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THE APPLICATION OF PROJECT MANAGEMENT METHODS IN COMPANY

VYUŽITÍ METOD PROJEKTOVÉHO MANAGEMENTU V PODNIKU

MASTER'S THESIS

DIPLOMOVÁ PRÁCE

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Goals of thesis and methods
A theoretical review of a problem
Analysis of the contemporary situation
Proposal of solution
Conclusion
References
Appendixes

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Basic sources of information:

Burke, R., 2013. Project Management: Planning and Control Techniques. 5th edition. United States: John Wiley & Sons, Inc. ISBN 978-1-118-56125-6.

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Abstract

The diploma thesis is focused on application project management methods in the company. Firstly, the work specifies theoretical knowledge of the field. This part is followed by an analysis of the external and internal environment of the given company. Based on these outputs and the use of project management methods, the proposal of solution is made. This proposal of a solution leads to successful reaching out of a new segment of potential customers.

Key words

project management, project, SWOT analysis, Work breakdown structure, Responsibility assignment matrix, Gantt chart, Risk project analysis

Abstrakt

Diplomová práce je zaměřena na aplikaci metod projektového řízení ve firmě. Práce nejprve specifikuje teoretické poznatky této oblasti. Na teoretickou část navazuje analýza externího a interního prostředí dané firmy. Na základě výstupů a využití metod projektového managementu je vytvořen možný návrh řešení projektu, který vede k úspěšnému oslovení nového segmentu potencionálních zákazníků.

Klíčová slova

projektový management, projekt, SWOT analýza, Hierarchická struktura práce, Matice odpovědnosti, Ganttův diagram, Metoda pro analýzu projektových rizik

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In Brno, 21st June 2019 ....

Author's signature

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INTRODUCTION

Companies do not have easy position to succeed in globalised competing world these days. So, companies use knowledge, tools and methods, which help them, in order to do their best. Moreover, each of the company once have experienced what it has never done before such as entering new market, developing new products, improving of business activities and so on. One of the field that is able to serve is the project management. The project management consists of many disciplines and skills, which are important for business (Meredith, and Mantel, 2011).

In addition, Mintzberg (1983) confirms the importance of the project management by the statement that the most of the emergent industries since the World-War II are project concentrated. This situation also led the experts of the field to set approaches and deepen the knowledge, however the extent in which it is implemented in companies still vary due to their financial, material and human resources.

The company ABC has never experienced project management tools before, so the author brings to the company brand new knowledge, which is able to processed the project in convenient and successful way. The company is a member of fishing industry in the Czech Republic. This industry could be described as one of the oldest ones in the world and also very broad. It includes fishing on the open seas but also aquaculture operations in fish farms, which is a case of the company ABC. The whole industry involves several activities such as fish catching, transportation of the fish, distribution, harvesting and so on (Khushboo, 2017).

So, the aim of this thesis is to apply theoretical knowledge, tools and methods of project management in a given small company, which experiences new activity and is not very used to project management processes. The thesis summarises main knowledge of project management and shows and overview of necessary activities for accomplishing the project. In addition, it is followed by analyses of the external and internal environment and mainly specification of the aim and actual use of project management tools, which provide all important parts for success of the project in the company.

GOALS OF THESIS AND METHODS

This chapter determines the main aim of this thesis, which is set within the project management field. Also, the methods, which are used during the whole accomplishing of the aim, are elaborated below.

Determination of the goal

The main aim of the master's thesis is to apply theoretical knowledge, tools and methods of project management in a given company. So, the concrete aim is to introduce a feasible unique proposal that leads to introduction of the company and reaching out a new potential segment of the customers with the use of methods of project management in a given company. In other words, the suggested solution should manage to offer ways how and when the company could offer its fish to new customer base of the company within project management's framework. The project requires current situation analysis, in order to prepare appropriate solution. Furthermore, it consists of a list of activities, time analysis, assignment of responsibilities, risk analysis, the setting of project financial side, and other tools.

To achieve the goal of the thesis, the author firstly has to reach a sub goal that consists in introducing and studying theoretical frameworks of the project management. The literature review is settled based on available resources of knowledge dedicated to the practices that are used in the field as well as the recommendations and guides. So, the final plan is based on project management tools, and it is created with the accordance with all reached information. Thanks to that, all vital steps in practical part, are executed with management methods and tools. In other words, the thesis accomplishes an aim to describe all essential parts of project management in order to provide a necessary overview of the proposed solution.

Used methods

Fellows and Liu (2003) state that choosing convenient methodology tools is affected by consideration of the scope and depth of the issue. So, the author adopts both qualitative and quantitative methods to collect suitable data. The data and

information that are used in this report are mainly based on secondary research (of both qualitative and quantitative data) towards the application of chosen frameworks. This assignment generates conclusions for given aim. It is undertaken systematically, and transparently. Moreover, the research is taken according to ethics.

To reach the main aim of the thesis, there is a use of several methods of project management mainly by IPMA and PMI. Project management methodologies are well-developed nowadays, but there is no universal common approach. There are various methodologies, which are different according to priorities, industry, size of the company, product and so on. These methods of the project management are described in the theoretical part of the work and used in the main body of this thesis such as work breakdown structure, responsibility assignment matrix, Gantt chart, risk project analysis and so on. Moreover, in practical part, there are used methods to analyse environment, which can affect the project and also will be affected by it. So, PESTEL analysis, Porter's five forces analysis, key success factors, McKinsey 7S framework, value chain analysis, key competitive advantage, and finally SWOT matrix are appropriate tools to do that.

This assignment includes frameworks that have some limitations, but in the author's opinion, their advantages outweigh the flaws. For instance, reaching the goal of the company happens under unique characteristics of the given industry and country, which the frameworks do not necessarily capture.

In addition, unfortunately, not all factors could be addressed because a lot of them are not publically available. Generally speaking, access to data in this manner is challenging for the author. Besides, the reality in this particular industry is far more complex and dynamic than can be captured. However, author still highly recommends implement the project management into the company ABC thanks to its undeniable advantages, which are described in theoretical part. Moreover, the project that is described in practical part could be taken as a sample for other projects. Now on, the author focuses on the theoretical side of the thesis.

1 THEORETICAL REVIEW OF A PROBLEM

The chapter provides and focuses on an overview of the vital knowledge, which is connected to the topic of project management. This theoretical background summarises the scope of the thesis. The theoretical knowledge is gathered mainly from published literature. The general basic definition of the project management and project are explained in the following parts and give an overview of project management activities, which have to be done in the practical part.

1.1   Project management

Use of the project management (PM) is nowadays more and more perceived in practise (Meredith, and Mantel, 2011). Project management is the use of skills, tools, knowledge and techniques to project activities in order to achieve or even exceed stakeholder expectations and objectives from a given project (Project Management Institute, 2008). Author Oisen (1971) describes it as a collection of tools in order to accomplish complex, unique, on time assignment within quality, cost and time constraints. Each task requires a unique mix of tools and techniques to fit into the given project environment. Ohara (2005) adds that PM is a professional's capability to deliver a project product that reaches a mission. Furthermore, Turner (1996) proposes that project management as the science and art of converting vision into reality.

The project management is typically used for the development of new product/service, improvement of new production method, implementation of systems. Moreover, PM can also be used throughout the organisation to boost collaborative and personal productivity. On the other hand, PM is not used for periodical, repeatable, and ordinary processes (Lacko, 2010; Milosevic, and Patanakul, 2005).

1.1.1 Levels of project management

The project management has three basic levels such as program, projects, and subprojects (see Figure 1: Levels of the project management). These levels are described in the following article.
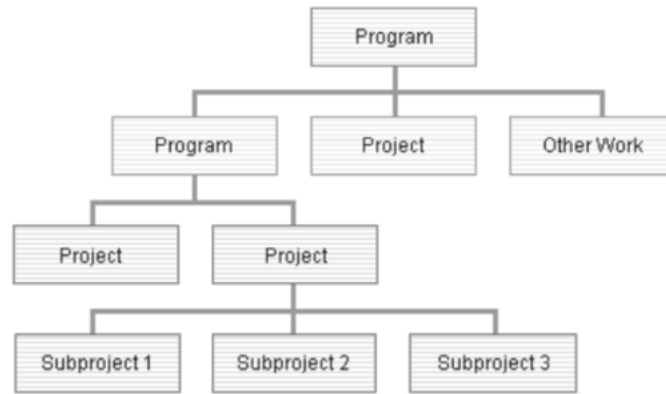
Figure 1: Levels of the project management
(Source: IBM, 2017)

A program is a group of projects and activities that are related in order to aim a common mainly long-term goal. The scope of the program could be more broadly defined or can be very specific and may evolve or change as the company develops (IBM, 2017; Pitaš, 2012).

A project is a not permanent effort launched to create an uncommon product/service within a specific scope. In other words, the project is a unique process that consists of controlled and coordinated activities, which have start and finish dates. It should achieve an objective that reaches given requirements such as scope, resources, time (Kerzner, 2003). Another author Ohara (2005) concludes it as value creation, which is affected by specifics based on the timeframe and given constraints. Bradley (2002) adds that project is a business case, which shows the benefits and risks of the venture, demonstrates not common outputs with identified resources, responsibilities and time. Carroll (2012) summarises that each project has to have three characteristics. These characteristics are the project needs to have a specific outcome, it has to be initiated, and the project needs to have someone who runs it. These definitions have in common that projects are unique in output, have given start and end, and are temporary.

There is a difference between project and operation. The operation is repetitive and ongoing, whereas project is temporary and unique as is mentioned above. The

projects usually range in effort, complexity, time, money (Project Management Institute, 2008).

Moreover, the differences between program and project are particular. The program should achieve and support the mission or strategy of the company. So, it is made through several projects (IBM, 2017).

A subproject refers to a part with a level of independence. It is a set of a unit of work that is assigned to the organizational unit in order to have project in manageable parts. These work units have common aspects and so could be easily assigned to one organizational unit. Moreover, these work units help construct the work breakdown structure which will be introduced in the following chapters (IBM, 2017).

1.1.2 Knowledge of project management

The project management comprises knowledge from several fields. Svozilová (2006) concludes the main four fields such as project scope management, project time management, project cost management, project quality management. These disciplines are basic ones, which lead to reaching the aim of the project. However, there are other areas which help as well. These are project human resources management, project communications management, project risk management, project procurement management. All these usable knowledge is connected in project integration management, which affects and is affected by these areas. Moreover, PMI adds project stakeholder management. Project managers have to know these fields of knowledge (Rose, 2013).

1.1.3 Advantages of project management

Svozilová (2006) and Kerzner (2003) point out several advantages, which highlight the importance of the use of the project management in companies. All the activities have assigned responsibility with given time schedule and costs. The resources are allocated for the given period, so the next availability is clear and effective. Also, the project manager creates environment, where is able to compare the actual

process against the planned one. So, the correction can be made quite quickly. Moreover, thanks to the methods, the information and lessons learned that were reached during the project could be used for another one.

1.1.4 Standards of project management

Project management consists of principles, concepts, methods, standards and techniques which cover all life-cycle of the projects. These should help the project manager and the team control if all essential activities are done in order. It also leads to excellent organisation of work, documentation, optimisation of resources and so on (Ježková, Krejčí, Lacko, and Švec, 2014).

There exist standards, which are set by professional units with subjective experiences. However, they still have quite common philosophy, terminology, techniques and so on. The main standards are Project Management Body of Knowledge (PMBoK) by Project Management Institute (PMI), Competence Baseline by International Project Management Association (IPMA), Project in Controlled Environments 2 (PRINCE2) by Office of Government Commerce UK, and ISO 10 0006 by International Organisation for Standardisation (Ježková, Krejčí, Lacko, and Švec, 2014).

In general speaking, the standardised project management can be described as advisory of appropriate methods and techniques. These standardisations are set to be universal and generalised in order to be used in all cases of project management. However, as be mentioned above, every project is unique, so these standardisations should be adjusted to it (Ježková, Krejčí, Lacko, and Švec, 2014).

PMI is an international institution, which mainly focuses on the processes and is based on managers' experiences, which were reached during big projects. The advantages are general, the use is broad, focus on the process. On the other hand, this standard does not give concrete, practical examples, which use these techniques (Máchal, Kopečková, and Presová, 2015).

The European Commission recommends PRINCE2 is one of the methods, which should be used for European Unions' projects. The advantages are that this standard can be combined with other ones quite easily; there is the vocabulary. However, the disadvantages are that project management is not described in complex, and it is not interested in the abilities of the project manager (Máchal, Kopečková, and Presová, 2015).

IPMA's standard is not so much interested in processes in phases of the life cycle instead of competences of project managers and roles in teams. The main advantages are that this standard specifies knowledge and abilities of the project manager, defines the levels of project manager and importantly can be used for all sectors and small companies. However, it uses just basic terminology, and it is not detailed (Máchal, Kopečková, and Presová, 2015).

Finally, ISO 10 0006 is more directive than usual standard. It serves as reference model for settling the project management in the company. It contains general methods mainly for improvement of the quality.

Máchal, Kopečková, and Presová (2015) suggest that according to the size of the company and sector they would choose the standard. So, if the company is small and is not public administration they would choose IPMA. If the company is big and also not a public one, the best option is PMI. And if the company is the public one, they would choose the PRINCE2. The author mainly uses knowledge by PMI and IPMA.

1.2   Project

Project's definition is introduced in the previous chapter. In this subchapter, the basic theoretical concepts about the project are described.

1.2.1 Types of the projects

The projects could be divided based on their types. Shenhar and Dvir (2004) set the NCTP framework which has four dimensions novelty (N), complexity (C), technology (T), and pace (P). The first dimension N means product novelty that is

interested in how the product is to its potential. It is also connected how the customers are familiar with it and how much they use and benefit from it. It can be subdivided into derivate product, platform product and a breakthrough product. The derivate product means that existing product is improved. So, the projects focus on product improvement, cost reduction, modification. The second, platform product, consists of the new development of the existing product. The next type in the dimension is the breakthrough product, which concentrates on new concepts, ideas and so on.

The next dimension which is called complexity is subdivided into assembly level, system level and array level projects. The assembly level projects are collecting of components that connect afterwards. Other subdimension system level projects make a complex collection of units. Thanks to it, this leads to unique operational needs. The next one, array level, projects are interested in a large collection of a system, which reaches one purpose (Shenhar, and Dvir, 2004).

The T dimension is sorted out into low-tech, medium-tech, high-tech and super-high tech projects. If the technology has higher uncertainty, it usually leads to a longer phase of development, testing and so on. The last but not least type of dimension is pace. There are subcategories such as pace/regular, fast-competitive, critical, and blitz (Shenhar, and Dvir, 2004).

Apart from this well-known approach, also Khazanchi and Zigurs (2004) allocate projects to three categories based on their complexity. This complexity is described in manners of team size, culture, gender composition, language, resource, knowledge, and personal characteristics. The first type, lean projects, have low capacity, low risks and narrow scope. They can be divided into manageable parts thanks to clear outcomes. The next type is called hybrid projects. These projects have varied levels of complexity, scope and risks. The coordination between people and activities are highly needed. So, the technologies are often taken to strengthen coordination. The third type, extreme projects, have high risk, complexity and broad scope. There is a need for powerful activity of the number of team members and stakeholders.

1.2.2 Aim of the project

The accurate definition of the aim of the project is one of the vivid parts of the project management. If the aim of the project is not concrete, there is a high probability of no success. However, define the goal is a difficult matter. All the parties need to understand it and take it in the same sense. In addition, they have to agree on what should be reached and under which conditions (Doležal, Machál, and Lacko, 2009).

The tool which is able to define the aim is called SMART technique. Each letter means a specific characteristic of the goal. The letter S stands for specific; M means that the goal has to be measurable. In addition, it has to be attained/agreed, which means that is reasonable by all relevant sides; the other letter is R means that is relevant/realistic. Finally, T says time-based (Doležal, Machál, and Lacko, 2009).

Other experts use Logical framework method. This logical framework is according to Štefánek (2011) one of the methods how clearly map intentions, wants and identify them with concrete outputs and activities of the project. The main advantages are that all information are summarised and afterwards there exist a common view on the project because this method's result is easily presented to customers. On the other hand, there is no easy to caption the whole project's extent.

1.2.3 Success of the project

The fulfilment of triple constraints (Figure 2: Triple constraints) is one of the most common approaches which sets if the project is successful or not. The project has to be done in time, within set budget, and meets its scope. It is appropriate in some short-run cases; however sometimes this method is not satisfying (Shenhar, Dvir, Levy, and Maltz, 2001). Therefore, De Wit (1998); Pinto and Slevin (1988) and another point out that there should be also other criteria as performance, effectiveness, use, and satisfaction.
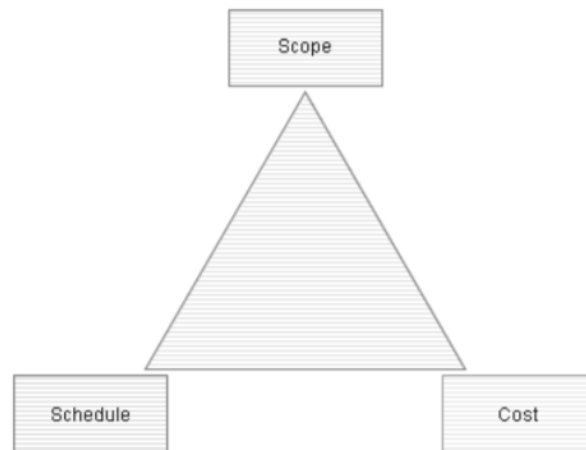
Figure 2: Triple constraints

(Source: IBM, 2017)

De Wit (1998) separates project success and project management success. The project success is measured against the overall objectives of the project, whereas the project management success is measured against measures of performance against cost, time and quality.

The project has to have clear and set objectives because different stakeholders in the project such as owner, suppliers, designers and others may have criteria, which differ from each other. When the objectives are not agreed on, it is not possible for a project to be successful for all parties (Cooke-Davies, 2001).

1.2.4 Project environment

All projects are planned and set in the certain environmental, social and economic context. These variables can affect the project both positively or negatively. The project and its environment are described as several overlapping circles that are in the immediate environment of the local community, national government, agencies, clients, contractors and so on (Gilbert, 1983).

1.3 Phases of the project

The project management system indicates a management system for a project, which should be set at the beginning of a project that is a responsibility of the project manager. The system covers responsibilities, roles, resources, tools and processes.

It documents collections of plans, records and procedures. These plans show how the work is done; procedures set that key tasks are operated in a systematic way (Kerzner, 2003).

As is written in the previous chapter, the project has its start and finish date. According to the time perspective and characteristic of the process the project can be divided into several phases, which indicates the life cycle of the project. Be aware of which phase the project is, helps to reduce the risk (Ježková, Krejčí, Lacko, and Švec, 2014).

There exist main three phases of the project; namely, they are pre-project, project and post-project phases but still very few life cycles of the projects are identical (Doležal, Máchal, and Lacko, 2009; Lacko, 2010).

1.3.1 Pre-project phase

Doležal, Máchal, and Lacko (2009) claim that in the pre-project phase there should be studied and explored opportunities for the project and examined the feasibility. There are two studies, which are devoted to these fields.

There is an Opportunity study, which should answer the question if it is the right time to propose and realise the given project. The actual position of the company, situation on the market, predicted development and so on are taken into consideration. The result of this study is either the recommendation or no recommendation of the project. In the case of the recommendation, there is a first insight into the project (Doležal, Machál, and Lacko, 2009).

The other one is a Feasibility study that is usually done after the Opportunity study. This documentation should show, which way is the most feasible to do the project. It specifies the scope, time, costs, and other needed resources. The Feasibility study is recommended to be done if the costs are higher than five million Czech crowns. For projects of lower extent, there could be done just one study, which summarises essential information (Doležal, Machál, and Lacko, 2009; Lacko 2010).

