process implementation, and it is not thoroughly detailed. There are some explanations owed:

Further implementation plan can be found in *appendix 2* and *appendix 3.*

Risk analysis refers to performing the risk analysis process according to RIPRAN methodology. The risk analysis outputs will subsequently be a part of input to LFM, which stands for Logical Framework Matrix, which will be filled out according to aforementioned logic. In the diagram, OVI stands for *objectively verifiable indicators* and SoV stands for *sources of verification.*

Activities, which will create different outputs, will be divided according to work breakdown structure within MS Project environment, which will provide monitoring and scheduling function.

4.3.4 Assumed outcome

After the implementation of the tools mentioned above, the project should gain trackable structure, which will help to assess the status and issues more closely than in current form.

Benefits of each of the tools are similar in nature, and that is to create more effective structure, which will be detailed enough to allow the project manager track effectively the assigned tasks and deadlines, and based on the data from Work Breakdown Structure, the project manager will be able to track the overall performance of the project.

I think that though the project is a small-scale, it may benefit especially from Work Breakdown Structure, as it will divide the larger tasks into smaller pieces to achieve their goals especially in the marketing area.

4.3.5 Recommendation

Preference level: 2

This is the second most viable option, in my opinion. The downside of this recommendation is that the project would be paused until the structure would be developed. However, benefit of this approach is that if the project team decides to work diligently, they may end up with robust structure, which will create effective environment to pursue the goal set. In this case, and in following possibility's case, I recommend getting acquainted with the MS Project tool, logical framework matrix, Work Breakdown Structure, and RIPRAN risk analysis and consider the best way of timely implementation of these tools into the project.

4.4 Scenario 4

Scenario no. 4 calculates with the option to identify project management processes, and to attempt to create leaner project structure during the operation of the project without pausing it.

4.4.1 Scenario description

This option considers the implementation of project structure and project management tools from subchapter 4.3 during the operation of the project's establishment. In my opinion, this requires more energy as the previous option, which can be done during the pause time, however, if the structure would be developed and implemented gradually, the project team has very little to zero time and energy constraints.

If this possibility is chosen, I would recommend choosing more gradual implementation of the tools and implement one tool process after process. Also, I would consider testing the tool and researching alternatives to the tools presented in the subchapter 4.3 in case the testing of particular recommended tool failure.

The project team can choose the different project structure incorporation than shown on *figure 18*, for example, the team can choose to develop the logical framework matrix first, and then implement the work breakdown structure tool, etc.

4.4.2 Assumed outcome

The outcome is similar, if not the same as the assumed outcome from subchapter 4.3. The expectation is to create the structure, which will effectively support reaching the goal set by the project team.

4.4.3 Recommendation

Preference level: 1

I highly recommend this final option compared to others. In my opinion and considering the state the project is currently in. The benefits of this recommendation are, as mentioned above, gradual implementation of the tools, which gives the project time to get acquainted with the tools described above and their proper usage.

5 Conclusion

The proposed goal of this bachelor's thesis was to develop a project structure for the particular student club project. As I collected the data to assess the project from the project management standpoint, I found out the range in which the missing documents could help in mapping the current situation.

On one hand, we need to consider the insufficiency of the data the Student Club had provided. The data, collected in several cases retrospectively, were not sufficient for the most accurate assessment of the situation, however, despite the inaccuracies in data, I could pinpoint the issues.

On the other hand, the data allowed me to create in some respects imperfect possible structure, and to propose its further development with utilization of presented tools.
The aim of this work, can, therefore, be considered reached. In order for the aim to be reached completely, more information about the Student Club would be needed, and the project team effort would be required.

I recommend the project members, myself included, to search for the ways to implement the combination of scenarios 3 and 4. Specifically, these steps should be followed:

Creating a detailed list of activities, and re-assessing the goals of the project, conducting the risk analysis, filling out logical framework matrix, and using the work breakdown structure for planning future tasks. After filling out logical framework matrix, the project team should see a clear path for their next steps, which they can deconstruct into smaller steps using the work breakdown structure, which should help the project team in reaching the clear goals, in order to fulfill their dream of creating the space and community.

In my personal opinion, the Student Club has potential, however, a project structure with detailed description of individual activities and their time sequencing needs to be incorporated, especially creating the project documentation, and assessing the risks.

I believe that my recommendations will contribute to successful project iteration.

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List of appendices

Appendices are located within zipped file named Appendices.zip. This file contains following documents:

Appendix 1 – WBS Example..mpp

Appendix 2 – Illustration of Initial Project Structure.mpp

Appendix 3 – Project Structure implementation.mpp