There are several analysis that serves these two documents and author has to be familiar with them from previous study. They are PESTEL analysis, Porter's five forces analysis, key success factors, McKinsey 7S framework, key competitive advantage, value chain analysis and finally SWOT analysis.

The PESTEL analysis divides external factors into political, economic, social, technological, environmental, and legal sections. These factors are able to influence the given project (Professional Academy, 2019). Moreover, the main findings of this analysis could be seen in opportunities and threats in SWOT analysis. It is also essential to use such an approach that will reveal the characteristics and forces of the industry. It could be defined by Porter's five forces and key success factors (Sedláčková and Buchta, 2006). In addition, the McKinsey 7S framework can reveal strengths and weaknesses. As well, the value chain analysis and key competitive advantage tool reveal other strengths and weaknesses of the given company and its project. So, the SWOT matrix summarises the most relevant information that are revealed. It is an universal analytical tool, which studies environment both internal and external of the project. The most importantly, thanks to this method, the project manager is able to identify strengths and weaknesses of the project's internal environment and see opportunities and threats within the environment that surrounds it, so the external environment (Poster, and Applegarth, 2006).

1.3.2 Project phase

This project phase is divided into initiation, planning, realisation, delivering and controlling, and finally closing of the project (Dobson, 2015).

The initiation has to set the aim, scope, requirements of the project. The project team is set and as well their roles, competencies and responsibilities. The project manager has to determine, which of the requirements gathered from the customers' needs could be fulfilled by the project so what the project will deliver. So, these requirements show what the sponsor wants and needs and what the project members agree to provide. These requirements need to be written very clearly and are

validated by both parties. The rest of the needs that are not decided to be requirements happen to be exclusions, which will not be part of the project. The Project charter often summarises these elements that are important at the start of the project (Rowe, 2015).

Afterwards, the planning phase starts. The team creates the detailed concrete plan together. The plan usually contains summary of the project (scale, inputs, outputs), aim of the project, time table, resources of the project (finance, material, human sources), plan of responsibilities and rights, plan of risks. These components are analysed in detail according to time, costs, technologies, methodologies and use of human resources (Němec, 2002; Svozilová, 2006).

The major project deliverables are decomposed into manageable components. So, there is an identification of the main elements of the project and the division of them into smaller pieces that could be scheduled and tracked. There exist mainly three types of breakdown structures, which are organisation breakdown structure (OBS), product breakdown structure (PBS), and work breakdown structure (WBS) (see Figure 3: Three types of breakdown structures) (Passenheim, 2009).
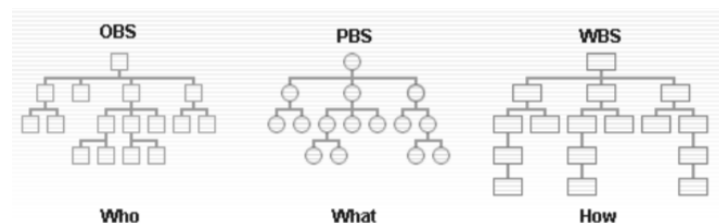
Figure 3: Three types of breakdown structures
(Source: IBM, 2017)

The OBS divides the team into units and their reporting relationships. So, it shows the relationship between organizational units and the subprojects of the whole project. The PBS is focused on the hierarchy of project work products. It indicates the items the team buys, reuses, and makes. And WBS is interested in project work activities. It is a decomposition of all activities that have to be done in order to produce the project. After the team knows the deliverables, the WBS can be generated. It can have many levels as needed. The lowest level of it is the work

package. This work package is assigned to a single person or a group of people. The WBS has several advantages such as its structure is clear to read and follow which enables the stakeholders to get information, allows more precise scheduling, budgeting and planning, and provides a source for identifying risks which can happen (Gray, 2006).

A project enters the realisation phase once the plan is approved and the necessary resources are in place to perform project tasks. The execution is doing the work (Doležal, Máchal, and Lacko; 2009).

Also, there is a phase of the project delivering and controlling. This phase of the project occurs at a similar time as the previous phase. ISO 10006 defines project control and delivery as a part of the project management, which executes proper actions, which leads to the success of the project. The project control means monitoring, analysing, and comparing planned results with current actual results. When the control of the project is not done correctly, cost, time or scope is possible to increase (BSI Standards Limited, 2017).

The project control process is frequently repeated process throughout the life cycle of a project. Thanks to standards the project and the plans can be measured. After the plans are established, the project manager observes the performance. The performance information is observed and collected from sources such as meetings, reports, letters, audits and so on. The following step focuses on the comparison of planned and actual performance data. If the project manager perceives differences, the corrective actions have to be done. The activities are relocating resources, changing the organisation of the project, revising the plan and so on (Burke, 2013).

And finally, there is project closeout. Every project comes to an end either fail or success. This process makes sure that several items are completed. The whole process is mainly about reviewing all the documentation and agreements to be sure that they are completed. In addition, it also includes the lessons learned (Ježková, Krejčí, Lacko, and Švec, 2014).

The lessons learned are gathering since the start of the project. This could include the effectiveness of policies, processes, tools, methods, relationships, communication, opportunities for improvement in skills and so on. At the end of the project, there could be a lessons learned meeting. All participants in the project can be invited. All together can make a list of items what went well, what not (Dobson, 2015).

The project closeout includes administrative closure too. It generates, gathers information to formalise project completion. All the documentation has to be completed and send to recipients. Moreover, all the assets have to be either return to owners if it is set so. In addition, the communication between the sponsor and delivery organisation are completed (Ježková, Krejčí, Lacko, and Švec, 2014).

So, the project manager should focus on responsibilities such as assess the terms of the agreement and the completion of all commitments, release the technical environment, obtain sponsor feedback, assess the lessons learned, close out the sponsor agreement, and submit the intellectual capital (Burke, 2013).

1.3.3 Post-project phase

New enriched knowledge, impressions and experience can be used in the following projects. There exists project evaluation report. This is a document, which highlights the key points, which were collected during the project. This document contains two sections which are Project Summary and Intellectual Capital. It is usually done at the end of the project by the project manager (IBM, 2017).

1.4 Project human resource management and organisation

During the whole life of the project, the several groups of people are involved in as could be seen as an example in Figure 4: Project stakeholders. The key ones are introduced in this following chapter.

Figure 4: Project stakeholders

(Source: IBM, 2017)

1.4.1 Project stakeholders

A stakeholder can be described as the organization or person that is somehow involved or has interests in the project. The project manager has to identify and communicate with these stakeholders. The project usually has several stakeholders, who have own objectives to meet the project. So, the project manager has to be aware of those objectives. In other words, all actions has to be done according to the consistency of the project along with their objectives (Burke, 2013).

1.4.2 Customer and sponsor

A customer is the one who receipts a product/service, so it can be consumer, user, purchaser. However, the customer can also be a sponsor, who is the authority that ensures that formalization of agreement with performing company/subject is done, approval to start of the project and its phases, perform acceptance of the outcomes, and ensure that the spending is according to the agreement. The sponsor might be external or internal (IBM, 2017).

1.4.3 Team

A team can include people from organization, suppliers, clients, sponsor. They work toward a common goal. Each of them has their own skills and are aware of them and knows that they are depend on each other and are committed to a common objective. All these information should be written done (Burke, 2013).

Building a successful team is one of the crucial actions, which has to be done by the project manager. There could be identified seven steps (see Figure 5: Steps of building a successful team). It is select the right team members, organise the team, ensure open communication, maintain the team, motivate the team, recognize and reward team behaviour and respond to the change (Burke, 2013).

Figure 5: Steps of building a successful team
(Source: IBM, 2017)

During the project, several critical skills are wanted, which have to be identified by the project manager. Also, team members have to understand information about the project and its mission. Moreover, the members need to feel be part of the team so the communication should be frequent, easy, and constant. In addition, the project manager has to choose motivators carefully to motivate team members properly. So, support appropriate behaviour in the team could be awarded and vice versa. Finally, the project manager has to be ready to deal with fluctuation team members thought the life of a project.

1.4.4 Project manager

The role of the project manager is to balance project scope, cost and schedule. A successful project manager should have and care about four areas of behaviour. The project manager should be sensitive to given situations and people. Moreover, the proper project manager should be able to coach, be able to build a team, delegate, provide constructive feedback, recognize the performance of each member, develop the team. Moreover, the communication is crucial skill of the project manager as well. She/he should have the ability to listen, communicate well, maintain contact, think and plan systematically. In addition, the successful project manager should be aware of project goal setting, be goal oriented, have ability to plan, proactive and innovative, and be able to solve the problem. Last, but not least, is the leadership. The proper project manager should be able to motivate, honest, enthusiastic, energetic, supportive, and be capable to drive the action (Kerzner, 2003).

Also, the project manager has competencies, which are divided into three main areas. The first one is technical competence. This contents elements, which are connected with professional knowledge of project management. The other one is called behavioural competence, which focuses on proper acting of project manager such as leadership, creativity, discussion, motivation and so on. The third competence is contextual one. This part is interested in interactions among the project team (Pitaš, 2012).

In conclusion, as could be perceived by these actions, project manager communicates a lot (Burke, 2013). The Project Management Institute (2008) assumes that she/he spends about ninety percent of her/his time communicating with the others. The communication ways differ based on the receiver. The requirements of communication between the project manager and sponsor are different from the requirements of communication between the project manager and the team. This situation also requires the management plan.

1.4.5 Relational Norms

Kadefors (2004) points out that trust is recognised as a very important attribute in the project. The trust makes value thanks to letting the partners focus on value creation. He emphasises that joint goal formulation helps with building trust between project partners. Also, Pinto, Slevin, and English (2009) add that there is a significant correlation between trust and satisfaction with relationships. When the level of trust is higher, there is a positive impact on project outputs.

1.4.6 Responsibility assignment matrix

This matrix, in other words RACI matrix, defines responsibilities and rights people involved in the project. It shows the relationship between the activities and the people. It clearly defines the competencies of the members of the team. So, the advantage of this responsibility matrix is this connection between activities and people. Another reason why include this tool is that it enables to control and monitor. In the matrix are written the letters. These letters are and means following. R means responsible, the person who is written for the given action is responsible for that. The other letter A means accountable, C is consulted which means that the person is able to give advice for the given action, and the letter I means informed so this person should receive the information about given action (Doležal, Máchal, and Lacko, 2009).

1.4.7 Organization types

The project manager has to know what kind of organization type she/he works in. It affects the challenges the project manager anticipates. There are three main kinds of organization structure; namely, it is functional, projectized, and matrix (Harrison, and Lock, 2017).

The functional organization has employees grouped into hierarchical manner by function (see Figure 6: Functional organisation). They are specialists or line managers, and they are assigned to the project for a specific time. The project is broken up into particular tasks, which are delegated to departments. The employees still report to their upper managers. There are no additional project team members, employees work with colleagues within their departments, no structural change is

needed, there is flexibility for changes, and easy post-project transition is the main advantages of this type of organisation. On the other hand, co-ordinational of cross-department actions are complicated, slow reaction time (Passenheim, 2009).
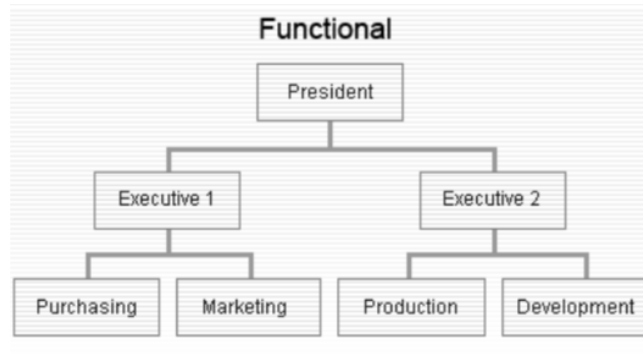
Figure 6: Functional organisation

(Source: IBM, 2017)

The projectized organisation is focused on the project, so the project manager controls the whole resources, team members report to the project manager, not to functional manager (see Figure 7: Projected organisation). The main advantages are that the project manager is able to simply and quickly communicate with team members, the cross-functional integration is supported, and possibility to create a strong identity and high level of commitment. The disadvantages, however, are that each project is fully staffed, so there could be duplication of them, the post-project transition is difficult. (Passenheim, 2009).
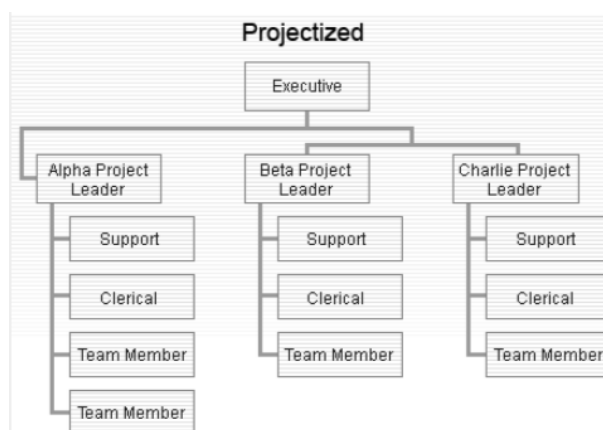
Figure 7: Projected organisation

(Source: IBM, 2017)

Last but not least, is the matrix type of organisation. It is kind between functional and projectized organizations. The project manager share responsibility with functional managers. Also, this kind of structure allows the making of multiple projects while participating in normal functional performance, resources can be coordinated efficiently, and team members can continue to their responsibilities after the project is done. However, employees have mixed loyalty due to two bosses, which could bring several issues such as not clear authority, duties, communication flows, and cost can be created due to more managers (see Figure 8: Matrix organisation) (Passenheim, 2009).
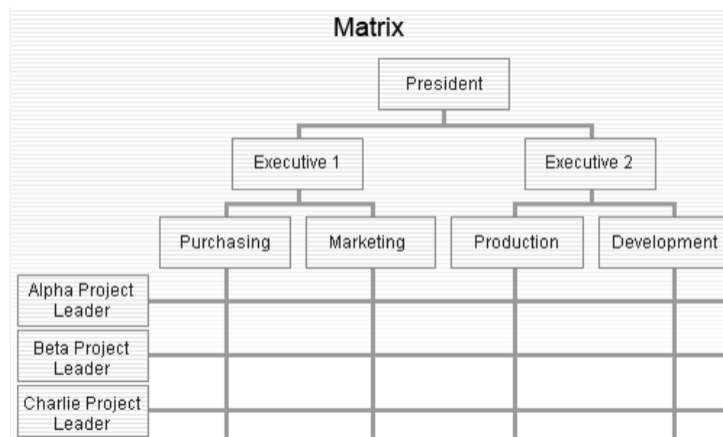
Figure 8: Matrix organisation

(Source: IBM, 2017)

1.5 Project scope and quality management

Defining and managing the scope of the project is the fundamental part of the project. The scope defines the deliverables of the project. In other words, it states the boundaries of the project (Heerkens, 2002; Wysocki and McGary, 2003).

The scope is tightly connected to the quality, both quality of the project and quality of the processes. It plays a key role during the whole development of the project. Together they are tightly connected with time, cost, and resource availability of the project, so with triple constraints (Phillips, 2004).

1.6 Project time management

Identifying the specific schedule activities, which have to be done to produce the project variables helps to identify the dependencies among them. Afterwards, there could be done the duration estimation of given activities, which lead to the creation of the project schedule. When the schedule is done, the changes need to be controlled according to this plan (Passenheim, 2009).

In general meaning, a schedule is a structured plan, which has a time dimension. It can include a financial plan, staff schedule, operational schedule and so on. It helps the project manager to track and evaluate the planned against actual progress of the project, more easily communicate and show the interdependencies among the actives, and determine if accept or reject a change. To the particular parts of the time period can be described the resources as well, which are used in that segment of time. It is able to show the milestones of the project, hierarchal structures and relationships (Burke, 2013).

There are several kinds of how to display the schedule. The following subchapter focuses on this topic.

1.6.1 Displaying the schedule

One of the kinds how to display the schedule is called Precedence diagram. This schedule directly shows the relationship and interdependencies among the activities clearly (see Figure 9: Precedence diagram) (IBM, 2017).
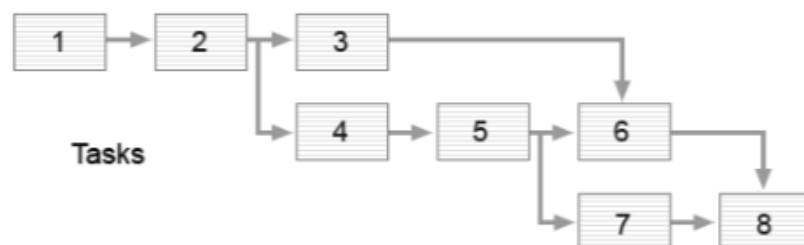
Figure 9: Precedence diagram

(Source: IBM, 2017)

The activities in the Precedence Diagram have one of three basic types of relationships. The first is Finish-to-Finish Relationships. This one is the most common one; it indicates that one activity firstly has to finish in order to start another activity. The other type Finish-to-Finish Relationships is used when predecessor and successor finish at the same time. The third type is Start-to-Start Relationships, which is used when one or more activities have to start at the same time (Harrison, and Lock, 2017).

The boxes in this scheme contain several values, which have standard format for nodes, see Figure 10: Documenting the values in node.

Early Start (ES)		Early Finish (EF)
	Name • WBS Number or Name • Duration	
Late Start (LS)		Late Finish (LF)
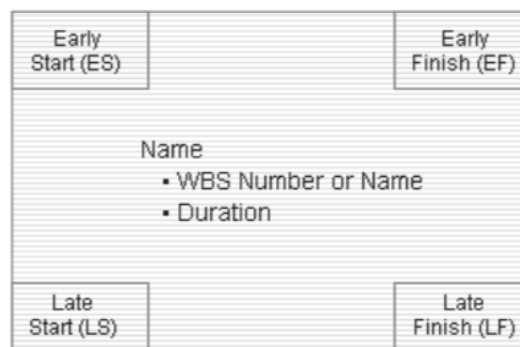
Figure 10: Documenting the values in node

(Source: IBM, 2017)

The other type is named as Gantt Chart. This schedule is used and helpful for viewing and comparing the planned and actual activities (see Figure 11: Gant chart). This diagram is used quite often, it is easy set up, and the information is clear. On the other hand, there is no seen the relationship between the tasks, and more importantly, the changes in lengths of these tasks and changes in their starts do not change the rest of the schedule. However, thanks to specialised software, nowadays there is a possibility to use more professional tools, which shows the connections between the processes (Dobson, 2015; Svozilová, 2006).
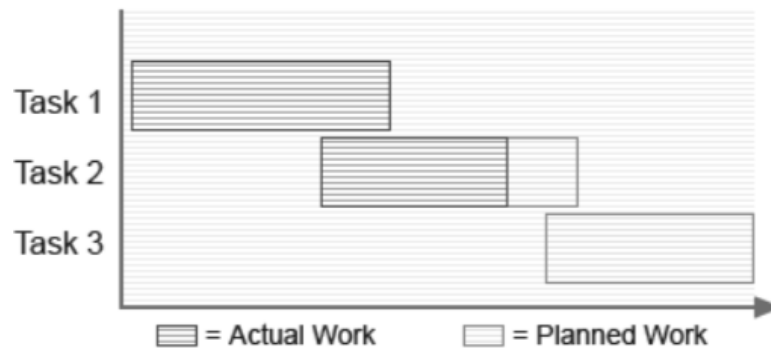
Figure 11: Gantt chart

(Source: IBM, 2017)

Thanks to disadvantages of the Gantt chart back in time, there were introduced Critical path method (CPM) and Program evaluation and review technique (PERT). Both methods are flexible and are able to catch the changes in time. The CPM uses one estimation of the length of given activity, whereas PERT uses optimistic, pessimistic and possible variants from which concludes the estimation of the length of activity. So, PERT is used for projects where it is more difficult to estimate the time length of activities. The CPM is the most common method which uses a forward and backward pass to find out the critical activities (Svozilová, 2006; Verzuh, 2003).

The last but not least is a Milestone Chart. This schedule is often used for communications between the project manager, sponsors, stakeholders and upper management. Milestone is an exact time date, which is connected to the exact event. In practice, it is often just used in table sheets. Also, milestones use deliverables to identify basic project segments (see Figure 12: Milestones chart) (Burke, 2013).
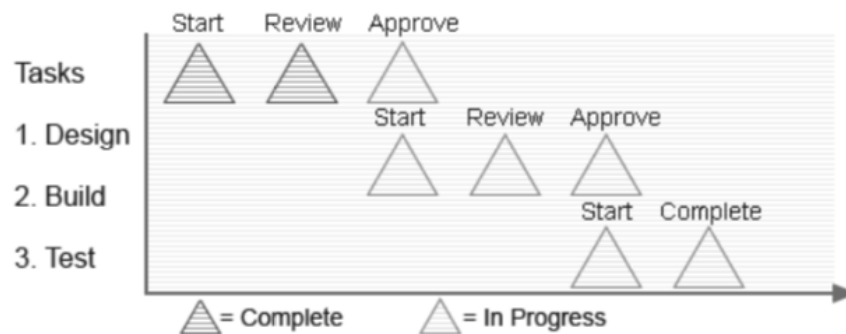
Figure 12: Milestone chart

(Source: IBM, 2017)

1.7   Project risk management

Risk management is a proactive decision-making. Creating the risk management plan involves several steps. There are identifying the risks, analyse the risks, create a risk response plan, track and control the risks, and react to the risks (see Figure 13: Risk management steps). Also, the project manager should involve in the risk management as many stakeholders as possible in order to ensure that all potential risks are captured (Project Management Institute, 2008).
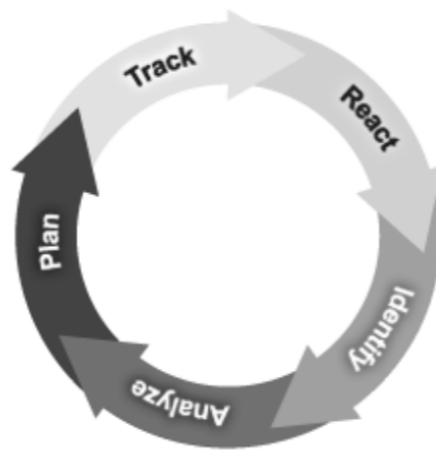
Figure 13: Risk management steps
(Source: IBM, 2017)

Thanks to the changes which happen due to risk events the elements of triple constraints are affected. Furthermore, if one element changes, the other ones are affected because they are mutually dependent. If the range is enlarged, for instance, there is a change in schedule and costs (Harrison, and Lock, 2017).

1.7.1 Risk identification

Firstly, it is highly important to search and identify the risks. The probability that the risk can happen is from zero to one or in percentage. The project manager has to determine, which of them could lead to negative consequences or even loss. On the other hand, she/he can look for risks, which can have opportunities. The project should be reviewed on a regular basis to ensure that no significant risks are missed. The aim of this step is to write down a list of the main potential risk that affects the outcome of the project. There are key project areas, where potential risks may occur

such as skills, resources, time, quality, cost, familiarity with the operations and so on (Harrison, and Lock, 2017).

There exist four important types of risk. Namely, it is business risk, pure risk, known risk, and unknown risk. The business risk is related to actual doing of business with the opportunity of gain or loss. The pure risk is just the probability for loss only such as natural disasters. The known risk is the risk that could be managed and controlled. The unknown risk is the one, which is not recognized (IBM, 2017).

1.7.2 Risk analysis

In this step, the project manager defines the probability and impact of each risk to set the exposure/resume. There could be used both qualitative and quantitative methods for estimating it. After that, the project manager is able to prioritise the attention for the risks, which worth the attention (Kerzner, 2003).

As was introduced qualitative and quantitative analysis are able to be used. The qualitative approach helps to estimate the probability thanks to levels such as low, medium, and high, which says the probability that the event can occur. These terms have to be used among the team similarly. After the determination of the probability, the next step is to the definition of the impact, which has the same levels as the probability. In other words, it has low, medium, and high levels of impact on the project. The following Figure 14: Qualitative analysis, shows the relationship between these two variables (Raftery, 2003).
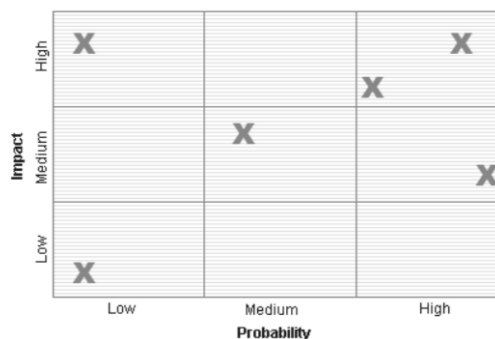
Figure 14: Qualitative analysis

(Source: IBM, 2017)

The other quantitative approach uses numeric basis from zero to one. The probability, which is equal to zero means that event does not occur; on the other hand, one means the event will occur. The impact has the same measurement. The zero means no impact at all, and one means the maximum impact. These two make together with the whole exposure/resume of the given risk (IBM, 2017).

1.7.3 Risk response planning

The step risk response planning identifies what should be done with the particular risk. It describes the actions. which lead to elimination, reduction of risk (Barker, and Cole, 2009). In a broad sense, the response to the risk could be made through acceptation, transfer, use of insurance or reserve, and mitigation or contingency planning (Gray, 2006).

The project manager has to be sure that the actions are done within the relevant period. The risk triggers are indicators, which specify an action that is taken if the trigger event happens (Burke, 2013).

1.7.4 Risk tracking and control

The project manager collects and analyses data about given risks if the action should be done or not. Moreover, meanwhile there could happen events such as new conditions arises, which can change the probability and/or the impact of the risk, new risk can appear, on the other hand, some can disappear, new solution happen to be more efficient due to changes and so on (Burke, 2013).

1.7.5 Risk reaction

In this step, the implementation of the chosen action plan is taken. The steps usually are following. There could be insurance of negative event, which means that the risk is transfer into other subject, mitigate the risk by suitable procurement, elimination of the risk by introducing new solution, which given action does not include, creating the spare time money and so on, which helps to compensate the risk, creating the plan B, which is done when the risk happen, and acceptation of the risk (Barker, and Cole, 2009).

The concrete solution can lead to costs, with which the project manager has to count with. However, the solution's costs need to be lower than the value of the risk (Harrison, and Lock, 2017).

1.7.6 Risk management plan

This particular plan documents how to identify, analyse and mitigate the risks of the project. The plan has to be checked by the team and other parties. If needed, it has to be updated by the changes that happen in the project (Loosemore, Raftery, Reilly, and Higgon, 2012).

One of the most used methods in risk management is called Risk project analysis; in other words, it is called RIPRAN. It is the empirical method that serves for analysis of the risks of the project. It consists of four main parts such as identification of risks, quantification of them, reaction, the whole observation of the risks. These steps are quite similar to those described in this chapter (Tichý, 2006).

1.7.7 Project change management

Change management means procedures, which control all the changes that arise within the project. It is a vital action due to the fact of ensuring the success of the project. Changes have to be documented and everyone is aware of them. Uncontrolled changes lead to overruns costs, late products, low quality and so on (Heagney, 2016).

The changes are in almost every project, so it is important to set the baselines of the project. The baseline can be described as an original plan. The baselines consist of data by which the activities of the project are controlled and so according to these baselines the change is managed. There are three main types, which have to be set for every single project. The scope baseline consists of requirement baselines that is set after all requirements are defined and approved by appropriate parties (what should be done). The schedule baseline is set after the project planning is done and approved (it says when the actions should be done). The cost baseline is established

after all costs are established and are approved (how much it should be done) (Heagney, 2016).

There exist to types of changes. The changes are contractual or technical. The contractual changes are the one which happens thanks to changing in the terms and conditions, scope, requirements, costs, schedule. In other words, they are usually external and some item in the contract is changed. The other type technical change arises from the implementation of the solution. They are usually internal, and scope baseline serves as baseline for this kind (IBM, 2017).

The project manager has been sure that the change processes are set, documented and known by project stakeholders and other important parties. The process of change management includes the steps that are described in next subchapter.

1.7.8   Change management process

Firstly, the change is identified in the change management process by someone on the project. This step has to be documented and considered by the project manager or change control board. So, the second step is the clarification of the scope, which means that the change request is reviewed. If the change is large, there has to be the estimation of the complexity and cost of investigating is done as the next step. Then, finally, the change request is approved, rejected or deferred by the project manager or change control board (Harrison, and Lock, 2017).

1.8   Project cost management

Another part of project management is the project cost management. It mainly covers the estimation of project costs, budgeting, and cost control. These three areas are strongly related and interacting. Moreover, a rough cost estimation can be done even before the project is agreed in order to see either benefits or drawbacks (Lock, 2007).

In order to estimate the costs and make a proper budget, it is necessary to have an overview of the kinds of costs that are there. Direct costs are the once that are quickly perceived and easily influenced by individuals. Other is direct overhead,

costs which can be linked to the product/service, however are not directly countable. So, the project management has to count with them in the long run in order to be sure of staying within budget. Moreover, organisation that executes a project has overhead costs, which are not directly linked to the project, but still have to be covered by it during the time of its performance (IBM, 2017).

The creation of cost estimation is based on WBS because it includes all tasks (Burke, 2013).

1.8.1 Cost estimation

The project manager has to satisfy all interested parties and on the other hand make efforts to keep costs low and control the time that is used for the project, and also use of human, material, and financial resources. Firstly, it is sufficient to set direct costs, because the indirect costs are not so easily identified (Schwalbe, 2011).

Cost estimation is the process, which forecasts and develops the assessment of monetary resources needed. It serves as a basis for control, allocates resources, estimates duration, assesses project viability. It has inputs such as scope, schedule, human resource plan, risk plan, organizational assets (Schwalbe, 2011; Turner, 2009).

In order to set the cost estimations, these techniques and tools can be used. The expert judgement means that the opinion of the expert with historical information is used. Another one is called analogous estimating, which is less accurate tool based on historical data when there is no a lot of information. The parametric estimating uses statistical methods in order to estimate cost and budget. The other method, which is used is the bottom-up estimating. It is a tool, which estimates the costs for the lowest levels of project WBS and sums these amounts to get cost for the higher levels (Project Management Institute, 2008).

The cost estimation could be done together by the team because these people know what they will need to have during the project. This estimation is afterwards used for the creation of the budget (Dobson, 2015).

1.8.2 Budget determination

The budget determination is a process of establishing the authorised cost baseline thanks to the estimated cost of individual activities of work packages. Attributes which serves as inputs are cost estimation, scope baseline, schedule, organizational assets and so on (Project Management Institute, 2008).

So, in conclusion of this part, it provides an overview of the key knowledge, tools, activities, and methods, which are needed in order to provide a practical part of the thesis. The company ABC has never experienced proper use of project management tools before, so the author brings to the company brand new knowledge, which is able to processed the project in convenient and successful way. So, now on, the theoretical part gives the framework for successfully accomplishing the project. The next chapter starts with analyses of the external and internal environment, which also provide all important information and factors for success of the project in the company.

2 ANALYSIS OF THE CONTEMPORARY SITUATION

This part focuses on a contemporary situation, so in other words, this is the pre-project phase. The author studies the factors that could influence the project and vice versa. Moreover, thanks to the fact that owners do not want to spend more than five million Czech crowns and the project does not have a huge extent; the following study considers and summarises essential information from key analyses, and moreover, it answers the question, if it is the right time to undertake and realise the project. The result of this part could either recommend or not recommend the project. In addition, it should show the way, which the project could be feasible done.

So, in this chapter, the introduction and necessary information of the company are set, which will furthermore help to maintain the best solution for this particular company. And moreover, the chapter focuses on analyses such as PESTEL analysis, Porter's five forces analysis, main competitors, key success factors of the industry, McKinsey 7S factors, and company's key competitive advantage, which will provide the suitable way how to reach the aim. The key elements are also labelled as strength (S), weakness (W), opportunity (O), or threat (T), which are afterwards summarised in SWOT matrix.

2.1 Basic information about the company

The company ABC was established in 2015 (W1) by two business partners. The company is specialised in production and sale of fresh trout by specialised recycling aquaculture system. In other words, the company is operating in the fishing industry. As is written in introduction part, the fishing industry could be described as one of the oldest ones in the world and also very broad. It includes fishing on the open seas but also aquaculture operations in fish farms, which is a case of the company ABC. The whole industry involves several activities such as fish catching, transportation of the fish, distribution, harvesting and so on (Khushboo, 2017). The company is focused only on the South Moravia Region because they want to provide only fresh trout that has the delicious taste and is abundant on vitamins,

omega 3 (S1). The business partners of the company have the same share, so fifty percent each, so all the decisions are made based on their agreement (W2). The business partners graduated from agricultural university, so they have needed knowledge of this fishing industry (S2). The company is located in one small village, where one of the business partners lives. The village is situated in the South Moravia Region, it is thirty kilometres away from the centre of the Brno (W3). Moreover, it is placed next to the main road, which is busy thanks to the fact that this way is used by people, who have cottages in this part of the country (S3). The farm is brownfield. The farm is rebuilt from the cow-house, which was not use for a long time. In addition, the water used in the specialised system is used from their water well.

The fish farm has a specialised system, in other words, it is new way how to produce fish without the need of sufficient environmental background such as stable weather, clean water, ponds and rivers in perfect conditions and so on (S4). The system is fully recycling aquaculture system for fish farming especially of rainbow trout. The production is able to reach over 50 tons of fish. It has two main sectors, which include fish hatchery, rearing of fish, and quarantine. Moreover, the company has its place, where are able to prepare the fish for selling and other free space.

This system has several benefits, which the traditional way of production of fish in ponds cannot ensure, such as the water is perfectly clean with nearly zero-waste of water (S5) and it has really low level of impact on the environment (S5). Also the fish cannot catch the disease because of inconvenient weather conditions, the production is during the whole year, the fish is delicious and eat only certificated feed (S6).

Nowadays, the company sells its product only to other businesses such as restaurants, hypermarkets, supermarkets, or other fishing companies, which need alive fish but are not able to produce them themselves. This business is quite convenient for the company because these subject usually take significant volumes however the prices are lower (W4) because of that, and moreover, the company wants to broaden its customer base because not all the fifty tons want to just sell to

other businesses. So, the company have decided that it would likely to sell its product also to end customer. So, take into account B2C marketing as well. The owners of the company perceive its fish as the quality product, which contains several beneficial vitamins that the human body deserves so also the end customers could appreciate the direct selling option.

2.2 What the company wants to achieve

As was mentioned above, the company nowadays only sells its product to other business. However, it wants to broaden its customer base and sells fish to end customers due to several factors such as it wants to be closer to the end customers, the higher prices would be possible, not all fifty tons the company ABC wishes to sell to other businesses and moreover it wants to share with end customers its story and quality of the fish. The company wants to have sustained financial prosperity. So, in the future it would like to sell half of the 50 tons to the end customers, and the other half still to the other businesses. The price for the end customers would be 135 CZK/kg of alive fish without VAT and 255 CZK/kg of alive fish without the VAT, which will be prepared by the machine.

2.3 PESTEL analysis

The analysis concludes the essential factors that are able to affect the company and its project as was already mentioned in the previous chapter. The key ones are further used in the SWOT analysis as opportunities (O) and threats (T). If understanding these external variables are not neglected; the company is closer to achieve a success (Lynch, 2006).

2.3.1 Political factors

The political environment is relevant for every company because it is able to influence for instance the profitability of a company very considerably. The Czech Republic is situated in Europe, where the political and legal environment is stable and democratic (O1), which is a positive aspect for the company. Furthermore, it is a member of the European Union (EU). However, there is nowadays a rise of populism and political polarization but still pro-EU, pro-business approach prevails. Also, political parties have to respect fundamental democratic principles,

hereby the companies are able to provide its business, which is a basic for continuous running of the companies. It also has press freedom, law enforcement, good access to information, which is a favourable situation for companies in this country (The Heritage Foundation, 2019).

According to the Corruption Perception Index, the country has a 38th position from all 180 measured countries. The country has a better result than the previous years. This indicates that perceived public sector corruption is getting lower, which is a more convenient situation for the company (Tradingeconomics, 2019).

2.3.2 Economic factors

The Czech economy is strong. Moreover, the Czech currency is nowadays one of the strongest ones in the world. Also, the inflation rate is more or less moderate. Unemployment is one of the lowest in the EU. So, salary growth is still expected (T1). This situation can increase the costs of the companies. Also, Czechs use a loan a lot these days. The companies need to be aware of the fact that people will have to use their wages on paying it back (Deloitte, 2018; FocusEconomics, 2019).

Moreover, Czechs also spend a lot of their wages, and do not save them. The wages in South Moravian Region are one of the highest within the country and there is a high number of inhabitants (O2) that is in favour of the company (Buřínská, 2017; Český statistický úřad, 2019).

Furthermore, the retirees spend the most money on food (O3) based on the fact that they are used to prepare the meals for themselves. The working group also spend around twenty percent of its costs on food. Moreover, according to the statistics, people more and more care about the quality (O4) of the product and the price is actually on the second place what are people interested in when they buy food in the shops. These facts are important to take into account for companies, which work in the industry that provides food (Brož, 2016; Česká spořitelna, 2017).

There is also an interesting fact about the average price of the meals in the South Moravia Region, which is around one hundred and twenty Czech crowds (O5). This

price in comparison with other Czech regions is the second highest. This fact is one of the key ones when the company introduce its prices to people as an alternative to other meals (Divinová, 2018).

2.3.3 Social factors

Most people who live in the region are between fifteen to sixty four years old. These people more and more want to live in the surrounding of the cities, they like villages (O6). Also, in the region live more than one million of inhabitants. So, the companies should be aware of that (Česká televize, 2016; Český statistický úřad, 2019; Kurzy.cz; 2019).

The trends that people follow in this country are nowadays also connected to an interest in what they eat, how they spend their time and choose the companies they want to support. Human beings more and more care about company culture and the behaviour of companies. Customers are interested in the origin of a food. The demand focuses on the quality of the food and wants to know its journey how to get to them. The food should be healthy, delicious, and nutritive wealthy (O7). Also, people like the convenient way of delivery (O8) all the kinds of items to their homes. It is nowadays more and more used service (Datinská, 2019).

Moreover, the farmer's markets (O9) are nowadays the favourite place to go on the weekends and buy quality variety of products there. The reasons why people go there are such as the quality, fresh, not processed products and support of local business. They also appropriate the community that this event creates and tradition, which is brought back. On the other hand, people are still used to buy food in the supermarkets and hypermarkets (T2), still fewer people buy this item online (T3), which is not an optimal situation for online food businesses (Fluxa, 2017; Michl, 2017).

However, customers still want to have easy preparation of the meals (T4), so the ready meals are possible to buy in supermarkets more and more. The company needs to be aware that people also use this convenient way how to eat meals (Fluxa, 2017; Michl, 2017).

Moreover, in the menu of the restaurants, there is no necessity to have meat as the main ingrediency. Vegetables are these days introduced as one of the most favourite main part of the meals. In addition, the vegetable is reshaped into meat looking food. The vegetarians in number are also increasing (T5) (Zábranský, 2017).

One human being eats one and a half kilogram of freshwater fish per year (O10). Most of them are imported (T6). In the case of the trout, ninety percent of consumed are imported to the country (Vavroň, 2016).

According to the statistics, advertisement is the source of information (O11) to about one-third of the population. Moreover, people buy a product based on the advertisement is about forty percent who undertaken the questionnaire. The advertisement that helps to choose the given product is television, newspapers, social media, and billboards (O12). These aspects are essential for the companies, which want to make attention to potential customers (Michl, 2018).

2.3.4 Technological factors

Access to the internet has around eighty percent of the people in the Czech Republic. Doing business through internet is nowadays new phenomena, so also the Czechs are interested in this way of shopping but still not as much as in foreign countries. According to statistics around one half of the population has bought something through the internet. The key fact is that most of them purchase product or service, which are produced in our country. The women usually buy clothes, food, toys, books and newspapers. The men mainly electronics and sport wear (Český statistický úřad, 2017).

Thanks to the internet, the companies can use several ways how to interact with potential customers. The website is a crucial tool, which is able to make a good impression to potential customers. The website should be usable and convince customers to buy the product. Moreover, these days are popular online tools such as Facebook, Twitter, and Instagram (O13). And in addition, the direct mail helps customers to keep in mind that the given company exists. These tools the company

should definitely consider as communication tools with customers (Česko v datech, 2019; Statistika a my, 2017).

In this fishery industry, there exist new technologies that help with fish farming. There is the recirculation aquaculture system that cleans water to be cleaned by sophisticated filtering system and to create a perfect environment for the fish and their growth. It is very economical for the water spending, but on the other hand, it is quite costly to buy. The system ensures that the fish are tasty, still available, with bio quality, healthy and are grown in right conditions with environmental sustainability and nearly zero-waste of water technology (Farma pro všechny, 2019).

2.3.5 Environmental factors

The Czech Republic as a landlocked country has the fishery industry mainly focused on freshwater aquaculture. The trout as a fish lives in the water in the Czech Republic; however the number of them is not rising. They live in deep waters and so global dryness, which appears in the country is not suitable for them in the traditional way of production (O14). The decrease of rainfalls is not good for conventional fish farms in brooks.

Moreover, the temperature of the water has an increasing tendency, which is notably not right for this kind of fish. This situation also leads to their decreasing number in the country. However, this situation is actually in favour of the companies which produce this fish in specialised technologies (Krutilek, and Hromková, 2019).

In addition, there is a high probability of bad quality of the water due to the fact that unwanted pesticides, substances and liquids or even substances hazardous to health can be part of it. It is not just an issue of the Czech Republic. Also, the fish from foreign countries such as Italy were found ill (O15). These cases give opportunities for companies, which have healthy fish and are able to declare it (Loudová, 2018; Novinky.cz, 2019).

People more and more care about current environmental problems. They want to limit pollution and reduce greenhouse gasses, protect the climate, recycle and use renewable resources. Also, a trend like "going green" is on the rise in the country. Moreover, they focus on eco-friendly products. Also, this industry should adopt in terms of eco-friendly products (O16), such as reusable bags, the paper receives, car deliveries, use of water, and so on. This means that those kinds of companies have a competitive advantage if potential customers care about these activities (Burns, Velinger, and Asiedu, 2018; Kočí, 2003).

2.3.6 Legal factors

The companies that are in this industry need to be aware of several legislative factors that influence them. There exist high standards that are regularly controlled by given offices.

Fishery is part of agriculture, concretely animal production in the country. So, legislatively it is connected to Act No 99/2004. Competencies of water, and who is in charge, and quality of water are linked to Act No 254/200 and Act No 61/2003. About the fishery delicts, the Act No 237/2012 is written. The veterinary aspects and making from the fish products are made by Act No 279/2003. All the legislation undertaken in the country is fully compatible with the EU's regulations. There are several other rules connected to the industry such as certificates, packaging, audits, false food, and so on that company needs to follow. As could be perceived, this industry needs to count with strict rules (T7) (2C analytics, 2016).

In connection with the marketing of the companies, the EU also has directives, which define misleading advertising. The company needs to be sure that branding, statement another representation of the product/service is not false or deceptive. Moreover, if the company collects, uses secures customer's information, it needs to be following the Privacy Act 1988. The EU General Data Protection Regulation (GDPR) puts together data on protection requirements. Also, The EU's Directive 2005/29/EC sets fair business practices to protect customers (2C analytics, 2016).

2.4 Porter's five forces analysis

The fishing industry is a sector in which the company operates. Therefore, it is essential to use such an approach that reveals the characteristics and external forces of the industry. It could be defined by Porter's five forces that show potential opportunities and threats, too (Sedláčková and Buchta, 2006). However, the fishery industry is very specific and find proper information is not an easy task for the author.

2.4.1 Rivalry among competitors

Firstly, the author only focuses on the local rivals due to the fact that the company only offers fresh fish. Producers in the Czech Republic mainly focus on carp. This fish is mostly produced in ponds. Most of them are organised in Rybářské sdružení ČR. The number of them is given more or less by the environment so there is no space for new ones. The most concentrated traditional producers are placed in South Bohemian Region, Central Bohemian Region, and Pilsen Region. These are not able to produce the fish so often than the second type. However, there exist new specialised technology that allows growth of fish in farms. But still, just a small portion of the competitors that have these specialised farms exist (about 2 percent) (2C analytics, 2016).

In addition, there are estimations, which predict that the producers will want to leave the traditional way and more and more will focus on specialised farms due to several negatives, which the traditional one has such as pollution of water, demanding water consumption, ecological strain, and questionable quality of the fish (2C analytics, 2016).

On the market is no dominant subject, there exist a few big ones and a lot of small businesses. In the business to business market, the most deals are done thanks to good relationships and mainly based on the quality of the fish. Also, the price makes its role (2C analytics, 2016). So, according to this situation, the experience of the owners of the company, and author's opinion, the rivalry among competitors is perceived as a medium.

2.4.2 Possibility of new entrants

Farming fish is a specific business, which is not quite easy to provide. In the country, there are basically two types of businesses. The first traditional one is done thanks to the convenient environment, which provide the basic needs for the producers. The number of the providers thanks to this is more or less given, as was mentioned in the previous subchapter. The second type is done by specialised new technologies that help with fish farming. It is the recirculation system that cleans water to be cleaned by sophisticated filtering systems and so create perfect environment for the fish and their growth. However, this one is quite expensive, and moreover, the owners need to deal with strict rules by several authorities thanks to the industry. So, capital requirements are high, and the knowledge of the given field as well role (2C analytics, 2016). So, according to the situation, the author's opinion and experience of the owners, the possibility of new entrants is still low.

2.4.3 Threats of substitutes

This particular industry faces other forms of meat such as beef, veal, pork, lamb meat, poultry meat, and other specific meats such as venison and crustacean. Also, the vegetarians take into account as a substitute the prepared vegetarian meals as meat such as soya. However, the menu what people eat should be various, and the fish meat is rich to proteins, essential fatty acids (omega 3), vitamins B, A, and D. According to diets' recommendations people should eat two portions of fish per weak. Eating fish prevents people against heart attacks and strokes (Veselý, 2005). In the author's opinion and experience of the owners of the company, the threats of the substitutes are perceived as a medium.

2.4.4 Bargaining power of suppliers

A lot of fish farms also buy roes from France and Denmark. These are bought in big volumes, and there are a lot of suppliers, who offer them. The roes have certificates, quality, without diseases, during the whole year. In the case of the country, some fish farms, which are not competition based on the location, order the roes together (2C analytics, 2016). So, the bargaining power of suppliers is low.

The companies in this industry are also in connection with the suppliers of the feed material. There are a lot of options that offer more or less the same products. The Czech companies from this industry (mainly ones with the specialised recirculation systems) can buy it. The companies also have quite a good position because they usually purchase feed material in significant volumes (Holmyard, 2016). So, according to this situation, the author and owners of the company perceive the bargaining power of suppliers as low.

2.4.5   Bargaining power of buyers

The author mainly focuses on fresh fish from freshwater of the industry thanks to the fact that the company only produces this kind of fish. The fish is not a frequent type of meal in the Czech Republic, as could be (T8). The favourite freshwater fish are carp, trout, and pangasius. The people, who are used to eat fish and prepare it do not mind go and shop in specialised shops and farms (O17). These consumers demand fresh fish. However, still, the first place, where the customers buy fish, is in supermarkets and hypermarkets (T9). In addition, the fact is that usual place, where people eat fish is home rather than in restaurants (O18). Also, the reasons why people do not eat fish are that do not know of quality of the company, not convenient way of eating, no knowledge of recipes, and prices (2C analytics, 2016).

According to the statistics, the production in the Czech Republic is lower than the actual demand. In the country is consumed around four thousand tons of trout per year, however, only one fourth is produced in the country because there are mainly small companies which are not able to provide such a volume. Moreover, the customers according to the taste, like the trout the most (2C analytics, 2016). So, according to this situation, the author's opinion and experience of the owners, the bargaining power of the buyer is low.

2.5   Main competitors

If the company increases the scope of the knowledge of competitors, it can reduce risks from competitors' actions (Von Krogh, Nonaka, and Aben, 2001). So, the companies should know who other competitors are, what they offer, what their strategies are, and so on. All that information can help to stand out.

There is a considerable number of mainly small companies as was mentioned, so the following companies are chosen based on products, the location of the company, and according to the fact that often the company ABC competes with these companies. The author reached the following information based on their websites, mystery shopping, and experience of owners, who have visited these competitors.

Rybářství Hodonín, s.r.o. is a traditional company with a long history. It has quite a full offer, the most selling fish and the one, which the company prefers, is the carp. It produces the fish in outside, which has led to several horrible fish deaths last year and also already this year. The fish there suffers from dryness and even illnesses, so the customers should be aware of these events before buying the fish. The trout is cheaper there than in the company ABC, however, the shop is quite far away from the Brno (Rybářství Hodonín, s.r.o., 2019; Solaříková, 2019).

Rybníkářství Pohořelice a.s. is a traditional company with long history aw sell. They have a broad offer as well. The shop is from Brno away at the same distance as the company ABC. It buys the trouts, so they do not growth them by themselves. Moreover, they are also more expensive. The company more focuses on the carps; they have certificate Pohořelický kapr. The outstanding characteristic is that the company provides a lot of actions and events for customers, who appreciate them (Rybníkářství Pohořelice a.s., 2019).

S.M.K., a.s. (Rybářství Skalní mlýn) is perceived by the company as the main competition based on several characteristics. They are the one that produce Punkevní pstruh. It has a lot of certificates, such as regional food as a brand. The company is specialised on trouts. On the shop, the fish is cheaper than in the company ABC, but the shop is not closer to the Brno. Also, the delivery is payable service that cost a costumer quite a lot (Rybářství Skalní mlýn, 2019).

KINSKÝ Žďár, a.s. is interested in carps mainly but still produce trouts as well. In addition, the company is able to deliver saltwater fish. The company has also the recycling aquaculture system, but this one is open, so the environment still is able

to affect the production. However, the shop is quite far away from Brno. Also, Rybárna Šopík, which is situated in Brno, takes the fish from this company. However, the fish there is costly (KINSKÝ Žďár, a.s, 2019; Rybárna Šopík, 2019).

Pstruhařství Jizerské hory s.r.o. is one of the biggest recirculation aquaculture system in the country. The company produces trouts, which mainly offers to other businesses and abroad. The prices are similar to the company ABC. The company is able to deliver the fish however, the customer has to pay for it. The company for the clients from Brno is however really far away (Pstruhařství Jizerské hory s.r.o., 2019).

Globus Brno-Ivanovice is one of the hypermarkets, where the fresh fish could be bought. However, the prices are really high, and the number of fish of given kind is very minimal. On the other hand, it is close to the city centre, and the people there can also buy other food and meals (Globus, 2019).

OCEAN48 s.r.o. is only a shop with fish; actually it is a chain of shops, which also could be found in Brno. On the other hand, it offers broad kinds of saltwater and freshwater fish. The fish are mainly distributed from foreign countries. The prices are quite high. Moreover, it creates several events for customers to make them used to eat fish (OCEAN48 s.r.o., 2019).

In summary, these companies have several in common. They have in common good name, and long history (T10). They were founded much earlier than the company ABC. Also, they try to be close to their customers; however just a few of them are considerably close to Brno city. Also, most of them offer not only trout but mainly carps, so the offer is broad. The prices are usually higher than the prices of the company ABC.

2.6   Key success factors

In fish industry are perceived these key success factors. The often misled factor is the knowledge of the wants of potential customers. Furthermore, be proactive and

create these wants. The production size is important too because it is connected to positive effect to fix costs, so the supply power of these companies is easier thanks to its prices. However, the quality of the product is perceived as one of the crucial ones. Also, the key factor is the fact that the product is not easily consumed (T11), and the price is also a factor. The other one is the appropriate technology that is used in the company and the ability of the employees. In addition, in the industry are important the connections with other potential customer business, so the ability to trade is important as well. Also, be able to deliver the fish where people are able to buy it. And finally, as was mentioned in the previous chapter, the knowledge of fish (usually connected with long time history and tradition in the industry) and also legislative one is valid characteristics of a successful company (2C analytics, 2016).

2.7 McKinsey 7S analysis

This technique studies seven key factors of success within the internal environment of the company, which could affect the project. Also, it is done according to the owner's discussion with the author, what the author has the opportunity to experience and communication with the employees.

2.7.1 Strategy

The strategy is connected and come out from aims, which the company wants to reach in future. In the long-term, the company still to intends to produce at least fifty tons of trout, which half of it will buy end customers, and the other half will be for businesses. This could be also called as a program in the terms of the project management. So, the company wants to undertake the first step, which will lead to this aim in the future. This should happen within five years in the South Moravia Region. So, the company's short term strategy and project are in accordance with it. The priority of the company is to produce quality, healthy and tasty trout, which people will prepare and eat on a regular basis. They want to be close to the customers as possible. The company wants to care about the customers individually according to their needs (S7). In addition, the recycle aquaculture system cares about the environment with nearly zero-waste of water use, which is definitely appreciated by the company.

2.7.2 Structure

The owners of the company have the decision power; their shares are equal, so they need to agree on the important things every time. One of them focuses on the operations of the farm, and the other one does the paperwork, which included finance, choosing the suppliers, legislative, selling paperwork, and so on. There are four employees. The employees usually feed the fish, prepare them to the selling, clean the farm, and check the technology. To be concrete, one employee often cares about hatchery, two cares about the main farming of bigger fish, and one focus only on the preparation of the fish, and selling. So, the structure of the company is a line structure, which is quite common among small companies.

2.7.3 Systems

In the company is not used any of complex information systems. The accounting is outsourced (W5). Other tools that keep track about the actual amount of fish, feed and so on the company created by themselves. In addition, the employee, who sells the fish to customers has mobile phones, which are owned by the company. The owners with this employee have meetings on regular basis, otherwise communicate via emails, messages, and WhatsApp.

2.7.4 Style

In the company, it is mainly perceived democratic style of leadership. The company is a small organisation, so the employees are able to conversate with owners basically when needed. However, still these two owners make the main decisions.

2.7.5 Staff

As was mentioned above, there are four employees. The employees work in the industry for a long time, so they obtained needed experiences. The subordinates can directly communicate with the owners and spend their working time together.

The employees usually feed the fish, prepare them to the selling, clean the farm, and check the technology. One new colleague is ready to focus only on selling the fish. To be concrete, one employee usually cares about hatchery, two cares about

the main farming of bigger fish, and one focus only on the preparation of the fish, and selling.

2.7.6 Skills

The staff who care about the fish have the characteristics such as conscientious, careful, observe the rules and schedule, be able to interpret the behaviour of the fish, and have the overall knowledge of the recycle aquaculture system. Moreover, they are able to visit foreign companies with similar systems according to friendship with owners, where they can reach the knowledge. The salesperson, who communicates with the potential and actual customers is passionate about his job, emphatic, well-prepared, goal oriented, and relationship driven.

2.7.7 Shared values

The company wants to show that the specialised nearly zero-waste of water technology is the best way how to produce quality fish with confirmed healthy of the product. The added value, the company sees in the availability of the quality product because thanks to the technology the fish are not based on the environment factors.

The company is quite small in the number of employees, so all of them know what the others exactly do, so if it needed, they are able to stand each other. The company's culture is based on long-term friendship, which was made even before the company was established. So, among them, there is strong trust, responsibility, and honesty. However, still what the owners command the employees do. All employees and owners are ready to meet the customer's wants and needs.

2.8   Value chain analysis

The author writes this value chain framework based on the discussion with the owners of the company. The following article describes the main process in the company.

One of the employees drives to the company with whom together order the roes from a foreign country. Afterwards, these roes are disinfected in farm and placed into incubation mangers. In these mangers, the roes are engendered. The employees

need to look after them, and if needed, they have to get rid of shells, the dead ones, and so on. Firstly, they have yolk sacs which give them nutrition. When the yolk sacs are fully absorbed, the employees start to feed them. Till this time, it takes about four months. So, when they begin to eat and swim, they are transferred into main section, new big tanks (Appendix I.). According to the sizes they are divided into several different tanks. In tanks, it can take about the other six months. In addition, there are fed three times per day. Also, the employees need to take care of the right circulation of water, and the right volume of oxygen. This system ensures that the fish is quality, healthy, available during the whole year, and impact on the environment is minimal.

So, the added value is mainly perceived in the overall ensured quality of the fish and its never-ending availability from the system, which has minimal impact on the environment. The whole process is very complex with the main aim to produce the best fish, which could be made. All employees are driven by it. On the other hand, this system is not known by potential customers, so they are not aware of these benefits. However, who have already tasted it, admits that the fish is delicious.

2.9   Key competitive advantage

According to what the author perceives and discussion with managers of the company, there is a conclusion what is the key competitive advantage of the company. The company perceives its key competitive advantage in the quality and healthy product, which the company wants to offer to the customer as close to them as possible. The system has nearly no impact on the environment, which produces the fish during the whole year.

2.10   SWOT matrix

In the previous text are marked key strengths (S), weaknesses (W), opportunities (O) and threats (T) of the company, which are summarised in this SWOT matrix. The graphic version of the SWOT matrix could be found in Appendix II. As is examined, these factors show that there are ways how to reach the company's goal. Strengths

- The company offers only healthy, fresh, bio quality trout with delicious taste rich on vitamins, omega 3 (S1).
- The owners and employees have knowledge of this fishery industry (S2).
- The company is next to the road where drivers as potential customers drive to their cottages in this part of the country (S3).
- The system does not need good environment such as stable weather, clean ponds, rivers in perfect conditions, and so on (S4).
- The recycle aquaculture system provides a nearly zero-waste system of water with very low impact on the environment (S5).
- The fish is available through whole year fed by certificated feed (S6).
- The company wants to and willing to be close to the customers as possible, moreover is ready to care about customers individually according to their needs (S7).

Weaknesses

- Company is quite new in the industry in comparison with other companies (W1).
- There are two business partners who each have fifty percent, so the decision has to be made on their agreement (W2).
- Nowadays, the company only sells the fish to other business in big volumes so the prices are lower than it could be sell to end customers (W3).
- The company is still quite far away from the city centre Brno. It is situated thirty kilometres away from it (W4).
- The accounting of the company is outsourced (W5).

Opportunities

- The political and legal environment in the Czech Republic is stable and democratic (O1).
- The number of people and their wages are one of the highest in the South Moravian Region within the country (O2).
- The retirees as a segment are the one that spends the most money on food (O3).
- Customers more and more care about quality (O4).

- The average price of the meal is one hundred and twenty Czech crowds in South Moravia Region, which is in comparison the second highest in the country (O5).
- People like to live in surrounding villages in the region (O6).
- Customers are interested in the origin of the food, its healthy, taste, and nutritive wealth (O7).
- The customers appreciate a convenient way of delivering (O8).
- People also like and enjoy farmer's markets on weekends and buy local products (O9).
- Person eats about one and half kilogram of freshwater fish per year in the country (O10).
- People perceive advertisement as a source of information (O11).
- Also, TV, direct mail, newspapers, social media (Facebook, Twitter, and Instagram), and billboards are a good way how to communicate with customers (O12).
- The website is key tool, which is able to make a good impression to potential customers (O13).
- The dryness which appears in the country is not good for the trout, which are in traditional farms (O14).
- There exist cases when the trout from foreign countries are ill, such as the last case, the trout from Italy (O15).
- The customers also focus on eco-friendly products (O16).
- The customers who are used to prepare and eat fish, do not mind shop in specialised shops and farms (O17).
- In addition, people prefer to eat fish at home than in restaurants (O18).

Threats
- Salary in the country is expected to rise, which can lead to a rise of salaries of employees (T1).
- People are still used to buy food, mainly in supermarkets and hypermarkets (T2).
- Still, nowadays, not a lot of people use online shops for ordering food regularly (T3).

- Customers want to have easy preparations of the meals, which are possible to buy in supermarkets and hypermarkets. In addition, the bones are not appropriated by customers much (T4).
- The number of vegetarians is rising (T5).
- The most of trout are imported to the country, to be exact ninety percent of consumed is imported to the Czech Republic (T6).
- For industry exists strict rules (T7).
- The fish as a meal is not a frequent one in the country as could be (T8).
- The place, where customers buy a fish is mainly in supermarkets and hypermarkets during their shopping (T9).
- The main competitors of the company have a long tradition, and good name (T10).
- The product is not easily consumed due to its bones (T11).

In summary of this part, the undertaken studies show appropriate time to do the first step to reach the wants of the company in the long run. The studies consider and summarise essential information from analyses, and moreover, the studies answer the question, if it is the right time to undertake and realise the project. The result of this part recommends the project and its need. In addition, it shows the way, which the project could be feasible done. So, author definitely sees opportunities how the company ABC is able to reach its aim and also recommends to do it because it is the right time according to the analysis. The concrete proposal of the project that is created based on the analyses is set thanks to use of project management methods in next chapter.

3   PROPOSAL OF SOLUTION

The content of this main chapter is focused on the project phases. The project gets a detailed scope that comes out from previous analyses. This all is done thanks to the use of project management tools, methods, and techniques, which are described in the theoretical part. The final proposal solution, work breakdown structure, identification of responsibility, time schedule, identification of risks, financial analysis, benefits and other vital parts of the project are described in the following articles.

3.1   Proposal of solution

The solution is based on the wants that the company desires to achieve, and the factors that were found out thanks to previous analyses. In addition, the owners are willing to try these activities and are ready to undertake needed actions. In addition, in Appendix III., could be found calculated importance of each factor, which also shows what the company ABC should do.

As the company wants reach out and be as close to its new potential end customers as possible, there are several ways how to do it and offer them the local freshwater fish, which according to the statistics customers could eat instead of foreign one (S7) (O10) (T6). The local fish is closer to them than the foreign one, so as well the freshness of the fish should be repeated as much as possible to customers (T6). To mention, the communication and business with already made customers from the side of businesses the company wants to continue for sure, however with the ones that are reliable and pay its orders on time (W3). Also, the proposal has only the options, which are affordable for the company.

Firstly, as is mentioned in opportunities, the customers perceive the website as an excellent tool to make an great impression on new potential customers (O13). The company when was established, it has already bought the domain, however still does not obtains the website, so now is a great time to do it. The website can be quite simple but should contain all the information that customers want. There should be necessary information about the recycle aquaculture system, in order to

introduce potential customer its benefits such as nearly zero-waste of water, a very low impact on the environment and so on. So, these characteristics actually can use as a reason why they are on the market quite new, so for sure, they use only modern methods (W1) (T10). They can emphasise the fact that they are not dependent on the weather and environmental conditions, so the fish is available every time, when customers need (S4) (S5).

Moreover, the company should show that the fish is fresh, healthy, with bio-quality and has vitamins, omega 3 and another important source of good for the human body (S1) (O7) (O4). This beneficial impact on the body could be used as one of the reasons, why to eat at least fish meat (T5). Also, focus on the fact, fish gets only certificated the best quality feed, which helps to growth exclusively tasty fish (S6). In addition, the company could show its knowledge in the field, and share with customers some delicious recipes and recommendation what to do with the fish (S2). The recipes should be easy to do, quick, and use only local products as well. The company could sell its local, quality base. And for sure, it could share with the customers basic information about the sizes of the fish, prices, telephone number, and other contacts such an email, and so on. Moreover, the company could make the website according to SEO rules, so that the search engines could place the web in a good position.

Another online marketing tool are social media. The company can communicate with customers via Facebook (O1) (O11) (O12). There is also a possibility to write reviews from customers and share with them actual information, photos. It offers another way how the customers can order the fish. In summary, all content that is described in the previous article could be used as well there in a shorter version.

Moreover, the company should start to attend the local farmer's events and other ones with food, where potential customers are already interested in local brands and quality food (O9). In this context, there exist a lot of options. Moreover, people in the region are used to pay the second highest meal in the country, so the price of the fish could be perceived as a good alternative option and prepare it at home as they wish (O2) (O5) (O18).

As was found out, more and more people start to live in surrounding villages around the big cities (O6). The company could also use this opportunity for how to stand out. The villages have its newsletter by the local authority, where the advertisement is possible, and the villages' have own public address system provided by the local authority, where the advertisement is possible to read and offer one time when the company with fish can arrive in the village (O8) (O12). So, the time for the customers could be convenient, so this way could lower the threat of buying the fish in supermarkets and hypermarkets (T12). This could happen on a regular basis. This is also the way how to offer its product to retirees, who still read these newsletters by the local authority (O3).

Also, the company ABC can open its shop in a place of the company (S5) (O17). As was mentioned before, the company is situated next to the road, where the people drive to their cottages, so at that time they can offer them the fish as well. The fish is easily prepared on the grill, which could be perceived as a quite easy preparation (T4). Moreover, the ones that are used to visit the farms and buy the food there can see the company, so see that what is said by the company is true (O10). Moreover, the company has prepared documentation for the shop. However, still, other actions are according to Appendix III. more actual.

The company also has decided that they will offer the delivery for free (under certain conditions such as the amount of order, kilometres away, time of the day and so on) for their customers, which will decrease of the weakness that the company quite far away (W4) (S7). This is also the added value, which no of their competitors have. So, as they want to be as close to their customers as possible, this is another option how to be. In addition, this could be a strong argument, why buy a fish in this company and not in supermarket and hypermarkets (T9). Moreover, this is a convenient option for retirees, who also spend on the food a lot of money (O3).

In every case of the propagation of the fish, the company needs to focus on the quality of the fish, its fresh, healthy, taste, nutritive wealth, how easily prepare it,

emphasise the process, which is eco-friendly, and stands out from the foreign fish that are imported to the country (O15) (O16).

Finally, the company should buy a specialised machine, which removes some of the bones from the fish, and make small filets from the fish, so the preparation of the fish and eating will be an easier task for consumers. So, another possible threat will be omitted (T11).

In addition, the author creates two typical personas of the possible end customers of the company that are made based on the analyses as well. It could help the company in the next steps to appropriately set the tools, social media, website, leaflets, and so on according to this customer segment (see Appendix IV.).

3.2 Initiation phase

So, when the decision is made the solution of the project is recommended and done, the initiation phase could happen, which sets all-important information.

3.2.1 Specification of type of project

As is set in the theoretical part, Shenhar and Dvir (2004) set the NCTP model, which is used by the author. It helps the author to understand the nature of the project more and make it successful. So, as is mentioned, the project is evaluated by four dimensions, please see Figure 15: NTCP model.
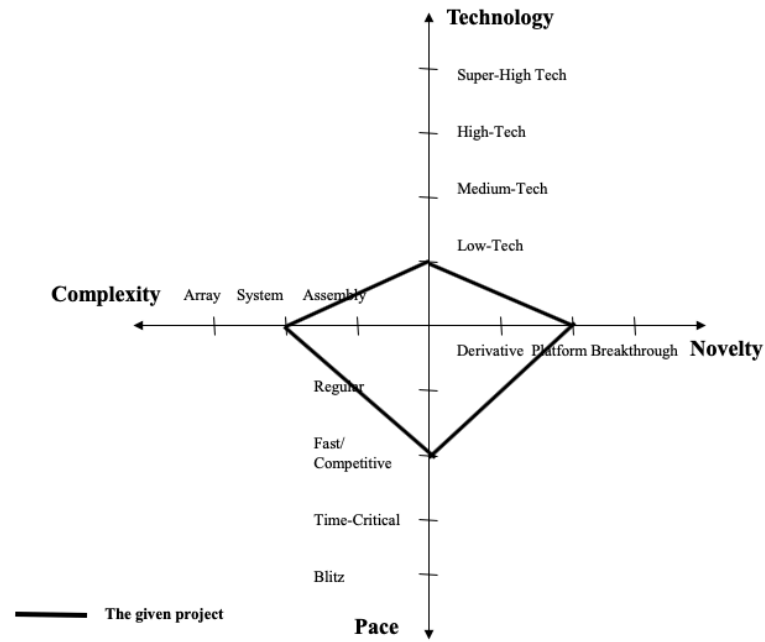
Figure 15: NTCP model

(Source: Own, 2019)

The novelty shows how new are crucial aspects of the project to the company; in other words, how it is new for the company. The platform novelty indicates that firstly, the project needs to be analysed and provided market research, which is surely done in the previous chapter. The product should please customers, ride trends, and marketing tools should emphasise the product's advantages. Moreover, the company is ready to prepare the fish according to their needs. And in the future, it will have an impact on the business.

Thankfully, the technology in this project is known, so the uncertainty in this dimension is low. The low-tech project as this one has a low level of technical risks, which indicates that in this manner, there is low level of uncertainty of postponing, higher costs. The project will use only well established and mature technologies.

The complexity dimension shows how the project is complicated after all for the company. In this case, the project is done by all members of the company, so there is quite a big interaction between them. So, in that case, there can arise new risks in this manner, on which the author has to focus during the risk analysis as well.

Finally, the last but not least is the pace dimension, which tells to members of the team how urgent the work is, so in this case, the project is recommended. In this case, thanks to the uniqueness of the product and the industry, the competitive side is more or less given for now, so as well the pressure is given.

Moreover, according to the Khazanchi and Zigurs (2004), as is written in the theoretical part, the given project could be described as a lean project, because it has quite a low capacity, narrow scope and also the quite low risks. In other words, the project can be divided into manageable parts that could be provided.

3.2.2 Project charter

The project charter summarises the essence of the project, which ensures that all parties understand the aim of the project in the same way. It determines the requirements, which all the important parties agreed on. Please see Table 1: Project charter for all information. This paper author signs up with the sponsors.

Table 1: Project charter

(Source: Own, 2019; based on Rowe, 2015)

Project	New potential customers base of the company ABC		
Created by	Bc. Tereza Káčerková	**Date**	1st June 2019
Sponsors	Owner 1 and Owner 2		
Aim of the project	The aim of the project is to successfully introduce and reach out a new segment of customers (end customers) via newly established deliverables.		
Date of start	1st July 2019	**Date of end**	1st July 2020
Project team	Project manager		
	Two owners		
	Four employees of the company		
Deliverables of project	List of the events (farmers' markets and other), which the company will attend		
	New delivery service		
	Functioning website		
	Facebook page for the company		
	The approved schedule of villages and surrounding of the Brno, where the company will sell its products.		
	New machine		
	Small shop		

Milestones of project	Add settle events to the calendar	1st September 2019
	Free delivery service start to agree on and be offered	1st September 2019
	The brand new website can run now	1st January 2020
	The company signed the contract with contractor	1st February 2020
	The Facebook page is ready to run	2nd March 2020
	The dates when the company can visit the villages are settled	1st April 2020
	The machine is prepared	1st May 2020
	The date of opening the store is announced	30th June 2020
	The results are presented	1st July 2020

3.2.3 Specification of aim

The appropriate specification of the aim of the project is a vital factor in order to reach the success of the project. The SMART technique is one of the most used ones, so the author sets the following goal of the project according to this tool. In addition, this technique is in accordance with triple constraints, which also check the success of the project, as is mentioned in theoretical chapter.

The stakeholders approved that demand of a trout allows focussing on end customers via tools described in the proposal, which will help company ABC to introduce itself and reach out a new potential segment (end customers). The company should be able at least reach one-tenth of the inhabitants of the South Moravian Region (around 110 000 people) per year. The budget of the project should not exceed two and half millions CZK. The project will be done by one project manager, two owners, four employees and two external human sources. Now on, the aim could be divided into characteristics according to the technique, so all stakeholders are able to see the goal in the same way.

Specific

The company ABC produces and sells quality, healthy, trout from low-impact on the environment recycling system to mainly business customers. Now on, they also want to introduce itself and reaches out to end customers as well. This aim will be processed as a project. So, the main objective is to reach out at least one-tenth of the inhabitants of the South Moravian Region within per year and thus be able to offer them its fresh fish.

Measurable

The number of reached potential end customers could be calculated and measured. Moreover, possibly sold fish will be in the price of 135 CZK/kg of alive fish without VAT and 255 CZK/kg of alive fish without the VAT, which will be prepared by the machine, these variables of sold fish can be measured as well. In addition, the budget, should not be exceed. Finally, the project has nine members.

Attained/agreed

The whole project is divided into manageable parts that can be attained. The project manager has to delegate these activities to people, who are able to achieve them and are committed to the project. The important stakeholders approved the project, which is in accordance with their primary needs and wants and based on the analyses.

Relevant/realistic

The analysis were done to ensure that there exists a demand on the side of end customers of a fish and there currently optimal factors of environment, which help to optimise the project. Moreover, the author chooses the tools of communications to end customers, which they are used to.

Time-based

The project is prepared from the 1st July of 2019 to 1st July 2020.

3.2.4 Logical framework

The author uses as well the Logical framework, which maps the main benefits of the projects, the goal of the project, the deliverables, which should be achieved in order to reach the aim, and the way how they could be verified when they are done (Štefánek; 2011). The assumptions of the project are summarised in subchapter Risk analysis of the project. Also, the activities are described in subchapter Work break down structure. And, the deliverables are described in its subchapter. Please see Table 2: Logical framework to look over the project.

Table 2: Logical framework

(Source: Own, 2019; based on Štefánek, 2011)

Objectives	Indicators	Means of verification
Benefit 1: Company will be introduced and possible to reach out to a new potential customer segment.	Indicator1: Number of visited events, and places. Indicator 2: Number of reached potential customers.	Verification1: Agreed events, villages, and farmers' markets. Number of people there. Verification 2: Estimated numbers of visitors of the shop and followers on social media.
Benefit 3: Volume of orders by end customers start.	Indicator 1: Number of sold fish to the segment.	Verification 1: Number of sold fish to this new customer segment.
Benefit 2: Better level of competitiveness of the company.	Indicator 1: Growth rate. Indicator 2: Market share. Indicator 3: Brand awareness.	Verification 1: Higher market share. Verification 2: Higher level of brand awareness and loyalty. Verification 3: Number of sold fish to this new customer segment.
Benefit 4: End customers are aware of this brand.	Indicator 1: Known name among end customers.	Verification 1: Higher level of brand awareness and loyalty. Verification 2: Number of sold fish to this new customer segment.
Goal 1: The aim of the project is to successfully introduce and reach out to a new segment of customers (end customers) via newly established deliverables of the project.	Indicator 1: Number of reached potential customers. Indicator 2: Number of sold fish to the segment.	Verification 1: Estimated/calculated numbers of end-customers in events, social media, visitors of the shop.

Objectives	Indicators	Means of verification
	Indicator 3: Finalised tools of reaching out of new customers.	Verification 2: Number of sold fish to this new customer segment.
Deliverable 1: List of the events (farmers' markets and other), which the company will attend.	Indicator 1: Real list of events that the company will attend.	Verification 1: Number of events that the company will attend.
Deliverable 2: New delivery service.	Indicator 1: Offering new service to end customers.	Verification 1: Number of offered free deliveries as a service of the company.
Deliverable 3: Functioning website.	Indicator 1: The functioning website.	Verification 1: Number of visitors of the page.
Deliverable 4: Facebook page for the company.	Indicator 1: Settled Facebook page with relevant content.	Verification 1: Number of visitors of the page, engagement.
Deliverable 5: The approved schedule of villages and surrounding of the Brno.	Indicator 1: The schedule of approved places.	Verification 1: Number of approved places.
Deliverable 6: New machine.	Indicator 1: Bought machine.	Verification 1: Existing new machine.
Deliverable 7: Small shop.	Indicator 1: The shop will be ready to open in settled times.	Verification 1: One shop is ready. Verification 2: Settled time of opening.
Activities: See WBS.	See WBS, resources, financial analysis, quality of the project.	See Gantt chart and milestones.

3.3   Planning phase

This phase in detail sets up the deliverables, project stakeholders and team and their responsibilities and rights, work breakdown structure, time table, plan of risk, and resources of the project. These components are analysed in detail according to time, costs, technologies, methodologies that are available for the company.

3.3.1 Project deliverables

Thanks to the proposal and the defined aim of the project, the project manager is able to set the outputs, which will be done towards to the main goal of the thesis. In other words, the scope of this project defines the deliverables, which set the boundaries of the project. So, the author of the thesis sets the following outputs, which are in accordance with the approval of owners of the company due to the finance that the company is able to invest in the project right now.

The contacts and list of all important events that the company will be able to attend with its product. The company will reach new knowledge about this segment of people, who likes these activities and could make special offers such as filets of the fish and so on.

Moreover, the company wants to be as close to their customers as possible, so they decide to have delivery service. This will be offered to customers for free under certain conditions (such as the amount of order, kilometres away, time of the day and so on).

The functioning website where the owners will able to post relevant actualities and information about their fish farm. Moreover, the web will have good SEO optimisation, which will help the website to be in good position in searching engine page.

The Facebook page would work as another communication tool with customers. There will also be all important information, all events that the customer could buy the fish, pictures of the fish, introduction of the system, and so on. So, the tool should create interaction between the company and the customers.

The schedule of repeated visiting of surrounding villages and parts of Brno, where the company will offer its fish according to previous local public address system offers and local newsletter's (by local authority) advertisement, so that they will be as close to the customers as possible thanks to this action.

Also, there will be a small shop/place in the company, where the customers can stop by and buy the product of the fish farm. The shop will be open just on given time according to the experience of the owners and employees when the people drive to their cottages and home. When the company rebuilt the farm, they already prepared the place and documentation for the shop, however they were not sure, if to finalised or not. This project shows that they should do it. There will be another output the functioning machine, which will be able to prepare fish as needed.

3.3.2 Project stakeholders and structure of team

The following project's stakeholders are somehow involved or have interests in the project, according to the author. The project manager is prepared to communicate with them as was mentioned in the theoretical part. So, the stakeholders are following: project team, project sponsors, co-operators, contractors, relatives, end customers, business customers, suppliers, competitors, government authorities, media, and public. And to mention, the company will still use already working system such as outsourcing of accountancy of specialised company.

The core project team consists of a project manager, owners, and employees of the company. So, it is essential to say, the sponsors are also the ones that work on the project to be done. Figure 16: Core project hierarchy shows the company's hierarchy according to the project, in other words, it is the organisation breakdown structure, which shows the primary reporting relationships. This also indicates the communication between the members of the project team. This type could be called as a functional type. The owners choose project manager as the head of the project due to her competencies. Other sources of people are external and just time limited.
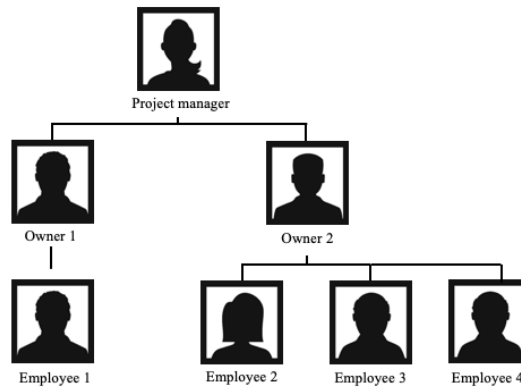
Figure 16: Core project team hierarchy

(Source: Own, 2019)

This type of organisation is used to keep the previous structure of the company, the employee is used to report to owner on a daily basis, there are no other core additional members, all work with people they are used to work, no structural changes are needed. They are grouped according to their functions in the company as was described in previous chapters.

3.3.3 Communication of team

The communication among the core team members will be mainly the same as was already introduced in the company analyses, so they will have meetings on regular basis, otherwise communicate via emails, messages, and WhatsApp. Besides, all documentation will be available via online Google Docs; see Table 3: Communication table.

Table 3: Communication table
(Source: Own, 2019)

What	When	How	Responsible	People involved		
				Owners	Employees	Ex. sources
Project kick-off meeting	Project Start, just once	Face-to-face meeting	PM	✔	✔	
Project Plan	Start & Upon Updates	Document	PM	✔		
Team meetings	Weekly	Document minutes in	PM	✔	✔	✔

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What	When	How	Responsible	People involved		
				Owners	Employees	Ex. sources
		Google Docs.				
Project status meeting	Weekly	Face-to-face meeting, Report via Google Docs.	PM	✓	✓	✓
Milestone reach	As complete	Email	PM	✓	✓	
Closeout & lessons learned (LL) meeting	End of Project	Face-to-face-meeting	PM	✓	✓	

3.3.4 Quality of project

The quality of the project has to be ensured by the project manager. As could be perceived in previous subchapter Logical framework, the deliverables have mechanisms on how to verify them, so the project. Also, the following basic rules are set to ensure that the project will have needed quality.

- All members of the team and all important stakeholders will be aware of the actual stage of the project, and they will be able to reach important information via Google docs.

- Moreover, the feedback and lessons learned will be done during the whole project, which will be summarised in the final meeting.

- The documentation in the Google Docs is up to date.

- The project by all team members will be provided according to the project plan.

- All-important stakeholders will be informed, if there occur key decision-making, change, or risk.

In Appendix V. see template created by the author for project status report and template for lessons learned. Moreover, if the change of the project will be needed (mainly change of scope, time, costs, quality of the project), the author creates for

the company template as well because it has to keep the quality as well. To mention, if the change occurs, all key stakeholders have to be informed. The project manager has to record it and analyses the impact of it. The sponsors and the project manager have to decide what to do next (if the change should be accepted or not). In addition, the project manager has to update all documents according to the change.

3.3.5 Work breakdown structure (WBS)

This work breakdown structure will afterwards help to reach the scope, quality of the project, schedule and not increase the costs. The deliverables of the project are divided into smaller project work activities. Thanks to that these work packages can be assigned to a single person, which is done in the following steps. As could be perceived from the Table 4: WBS, the structure of it is clear to read, follow, and it allows great background for scheduling, planning, budgeting, and also it helps to identify the risks (Passenheim, 2009).

Table 4: WBS

(Source: Own, 2019; based on Passenheim, 2009)

ID			Component name	Brief description
The aim of the project is to successfully introduce and reach out to a new segment of customers (end customers) via newly established deliverables of the project.				
1			Farmers' markets and other events	The activities that have to be undertaken in order to attend farmers' markets.
	1.1		Registration in Czech agriculture and food inspection authority	For selling products in the farmers' markets, the sellers need to do registration in this authority.
	1.2		List of farmers' markets and other food events	Make a list of farmers' markets in the region based on the date.
	1.3		Creating the calendar	For better orientation, the farmers' markets would be also added to G. docs.
	1.4		Communicating with markets	Prepare the email, which will be sent to the contacts, or directly sign up the company to the event.
		1.4.1	Add settle ones into the calendar	When the event will be agreed, it will be marked to the Google calendar.
	1.5		Fees	Fees of the settled farmers' markets.
		1.5.1	Collect the documentation	Collecting the documentation and upload it into prepared Google Docs fold.
		1.5.2	Pay the fees	Paying the fees within the term.
	1.6		Stand	Not all farmers' markets have their stands.
		1.6.1	Make a design of the stand	Preparation of the look of the stand.
		1.6.2	Buy materials	Buying needed materials.
		1.6.3	Building the stand	Building the stand.
		1.6.4	Printing the logo and front of the stand	Set the deal with the printer company, which is able to print the logo and exterior of the stand.

ID			Component name	Brief description
		1.6.5	Prepare the leaflets	Prepare and write the leaflets and print them in known company.
	1.7		Checking the car	The company has its car, so make sure it is working correctly.
	1.8		Checking the tools for transportation of the fish and selling	The company has the systems on how to transport fresh fish, so check it as well.
2			Website	Creation of the website (the company has its domain).
	2.1		Hosting	The company needs to have hosting of the website.
		2.1.1	Research	Find the options, where the hosting can be settled.
		2.1.2	Buy the web hosting	Pay for the chosen hosting.
	2.2		Web designer/developer	The company needs the person who sets the website.
		2.2.1	Connecting with the web designer/developer	One of the owner's sons is the web designer who is able to help.
		2.2.2	Information on the website	Make a list of things, information, which should be part of the website.
		2.2.3	Set the whole website, also with the possibility to order there	Setting the basic layout of the website according to the information on the website. Setting the functions the website should have.
		2.2.4	Create the phone version	The web designer also will do the version for mobile phones.
		2.2.5	Finalizing the design of both versions	The design would be set for both, the website can start working.
		2.2.6	Analyzing keywords	Analyzing the key words in order to have a good position in the searing engine.
	2.3		Content of the website	Content of the website has to be settled according to the SEO and other rules.
		2.3.1	Create of the topics of the website	Collecting the information the company wants to have on its website. Copywriting.
		2.3.2	Schedule of the articles	Creating an online version of the schedule of the articles, which each has to be done.

ID			Component name	Brief description
		2.3.3	Start writing the articles	Write the article, which is currently needed according to the plan. Copywriting.
		2.3.4	Photos	Taking the photos to the articles and on the website.
	2.4		Start to run the website	Official start of the website.
	2.5		Optimisation	Checking if the website works according to the needs of the company.
	2.6		Management of the websites of the company	Management of the website and checking the statistics according to the optimization.
	2.7		Setting the reports from the websites	Write down the reports from the website and share them on Google Docs from Google Analytics.
3			Facebook	Company will be also available on this social media.
	3.1		Contractor finding	The site and content will be firstly made by contractor.
		3.1.1	Summarizing the needs	Write down the needs and wants what should be done.
		3.1.2	Writing a post	Via personal account, write an offer of setting the page and administration through Facebook groups, which associate the people with needed knowledge.
		3.1.3	Choose the right person	According to the knowledge, wage, experience.
		3.1.4	Prepare the contract	The preparation of the contract for the chosen person.
		3.1.5	Signing up the contract	The final settlement of the agreement.
		3.1.6	Set the Facebook page	The contractor sets the page according to the needs of the company.
		3.1.7	Connecting the pages	Connecting the page with the website and analyzing tools.
		3.1.8	Set the Facebook ads	Setting the Facebook ads on the Facebook page.
	3.2		Content of the page	The basic information and short versions of the articles could be taken from the web. Setting the framework of the page.
		3.2.1	Schedule of the posts	According to the experience, knowledge, engagement, the schedule of short post would be set.

ID			Component name	Brief description
		3.2.2	Making bank of photos	Actual and authentic photos from the farm, events to introduce the company to the customers.
		3.2.3	Learning how to answer the messages of customers, which ask	The employees have to learn how to do basic things on Facebook's company page and does the reports.
	3.3		Set the reporting tools	Start doing the reports and according to that optimizes the page. Safe the reports into Google Docs.
4			Visiting the surroundings of the Brno and villages in the region	To be close to the potential customers as possible, the company will also visit customers in their place, where they live.
	4.1		Make a list of the villages and parts of the region	The list is the first starting points, where the company can start. Make an online version in Google Docs.
	4.2		Contacts creation	Create a list of responsible contacts from given villages, where the company could come.
	4.3		Set the deals	Setting the deal with the villages that agree based on given rules. Setting the regularity of the events.
	4.4		Agreement and paying the fees	Paying the fees that the village and company agree.
	4.5		Add the location with a date into Google calendar	The calendar is the same as the calendar with the other actions of the company, which is online and available to all in the company.
	4.6		Advertisement of the actions	The customers need to be aware of this opportunity to buy a fish close to their homes, so the company need to be sure that the message gets to them.
		4.6.1	Write the text of offer to the newsletter by local authority	Write an advertisement, which will be afterwards in the local newsletter about time and date, price and other important information about the event.

ID			Component name	Brief description
		4.6.2	Write the text of offer to the local public address system of the village	Write the advertisement to the local office, where have its public address system, where the offer could be read.
		4.6.3	Send it to the authority	Send the advertisement and offer to given office authority of the village.
		4.6.4	Pay a fee	Pay the needed fees from this kind of advertisement.
	4.7		Checking the tools	The company has the systems on how to transport fresh fish, so check it.
	4.8		Checking the car	Check if the car is available and ready to be used.
	4.9		Make a list of who is available and when	Into the Google Docs. Make a list when an employee with the owners will have a shifts.
5			Shop	The company will prepare a small place, where it will sell fish in the area of the farm.
	5.1		Documentation	The documentation, which are needed for the place in the company, where the company wants to sell its products.
		5.1.1	Needed documentation/checking of final inspection for this manners.	The company has a free space in the building, however the shop is not prepared there yet. Checked if the building has a final inspection for this manner that was done in previous years.
		5.1.2	Check fire protection	Check if fire protection has been done.
		5.1.3	Checking the emergency plan and the sign with emergency numbers	Check if the emergency plan is correct.
		5.1.4	Local public health authority	Need to execute documentation about waste from the shop.
		5.1.5	Check the documentation of occupational safety and health and other	Check if the company has it. Check and print other regulations such as return policy (this type of business still does not have to have EET).

ID			Component name	Brief description
		5.1.6	Schedule of opening	Decide on the date and time, when the shop will be open for the customers. And add it to the sign outside.
		5.1.7	Check of the sign of the business plant	Check if all important information such as the name of the company, identification number, name and surname of the responsible person, and opening and closing times are there.
	5.2		Designing the place where the shop will be	Make a list of staff, which are needed for selling the fish to customers.
		5.2.1	Find, where to buy essential items to the shop	Find, where are the possibilities, make a research of the market.
		5.2.2	Buy and transport the needed items for the shop	Buy the chosen items and get them to the farm.
		5.2.3	Prepare the shop for the opening	Prepare the place for opening and clean it.
	5.3		Set the final date for opening	Set the final date.
6			Machine for preparation of the fish	Company has to bought a machine, which will help them for new options on how to sell the fish.
	6.1		Characteristics of the machine	Write down the specification of the machine, what should be able to do with the fish.
	6.2		Start looking for already used ones	Company does not want to invest in new technology, so does not mind to buy already used one.
	6.3		Buy the machine and transport it into the company	The chosen machine will be bought and transported to the company.

ID			Component name	Brief description
	6.4		Preparation of the machine	Clean it, configure it, and finally start to use it.
7			Set the new system of delivery	The company will deliver its fish for free to its customers.
	7.1		Set the conditions, under which they will deliver for free	Setting the concrete conditions under which, they will provide this service for free.
	7.2		Spread this service to customers, start the service	Start to offer this service to customers.
8			Evaluation	The project should be evaluated.
	8.1		Collecting feedback and lessons learned	The stakeholders should learn from this project, so the lessons learned should be write by all during the whole time of the project.
	8.2		Present the results	Present the result to the owners.

3.3.6 Responsibility assignment matrix (RACI matrix)

RACI matrix is a tool, which the author has decided to use based on its clarity, easy control and monitor. It helps the project manager and other members to keep in track, who is responsible for what should be done (R), also who is responsible that the work is done properly (A), who should give advice and consult (C), and who should be informed (I) for given action. As could be perceived in Table 5: RACI matrix, usually the project manager is responsible that the work is done properly for given activities (Doležal, Máchal, and Lacko, 2009). To mention PM means project manager, O1 is owner one, O2 is owner two, E and the indicates employee and her/his identification number. The one, who specialises in the selling, is the E 1 and C means contractor.

Table 5: RACI matrix
(Source: Own, 2019; based on Doležal, Máchal, and Lacko, 2009)

ID	Role / Activity	Project Team Members							Ex. sources	
		PM	O 1	O 2	E 1	E 2	E 3	E 4	Developer Web designer	C
1.1	Registration in Czech a. f. i. authority	A	R	I						
1.2	List of markets	A	R	I						
1.3	Creating the calendar in Google	R	I	I	I					
1.4	Communicating with the markets	A	R	I	I					
1.4.1	Add settle ones into the calendar	A	R	I	I					
1.5.1	Collect the documentation	A	R	I						
1.5.2	Pay the fees	A	R	I	I					
1.6.1	Make a design of the stand	A	I	I					R	
1.6.2	Buy materials	I	I	R						
1.6.3	Build the stand	A	C	R	R					
1.6.4	Print the logo and front of the stand	A	C	I	R				R	

ID	Activity	Project Team Members							Ex. sources	
	Role	PM	O 1	O 2	E 1	E 2	E 3	E 4	Developer Web designer	C
1.6.5	Prepare leaflets	A	I	I	R					
1.7	Checking the car	A	I	R	I					
1.8	Checking the tools	A	I	I	I	R	R			
2.1.1	Research of the hosting	R	I	I					C	
2.1.2	Buy the web hosting	A	R	I					C	
2.2.1	Connecting with web designer/developer	A	I	R						
2.2.2	Information in the website	A	R	R	R				C	
2.2.3	Set the website	A	I	I	I				R	
2.2.4	Create the phone version	A	I	I	I				R	
2.2.5	Finalize the design and web	A	I	I	I	I	I	I	R	
2.2.6	Analyze the keywords	A	I	I					R	
2.3.1	Create the topics	A	R	I	R				C	
2.3.2	Make a schedule of the articles	A	R	I	R				C	
2.3.3	Start writing	A	R		R					
2.3.4	Taking photos	A	I	R	R	R	R	R		
2.4	Start to run the website	A	R	I	I				R	
2.5	Optimization	I	I	I					R	
2.6	Management of the websites	R	R	I	I				C	
2.7	Set the reports from the websites	I	I	I					R	
3.1.1	Summarizing the needs	A	R	R	I					
3.1.2	Write a post	R	A	A	I					
3.1.3	Choose the right person	A	R	R						
3.1.4	Prepare contract	A	R	I						C

ID	Activity	Project Team Members							Ex. sources	
	Role	PM	O 1	O 2	E 1	E 2	E 3	E 4	Developer Web designer	C
3.1.5	Sign up the contract	A	R	I						
3.1.6	Set the Facebook page	A	I	I						R
3.1.7	Connect the pages	A	I	I					C	R
3.1.8	Set the Facebook ads	A	I	I						R
3.2	Content of the page	A	R	I	R					C
3.2.1	Schedule of the posts	A	R	I	I					C
3.2.2	Making bank of photos	A		R	R	R	R			C
3.2.3	Learning how to answer the messages	C	R	R	R					C
3.3	Set the reporting tools	A	I	I	I					R
4.1	Make a list of the parts around Brno	A	R	C	R					
4.2	Contacts creation	A	R	I	R					
4.3	Set the deals	A	R	I	I					
4.4	Pay the fees	A	R	I	I					
4.5	Add the location	A	R	I						
4.6.1	Write the offer to newsletter	A	R	I	R					C
4.6.2	Write the offer to public a. s.	A	R	I	R					C
4.6.3	Send it	A	I	I	R					
4.6.4	Pay fees	A	R	I						
4.7	Checking the tools	A	I	I	I	R	R	A		
4.8	Checking car	A	I	R	I					
4.9	Make a list of employees	A	R	R	C	C	C	C		
5.1.1	Checking of doc.	A	R	I						

| ID | Activity | Project Team Members | | | | | | | Ex. sources | |
	Role	PM	O 1	O 2	E 1	E 2	E 3	E 4	Developer Web designer	C
5.1.2	Checking the fire protection	A	I	R						
5.1.3	Checking the e. plan and the sign	A	I	I						
5.1.4	Regional public health authority	A	R	I						
5.1.5	Checking the other documentation	A	R	I						
5.1.6	Schedule of opening	A	R	R	I	I	I	I		
5.1.7	Checking of the sign	A	I	R						
5.2	Design the place where the shop will be	A	C	R	R	I	I	I		
5.2.1	Find where to buy	A	C	R	R					
5.2.2	Buying and transporting	A	I	R	R					
5.2.3	Preparation of the shop for the opening	A	I	I	R	R	R	R		
5.3	Setting the final date	C	R	R	R					
6.1	Characteristics of the machine	A	C	C	R	R	R	R		
6.2	Searching	A	I	R	R					
6.3	Buying and transport it	A	R	I	I					
6.4	Preparing of the machine	A	I	R	R	R	R	R		
7.1	Setting the conditions	A	R	R	R					
7.2	Spread this service to customers, start it	A	I	I	R				C	C
8.1	Feedback, LL	R	C	C	C	C	C	C	C	C
8.2	Presenting the results	R								

3.3.7   Gantt chart and milestones

The author has decided to use the Gantt chart. This schedule is used quite often, and the information is clear (Dobson, 2015; Svozilová, 2006).

The author connects this chart with the milestone chart. So, the connection between the working packages, milestones, and dates is easily perceived. The milestone shows the exact event that emphasises the deliverables of the project in this project. As this is the first project in the company, the author decides to use the easy version of the Gantt chart for not complicated orientation for employees and owners of the company.

Table 6: Gant chart sets the schedule of the working activities, where it is also possible to perceive the order of the activities (Dobson, 2015; Svozilová, 2006). The one that take a lot of time are searching for the machine, continuously taking of photos so making a bank with them, setting the website and its management, and communication with the farmer's markets and other events. Others activities are possible to be done within a given month. When the change occurs, it needs to be controlled by the plan.

In addition, Table 7: Gantt chart (graphic version) shows the milestone of the project. The milestones are connected with the deliverables/outputs of it. So, the following actions in the schedule are marked as important events:

- Add settle events (farmers' markets and other events in the region) into the calendar.
- The brand new website is able to run.
- The company signed the contract with the contractor, who will create the Facebook page.
- The functioning Facebook page is ready to run now on.
- The locations/villages, where the company can offer its fish, are settled.
- The final date of opening the shop is announced thanks to the fact that it is ready to be open.
- The brought machine is prepared to be used, start using it.

- The free delivery service is ready, begin to offer it.

- The project manager presents the results, the end of the project.

Table 6: Gantt chart

(Source: Own, 2019; based on Dobson, 2015; and Svozilová, 2006)

Working package	Start	End	Duration	Milestone	Activity/milestone
Registration in Czech ag. and food ins. a.	01-Jul	31-Jul	31,0		Activity
List of farmers'markets and events	01-Jul	20-Jul	20,0		Activity
Create the calendar in Google docs	01-Jul	03-Jul	3,0		Activity
Communication wit the markets	20-Jul	31-Aug	43,0		Activity
Add settle ones into calendar	01-Sep	01-Sep	0,0	1,0	Milestone
Collecting the documentation	01-Sep	30-Sep	30,0		Activity
Paying the fees	01-Sep	30-Sep	30,0		Activity
Making a design of the stand	31-Aug	20-Sep	21,0		Activity
Buying materials	21-Sep	30-Sep	10,0		Activity
Building the stand	01-Oct	30-Oct	30,0		Activity
Printing the logo and front of the stand	21-Sep	30-Sep	10,0		Activity
Preparing leaflets	31-Aug	10-Sep	11,0		Activity
Checking car	01-Oct	05-Oct	5,0		Activity
Checking the tools	06-Oct	09-Oct	4,0		Activity
Research of the hosting	01-Sep	07-Sep	7,0		Activity
Buying the webhosting	08-Sep	10-Sep	3,0		Activity
Connecting with web designer/developer	01-Sep	08-Sep	8,0		Activity
Information in the website	09-Sep	30-Sep	22,0		Activity
Setting the website	01-Oct	30-Nov	61,0		Activity
Creating the phone version	01-Dec	31-Dec	31,0		Activity
Finalizing the design and web	06-Jan	07-Jan	2,0		Activity
Analyzing of key words	07-Jan	10-Jan	4,0		Activity
Creating of the topics	30-Nov	31-Dec	32,0		Activity
Schedule of the articles	10-Jan	14-Jan	5,0		Activity
Start writing the articles	15-Jan	31-Jan	17,0		Activity
Taking photos	01-Sep	31-Jan	153,0		Activity
Start to run the website	01-Jan	01-Jan	0,0	1,0	Milestone
Optimization	02-Jan	31-Jan	30,0		Activity
Management of the website	01-Feb	31-Mar	59,0		Activity
Setting the reports from the websites	07-Jan	15-Jan	9,0		Activity
Summarizing the needs	10-Dec	30-Dec	21,0		Activity
Writing a post	02-Jan	03-Jan	2,0		Activity
Choosing the right person	03-Jan	25-Jan	23,0		Activity
Preparng the contract	03-Jan	24-Jan	22,0		Activity
Signing up the contract with contractor	01-Feb	01-Feb	0,0	1,0	Milestone
Setting the Facebook page	01-Feb	25-Feb	25,0		Activity
Connecting the pages	26-Mar	28-Mar	3,0		Activity
Settling the Facebook ads	01-Feb	25-Feb	25,0		Activity

Working package	Start	End	Duration	Milestone	Activity/milestone
Content of the page	01-Feb	25-Feb	25,0		Activity
Schedule of the posts	26-Feb	27-Feb	2,0		Activity
Making bank of the photos	01-Feb	28-Feb	28,0		Activity
Learning how to answer the messages	28-Feb	01-Mar	2,0		Activity
Setting the reporting tools	01-Mar	31-Mar	31,0		Activity
Functioning Facebook page	02-Mar	02-Mar	0,0	1,0	Milestone
Making the list of the the parts around Brno	01-Feb	01-Mar	29,0		Activity
Contacts creation	01-Mar	08-Mar	8,0		Activity
Setting the deals	01-Mar	31-Mar	31,0		Activity
Paying the fees	01-Apr	30-Apr	30,0		Activity
Adding the location	01-Apr	01-Apr	0,0	1,0	Milestone
Writing the offer to newspapers	01-Mar	25-Mar	25,0		Activity
Writing the offer to radio	01-Mar	25-Mar	25,0		Activity
Sending it	26-Mar	05-Apr	11,0		Activity
Paying fees	01-Apr	30-Apr	30,0		Activity
Checking the tools	05-Apr	07-Apr	3,0		Activity
Checking car	06-Apr	08-Apr	3,0		Activity
Making a list of employees	10-Apr	30-Apr	21,0		Activity
Checking of needed documents	01-May	10-May	10,0		Activity
Checking fire protection	01-May	10-May	10,0		Activity
Checking the emergency plan and the sign	10-May	17-May	8,0		Activity
Regional public health authority	01-May	31-May	31,0		Activity
Checking the other documentation	01-May	20-May	20,0		Activity
Schedule of opening	10-May	29-May	20,0		Activity
Checking the sign	25-May	10-Jun	17,0		Activity
Designing the place	01-May	31-May	31,0		Activity
Finding where to buy	01-Jun	10-Jun	10,0		Activity
Buying and transporting	11-Jun	18-Jun	8,0		Activity
Preparing the shop for opening	19-Jun	30-Jun	12,0		Activity
Setting the final date	30-Jun	30-Jun	0,0	1,0	Milestone
Characteristics of the machine	01-Jul	29-Jul	29,0		Activity
Start searching	01-Aug	28-Feb	212,0		Activity
Buying and transporting the machine	01-Mar	31-Mar	31,0		Activity
Preparing the machine	01-Apr	30-Apr	30,0		Activity
Start using the machine	01-May	01-May	0,0	1,0	Milestone
Setting the conditions	01-Aug	29-Aug	29,0		Activity
Start of the service	01-Sep	01-Sep	0,0	1,0	Milestone
Collecting feedback and lessons learned	30-Jun	01-Jul	2,0		Activity
Presenting the results	01-Jul	01-Jul	0,0	1,0	Milestone

Table 7: Gantt chart (graphic version)

(Source: Own, 2019, Dobson, 2015; Svozilová, 2006)
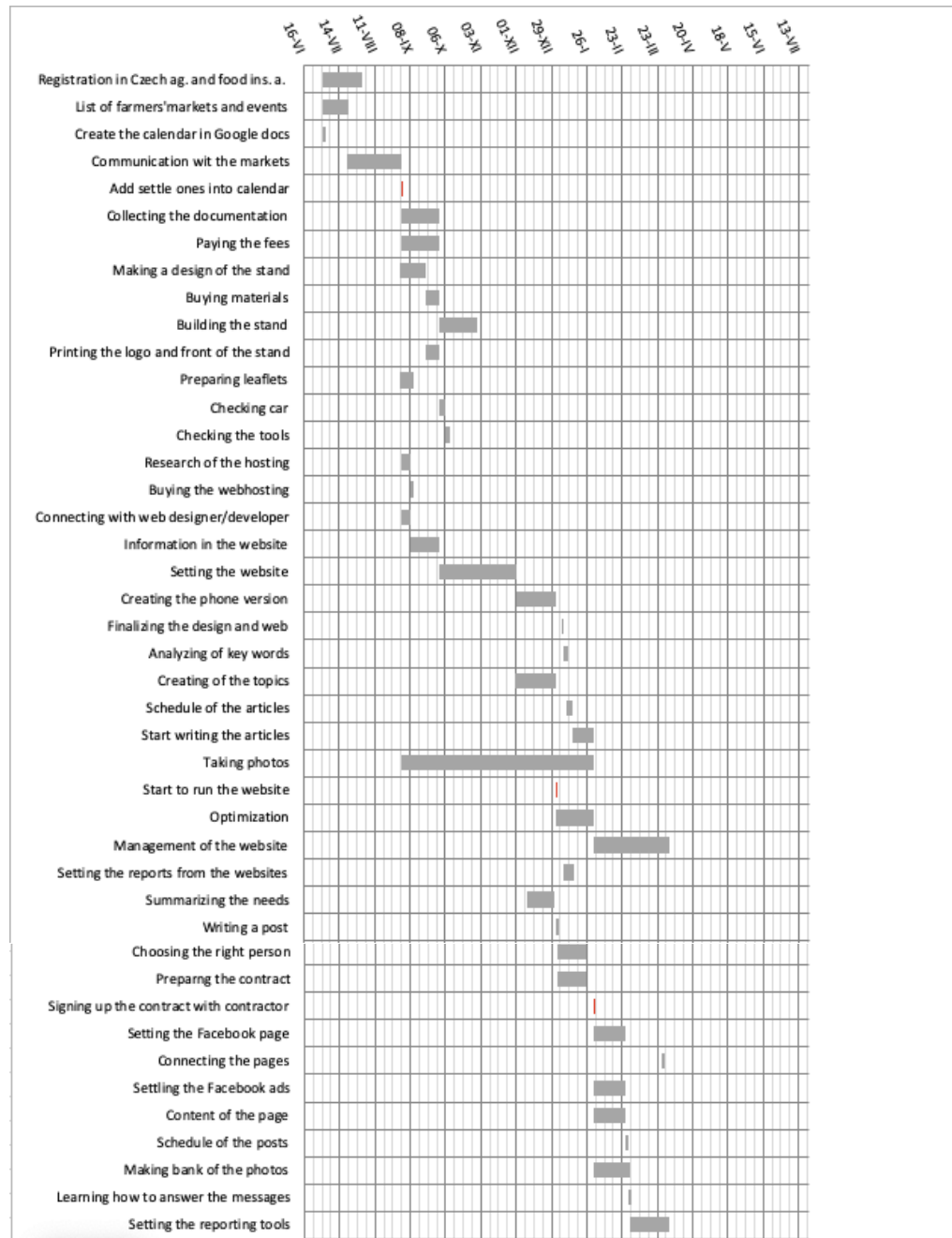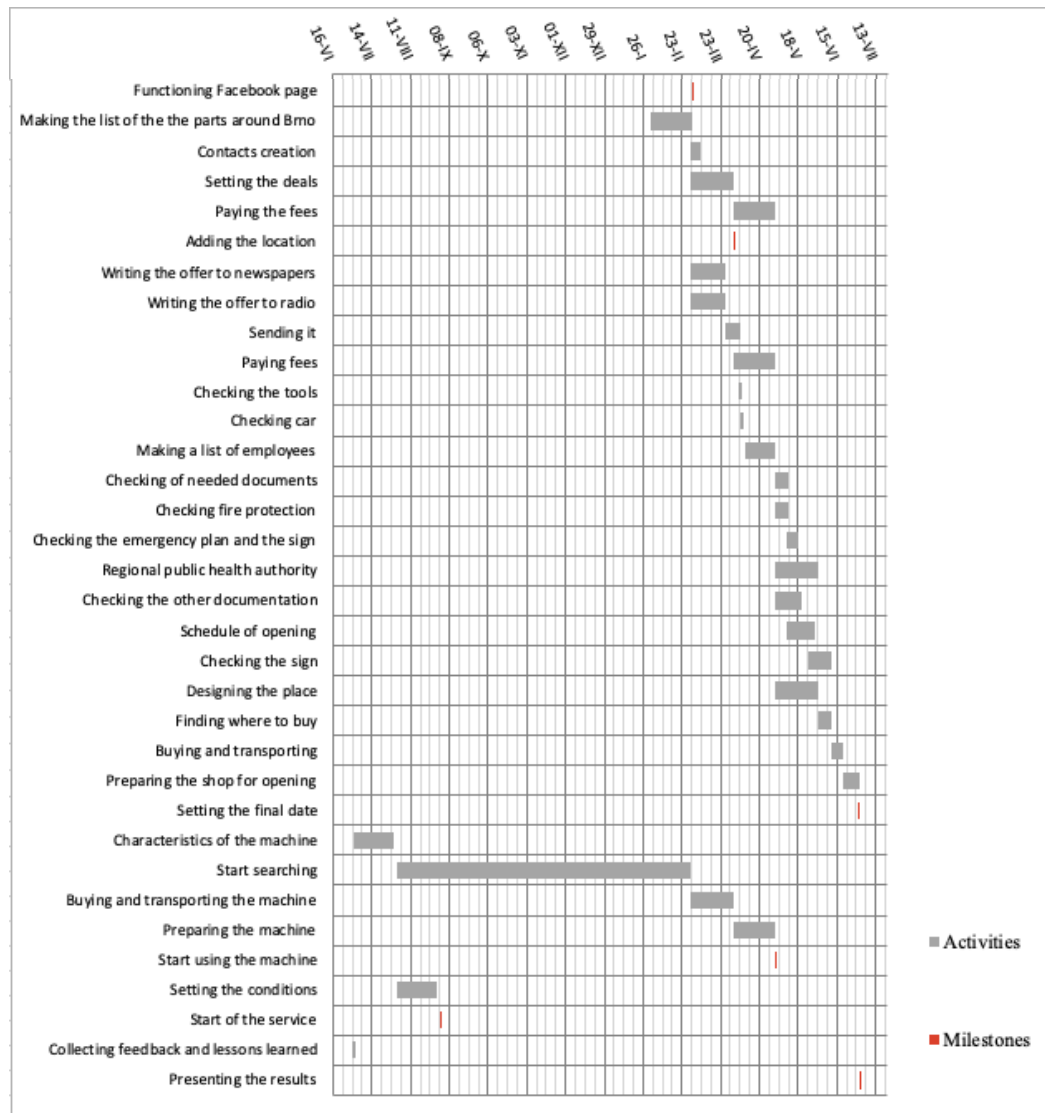
In summary of this subchapter, the project takes one year to set and prepare needed deliverables with nine milestones that should be reached during it. Moreover, thanks to the fact that this is the first project of the company, the author has decided to add reserves to each working package, so the responsible person will have time to provide it accurately. Moreover, the author uses this easy kind of chart since she wants to make it clear and easy to follow by employees in familiar Microsoft Excel.

3.3.8 Risk project analysis (RIPRAN)

Firstly, due to this RIPRAN method the team and mainly the project manager identifies the risks, which are based on the experience from the previous projects and other knowledge of stakeholders, see Table 8: Risk identification. So, the key

risks that could negatively affect the project are summarised below with scenarios (Tichý, 2006).

Table 8: Risk identification

(Source: Own, 2019; based on Tichý, 2006)

ID	Risk	Scenario
1	Lack of experienced project manager	The project will be postponed.
2	Unplanned increase of costs	The real costs of the project will be higher than was estimated.
3	Not sufficient studies of the project	The insufficient analyses could lead to higher costs, postpone of the project.
4	Lack of communication and conflicts among the team	Mistakes, misunderstanding, time gap, it will lead to the non-effective realisation of the project.
5	Leave of project member	Reschedule of working packages to other member/members of the team and the project will be postponed.
6	Illness in the project team	The whole project will be postponed or the rest of the members has to divide the work.
7	Failure of following the schedule	The project will be postponed. More time will be needed.
8	Natural disasters	Damage of real estates, products and other property of the company.
9	Vandalism and/or thefts	Illegal stealing of products, the property of the company.
10	Lack of attention on risk occurrence	The team will do not mind the possibility of the risk occurrence, so it could lead to higher costs and time gap.
11	Late delivery of materials	The work will be postponed, so probably the whole project.
12	No reach of the aim.	Not sufficient marketing, supersaturation of the products. The project will not be successful.
13	Not having the certification	The project will be postponed and the costs will be higher due to the fact that the company has to start dealing with offices and get certifications, which are obligatory.

ID	Risk	Scenario
14	Not choosing the right contractor	The wrong contractor could lead to the endanger of a good name.
15	Low effectiveness of the work	The project will be postponed and not the effect that could be reached would be met.
16	Insufficient continuous control	There is also a need to control planned and realised work. If there is a difference, it could lead to higher costs and time gap.
17	Loss of the documentation	The project will be postponed by this situation.
18	Loss of online documentation and calendar	The project will be postponed and requires to communicate with other sides once more.
19	Not setting the deals with the suppliers on time	The project will be postponed due to this event and the team will have to find other suppliers.
20	Violate the terms of contracts from the site of suppliers	Late delivery, wrong realised deliveries, no quality products.
21	Not obtaining of needed knowledge	Mistakes, misleading information is transferred. The project is postponed.
22	Choosing the wrong tools (such as not optimal website provider) for given action	All the work is not as effective as could be, so there could be lower level of reaching out the end customers, so lower effect of the project.
23	Team members will not have time	The extent of the project will need to be changed, or postponed.
24	Not finding the machine in second-hand good stores	The company will have to wait or buy a brand new one, which costs much more.
25	Loss of money due to free delivery option	The company has to carefully set the rules of free delivery, otherwise, the costs will be really high.
26	Not enough fish to offer	The company will lost a great number of fish due to catastrophic event. The customers will not get their order on time. Loss of money.
27	Not sufficient set up of social media and web	Not sufficient optimisation of sites, which could lead to lower positions on searching sites, fewer followers, less potential customers.
28	Not choosing the good locations	Potential customers will still not reach out of the product and mistaken locations.
29	Immediate overwhelming interest in the products from	The employees will not be ready, fewer products and customers will be unsatisfied.

	the site of the end customers	
30	The project does not meet the quality	The project will not achieve its potential, hence the cost will be higher.

Secondly, these risks need to be quantified, which helps to show the most serious ones. So, the project manager and other team members need to be aware of these risks. The author has to use several variables, which are described below.

The author has decided to use already utilised tool by Doležal, Máchal, and Lacko (2009). The probability is set as the high probability (HP), when it can occur over sixty-six percent, medium probability (MP) when the probability is between thirty-three and sixty-six percent, and finally low probability (LP), when the probability occurs to be smaller than thirty-three percent.

The impact is also divided into three sections. The most severe high negative impact (HI) can affect negatively the aim of the project, the deadline of the project, the final costs, damage could be around twenty percent of the value of the project. The next one is called medium negative impact (MI) on the project, which could lead to damage between one half and ninety point five percent of the value of the project, the deadline is in danger, and some working packages could need some changes. Finally, the low impact (LI) on the project has damage less than half of percent of the value of the project. When it occurs, it needs just some changes (Doležal, Máchal, and Lacko, 2009).

These two variables together give a resume, see Table 9: Resume of the risk, where the probability of the risk and impact on the project are put in mutual connection (Doležal, Máchal, and Lacko, 2009).

Table 9: Resume of the risk

(Source: Doležal, Máchal, and Lacko, 2009)

	HI	MI	LI
HP	High resume of risk (HR)	High resume of risk (HR)	Medium resume of risk (MR)
MP	High resume of risk (HR)	Medium resume of risk (MR)	Low resume of risk (LR)
LP	Medium resume of risk (MR)	Low resume of risk (LR)	Low resume of risk (LR)

So, Table 10: Risk quantification shows the probability of the risk, and its possible impact on the project, which together gives the final resume of the risk.

Table 10: Risk quantification

(Source: Own, 2019; based on Doležal, Máchal, and Lacko, 2009)

ID	Risk	Probability	Impact	Resume
1	Lack of experienced PM	MP	HI	HR
2	Unplanned increase in costs	MP	HI	HR
3	Not sufficient analyses of project	LP	HI	MR
4	Lack of com. and conf. among team	LP	HI	MR
5	Leave of project member	MP	HI	HR
6	Illness in the project team	LP	HI	MR
7	Failure of following the schedule	MP	MI	MR
8	Natural disasters	LP	HI	MR
9	Vandalism and/or thefts	LP	MI	LR
10	Lack of attention on risk occurrence	LP	MI	LR
11	Late delivery of materials	MP	MI	MR
12	Not reaching the aim.	LP	HI	MR
13	Not having the certification	MP	HI	HR

ID	Risk	Probability	Impact	Resume
14	Not choosing the right contractor	MP	MI	MR
15	Low effectiveness of the work	MP	MI	MR
16	Insufficient continuous control	LP	MI	LR
17	Loss of the documentation	LP	MI	LR
18	Loss of online doc. and calendar	LP	MI	LR
19	Not setting the deals with suppliers	MP	MI	MR
20	Violate the terms of contracts from the side of suppliers	MP	MI	MR
21	Not obtaining of needed knowledge	MP	HI	HR
22	Choosing the wrong tools (such as not optimal website provider) for a given action	LP	HI	MR
23	Team members will not have time to provide the work	LP	MI	LR
24	Not found the machine in second-hand good stores	HP	HI	HR
25	Loss of money due to the free delivery option	MP	MI	MR
26	Not enough fish to offer	LP	HI	MR
27	Not sufficient set up of social media and web	MP	MI	MR
28	Not choosing the good locations	LP	MI	LR
29	Immediate overwhelming interest in the products from the site of the end customers	LP	MI	LR
30	The project does not meet the quality	LP	HI	MR

From the results could be perceived that most of the risks are medium. Only a few such as lack of experienced project manager, an unplanned increase of costs, leave of project member, not having the certification, not obtaining of needed knowledge, not finding the machine in second-hand good stores have a high resume of risk. The rest is marked as a low resume of risk.

So, now on, it is important to set the solutions on how to deal with these potential risks. Table 11: Proposal of reaction to given risk shows two columns of concrete solution for the given risk, which could lead to lower resume, in other words, how the company will react to these risks. Also, it also sets the details such as estimated costs, term of reaction, and person who is responsible for that. The fourth column sets the new value of the risk. The resume of the risk thanks to the new proposal of risk changes its value into lower resumes of risk that it used to be (Doležal, Máchal, and Lacko, 2009).

Table 11: Proposal of reactions to given risks
(Source: Own, 2019; based on Doležal, Máchal, and Lacko, 2009)

ID	Proposal of reaction	Estimated costs Term of reaction Responsible person	New resume
1	Continuous education and training, asking experienced colleagues, communication.	0 CZK Before and during the project Project manager	LR
2	Continuous checking of real acting and planned activities.	The author has decided to use three types of calculation of costs (optimistic, realistic, and pessimistic) Before project phase and during the project Owner 1	LR
3	Continuous analysis of the environment and the project, its changes, and risks.	0 CZK During the whole project Project manager	LR
4	Constant communication, making sure no problems occur	0 CZK	LR

ID	Proposal of reaction	Estimated costs / Term of reaction / Responsible person	New resume
	and if immediate resolve, set specific responsibilities.	During the whole project Project manager	
5	Set the successor of the work, proper and detailed set of exact requirements, keep the contact on previous holiday workers.	0 CZK Before the project starts Owner 1 and owner 2	LR
6	Set the successor of the work from current employees.	0 CZK Before the project starts Owner 1 and owner 2	LR
7	Continuous checking the schedule and actual activities, regular communication.	0 CZK Initiation and during the whole project Project manager	LR
8	Insurance of the real estates and other property of the company.	This is already done by the company. Before the project starts Owner 1	LR
9	Insurance of products, the property of the company.	This is already done by the company. Before the project starts Owner 1	LR
10	Continuous checking of the potential risks during the meetings, going through LL	0 CZK Before and during the project	LR

ID	Proposal of reaction	Estimated costs Term of reaction Responsible person	New resume
	from the previous projects.	Project manager	
11	A detailed set of requirements, check the suppliers before setting the deals, check the references, count with a longer time, set sanctions.	0 CZK Before setting the deals Owner 1	LR
12	Continuous checking the schedule and actual activities, costs, quality, regular communication among the team.	0 CZK Initiation and during the whole project Project manager	LR
13	Complete the ones that are not done yet. Have enough time to finish them.	0 CZK Before the project start and during the project Project manager and owner 1	MR
14	A proper and detailed set of exact requirements, check the contractors before setting the deals, check the references. Choose the one, with whom the company has a pleasant experience, set sanctions.	0 CZK During choosing the suppliers Project manager and Owner 1	LR
15	Continuous checking the schedule and actual activities, costs, quality, regular	0 CZK Initiation and during the whole project	LR

ID	Proposal of reaction	Estimated costs Term of reaction Responsible person	New resume
	communication.	Project manager	
16	Continuous checking of all key parts of the project, communication and meetings.	0 CZK Before the project start and during the project Project manager	LR
17	Continuous consistency during documentation, ask experienced colleagues.	0 CZK Before and during the project Project manager and owner 1	LR
18	Continuous back-up on external clouds.	0 CZK On regular basis during the project Project manager, owner 1, and website developer	LR
19	A proper and detailed set of exact requirements, check the suppliers before setting the deals, check the references.	0 CZK During choosing the suppliers Project manager and Owner 1	LR
20	A proper and detailed set of exact requirements, continuous checking of the suppliers and the choice of choosing the best ones, understandably set the requests, require the references, communication, establish sanctions.	0 CZK In time of choosing the suppliers and continuous checking afterwards Owner 1	LR

ID	Proposal of reaction	Estimated costs Term of reaction Responsible person	New resume
21	Continuously check of employees, clear communication, fluent coordination.	0 CZK On regular basis during the whole project Project manager	MR
22	Check the tools before setting them, check the references. Choose the one, with whom the company has a good experience. Ask colleagues and experts.	0 CZK Before the project, during the whole project Project manager, owners, website developer	LR
23	Continuously checking of employees, clear communication, fluent coordination, continuous checking the schedule and actual activities	0 CZK On regular basis during the whole project Project manager	LR
24	Buying the new one with settled discounts or reschedule the timeline of purchasing the machine.	400 000 CZK (difference between the optimistic and pessimistic variant) During the project Owner 1 and owner 2	MR
25	Setting the delivery based on estimated costs and calculation, analyses.	0 CZK Before and during the project Project manager, owners	LR

ID	Proposal of reaction	Estimated costs Term of reaction Responsible person	New resume
26	Continuous checking the fish, its healthy, production, communication with suppliers, analysing.	0 CZK During the whole project Owner 2 and employees	LR
27	Proper and detailed set of exact requirements, so choosing the right people, who are able work with these tools or Choose the one, with whom the company has a good experience. Continuous check-up. Ask colleagues and experts.	0 CZK During the whole project Project manager, contractor, and website developer	LR
28	According to the communication with offices, setting the deals, proper public address system and newsletter by local authority advertisement, letting people know via social media.	0 CZK During the whole project Project manager	LR
29	Setting the estimations, follow the trends, communicate with potential customers, communicate with suppliers, continuous communication	0 CZK Before and during the project Project manager and owner 1	LR

ID	Proposal of reaction	Estimated costs Term of reaction Responsible person	New resume
	among members of team and regular meeting.		
30	Continuously checking the schedule and actual activities, costs, quality, regular communication among the team, monitoring the outputs, be flexible to make changes if needed, ask experts from a given field.	0 CZK On regular basis during the whole project Project manager	LR

In all-risks' cases, the resume of potential risk is lower than it was in the first step. However, still, the project manager and all people involved in the project need to be aware of, monitor and keep up to date these and other possible upcoming events.

3.3.9   Resources of project

Before the author analyses the financial side of the project, it is good to know the resources of the company that should be available for the project and also list the items the company does not possess. The author focuses on resources such as human resources and assets. See Table 12: List of all needed main resources, where the key resources are summarised. To mention, the author mainly uses bottom-up estimating that estimates the costs for the lower levels of WBS (Project Management Institute, 2008).

Table 12: List of all needed main resources.

(Source: Own, 2019)

Kind of resource	Item
Human resource	One project manager Two owners Four employees One website designer/developer (Website) One contractor (Facebook)
Other assets	One spare space/room in farm Specialised car Tools for the transportation of fish Computer with internet Domain Machine for preparation of the fish Webhosting Material for stand Printed logo for stand Facilities of the shop

The labour costs that are connected with human resources are paid to people involved in the project. The four employees and two owners do it within their working hours, so there is no need to pay them more. Moreover, the owners, who are involved a lot in the project give up money in order to mainly reach the aim. The author, as the project manager, does the work for free because she is thankful to the owners for the opportunity to write this work in their company. However, there are new two positions, such as website developer and contractor, who are paid.

From the assets, the company already has ready space for the shop, specialised delivery car and the tools, which are made for the business with fish. Moreover, the company already has and uses the computer with the internet. When the company was established, the owners also have bought the domain because they were afraid of buying it by someone else. However, the company does not have its website and the specialised machine for preparation of fish. These items have to be purchased by the company. Also, the company has to buy a material and printed logo for the stand and facilities of the shop (such as tables, cooling, stews).

Afterwards, the author also has to count with the cash that will go on services that will be provided such as fees paid for the markets, events, and villages, printing the leaflets, advertisement in the newsletter by the local authority, public address system, advertisement in Facebook, and web hosting. These need to be estimated as well.

On the other hand, the author omits the overheads such as mobile tariffs, internet (without limits), electricity and so on because the company already uses and pays it. Also, the author omits the insurance that is also paid by the company, as is mentioned in previous chapters. However, the company still needs to be aware of these costs, especially in the long run. In the following section, the author estimates the costs.

3.3.10 Financial analysis

The financial analysis chapter summarises the financial side of the project. When WBS, Gantt chart, RIPRAN, and resource analysis, are done, the author is able to estimate the cost of the project. To mention once again, the author focuses on direct costs due to the fact that the project is done during working hours, so the all overhead costs are omitted. The costs are calculated without the VAT and based on the experience, research on the market, mystery shopping and consultancy with owners with their expert judgement. Besides that, the author calculates with the assumption that the costs of the project are paid as soon as possible (in the first year) to decrease any risks connected to that and also the author estimates that the some of the deliverables of the project could be used more years.

Firstly, the author sets the labour costs with the optimistic, realistic, and pessimistic variant. For more information, see Table 13: Total labour costs that are directly linked to the project.

Table 13: Total labour costs

(Source: Own, 2019)

	Optimistic variant	**Realistic variant**	**Pessimistic variant**
Developer /designer	15 000 CZK	20 000 CZK	25 000 CZK
Contractor	10 000 CZK	15 000 CZK	20 000 CZK
Summary	25 000 CZK	35 000 CZK	45 000 CZK

The labour costs were set in the following order. The web designer/developer is a son of one of the owners, so this fact also plays a role in the cost of this item. He will probably take around 145 CZK per hour. His work takes according to the Gant chart 137 days (61 days, 31 days, 2 days, 4 days, 30 days, and 9 days, according to the working packages, Gantt chart, and RACI matrix). However, each day it would be around one hour. So, the final price is 20 000 CZK in the realistic variant. In the case of the contractor in the realistic variant, the cost is set that she/he should work one hour per day and the work takes 84 days (25 days, 3 days, 25 days, and 31 days according to the working packages, Gantt chart and RACI matrix), which is around 175 CZK per hour. For this position the owners do not mind choose a student who needs to gain new experience. So, the labour cost of this item in the realistic variant is 15 000 CZK. The contractors will sign Agreements to complete a job. This could happen thanks to several occasions, the work is less than 300 hours per calendar year and lower than 10 000 CZK per month and person. So, there is no need to pay social and health insurance of these contractors. For this kind of work in the company is agreement to complete a job usual way.

For the next costs, there could be two points of view. One is that the author estimates that the machine and facility could be used in the company for five years, so their costs could be recalculated. The second point of view is that the company the whole price of the machine and facility has to pay immediately in the first year. The company obtains cash, which could be used to this aim. See Table 14: Acquisition costs of investments with the use of five years and Table: 15: Repeatable year costs

shows the cost for one year of the project for the assets that will be in the company just one year.

Table 14: Acquisition costs of investments with the use of five years.

(Source: Own, 2019)

	Optimistic variant	Realistic variant	Pessimistic variant
Machine	600 000/5 = 120 000 CZK	750 000/5 = 150 000 CZK	1 000 000/5 = 200 000 CZK
Facilities of the shop	50 000/5 = 10 000 CZK	75 000/5 = 15 000 CZK	100 000/5 = 20 000 CZK
Summary	650 000 CZK	825 000 CZK	1 100 000 CZK
Summary (five years)	130 000 CZK	165 000 CZK	220 000 CZK

Table 15: Repeatable every year costs

(Source: Own, 2019)

	Optimistic variant	Realistic variant	Pessimistic variant
Web hosting	600 CZK	1 000 CZK	1 500 CZK
Printed leaflets	20 000 CZK	25 000 CZK	30 000 CZK
FC ads	5 000 CZK	7 000 CZK	9 000 CZK
Fees (markets and events)	2 400 CZK	3 600 CZK	4 800 CZK
Fees (Villages)	30 000 CZK	45 000 CZK	60 000 CZK
Public add. system	60 000 CZK	70 000 CZK	80 000 CZK

Newsletter by the local authority	60 000 CZK	70 000 CZK	80 000 CZK
Material for stand	5 000 CZK	7 000 CZK	10 000 CZK
Printed logo	1 500 CZK	2 000 CZK	2 500 CZK
Summary	**184 500 CZK**	**230 600 CZK**	**277 800 CZK**

In Table 15: Repeatable year costs, the author estimates the following costs. In the case of leaflets, the company has the supplier, who would give them 50 000 leaflets for 25 000 CZK that could be used in one year in the realistic variant.

The Facebook ads are more or less up to the company how much money they would like to invest, so in realistic version, the company has decided to invest in this kind of advertisement 7 000 CZK per year.

The fees that the company will need to pay to the farmer's markets are set according to the mystery shopping, and market research. In the case, of attending two events per one month, it would make twenty-four attended events per year. In the case of paying the fees to villages, in some cases the company will not have to pay it but some of them has small fee, so author estimates that the company will attend around 300 villages (some of them repeatably and more in one day just for limited time) and together in realistic version will pay around 45 000 CZK for that.

When the company wants to have an announcement in the local public address system by the authority, it is in realistic variant 25 CZK per one radio announcement. So, when the company will be announced in the village for eight times, it would make together 200 CZK per visited place. So, in one day they are able to visit three places like that, so it will make 600 CZK per day, and in the week if the event will repeat for two times it is 1200 CZK, so per year (50 weeks) in

realistic variant, it will be 60 000 in optimistic variant. The author puts it in the optimistic variant due to the variance in the costs of the announcements.

The costs that are connected to the announcement made in the newsletter by the local authority in A6 will be (according to the market research and mystery shopping) around 200 CZK per one. So, for all places, it will cost in optimistic version around 60 000 CZK (six places per week is multiplied by 50 weeks in the year).

The stand will be made within the company so; it only needs to buy the material for that. And finally, the printed logo will be provided by the known external company.

Now, the author puts together the costs that were estimated in the tables above. See Table 16: Cash needed by the company in the first year. This money should the company have available for the project.

Table 16: Cash needed by the company in the first year
(Source: Own, 2019)

	Optimistic variant	Realistic variant	Pessimistic variant
Labour costs	25 000 CZK	35 000 CZK	45 000 CZK
Acquisitions costs of the investments	650 000 CZK	825 000 CZK	1 100 000 CZK
Repeatable costs	184 500 CZK	230 600 CZK	277 800 CZK
Summary	**859 500 CZK**	**1 090 600 CZK**	**1 422 800 CZK**

Also, in Table 17: Costs for the use of the investment in the first year of five years, the author takes into the account the assets that could be used more than just one year (namely five years), so the summary of all costs for one year will be following.

The labour cost is only in the first year, so the total price of them is in table. The costs of the machine and facilities can be recalculated on five years of the use. The rest of the resources have to be bought once again. For more information, see Table 17: Costs for the use of the investment in the first year of five years.

Table 17: Costs for the use of the investment in the first year of five years
(Source: Own, 2019)

	Optimistic variant	Realistic variant	Pessimistic variant
Labour costs	25 000 CZK	35 000 CZK	45 000 CZK
Acquisitions costs of the investments per year	130 000 CZK	165 000 CZK	220 000 CZK
Repeatable costs	184 500 CZK	230 600 CZK	277 800 CZK
Summary	**339 500 CZK**	**430 600 CZK**	**542 800 CZK**

As could be perceived, the complete realisation of a given project is (without the costs that have been omitted such as overheads) is an amount of 1 090 600 CZK in the realistic version that the company should pay in the first year. When the company takes into account the use of assets that will be used in the company, it will make 430 600 CZK in the realistic version. Also, the project manager has to monitor the actual and planned costs, so if needed, the action can be taken.

The rest of the years will have the costs based on previous tables. Besides, the labour cost from now on will not be calculated due to the fact that the company will not have contractor and website developer because the sites will be set from the first year, see Table 18: Costs for the use of the investment from the second year to the fifth year (per year).

Table 18: Costs for the use of the investment from the second year to fifth year (per year)
(Source: Own, 2019)

	Optimistic variant	Realistic variant	Pessimistic variant
Acquisitions costs of the investments per year	130 000 CZK	165 000 CZK	220 000 CZK
Repeatable costs	184 500 CZK	230 600 CZK	277 800 CZK
Summary	**314 500 CZK**	**395 600 CZK**	**497 800 CZK**

The author also has decided to estimate and calculate the following five years in the manner of revenues and costs. The company will sell to the end customers the fish with the price 135 CZK/kg of alive fish without VAT and 255 CZK/kg of alive fish without the VAT, which will be prepared by the machine. In addition, the company will still sell the fish to other business in price 92 of CZK/kg of alive fish without the VAT. In the first year, there will be only costs. The second year, the company assumes that five tons of fifty tons will be able to sell its end customers (in both kinds equally, so two and half of tons in price 135 CZK/kg of alive fish without VAT and the other half of five tons in price 255 CZK/kg of alive fish without the VAT). The third year the company will be able to sell fifteen tons out of fifty tons to end customers (again both kinds equally). Moreover, this third year, the company covers all the costs that the project will cost. Please see Table 19: Revenues and costs of the project in the realistic version below.

Table 19: Revenues and costs of the project in the realistic variant

(Source: Own, 2019)

When	kg	CZK	Revenues		Realistic variant CF	Realistic variant Costs
Now	50 000	92	4 600 000			
First year	50 000	92	4 600 000	First year	1 090 600	430 600
Second year	45 000	92	4 140 000			
	2 500	135	337 500			
	2 500	255	637 500			
Sum			5 115 000			
(Benefit of the project)			515 000	Second year	230 600	395 600
Third year	35 000	92	3 220 000			
	7 500	135	1 012 500			
	7 500	255	1 912 500			
Sum			6 145 000			
(Benefit of the project)			1 545 000	Third year	230 600	395 600
Fourth year	30 000	92	2 760 000			
	10 000	135	1 350 000			
	10 000	255	2 550 000			
Sum			6 660 000			
(Benefit of the project)			2 060 000	Fourth year	230 600	395 600
Fifth year	25 000	92	2 300 000			
	12 500	135	1 687 500			
	12 500	255	3 187 500			
Sum			7 175 000			
(Benefit of the project)			2 575 000	Fifth year	230 600	395 600
Sum of the benefits			6 695 000	Sum	2 013 000	2 013 000

So, when the average price of fish will be ((135 + 255)/2) 195 CZK/kg of alive fish without the VAT, it has to be lowered by the price of the B2B customers (92 CZK/kg of alive fish without the VAT). So, it will be 103 CZK/kg of alive fish without the VAT, which is another benefit of the project (in the form of money) that the project brings on each kilogram of alive fish without the VAT sold to the new customer base. So, the company will have to sell 19 544 kg to the end customers, when the costs of the project will be returned. In other words, if the

author divides the sum of the costs 2 013 000 by the benefit of the project of alive fish without the VAT, the company will need to sell 19 544 kg of fish.

3.4   Contribution of the project to the company

The advantage of this thesis and project is meeting the goal, so applying theoretical knowledge, tools and methods of project management in a company. Primary, the company has never before experienced the process of the project management, so applying these tools and knowledge is brand new for them. They can use this knowledge for other following projects, thanks to which the projects will be processed in a structured, convenient and successful way. In other words, the proposal of solutions includes important tools of the project management, such as work breakdown structure, responsibility assignment matrix, Gantt chart, milestones, risk project analysis that could be applied and used for next projects. The breakdown structure shows the owners that the project can be subdivided into manageable work packages, which the company can do. The timetable sets these actions into time manner, so the company is aware of the time needed for each task. In addition, the analysis sets possible risks and threats, which can occur and their way how to deal with them. Some of these risks can be also applied in the future. The company could also use these methods and tools in other fields of its processes. In addition, the work includes environmental situation analyses, which show the current key factors in the state, industry, and company that the company should be aware.

So, thanks to the project, the company will be able to introduce itself and reach out to the new segment, the end customers. In addition, they will be as close to them as possible and be able to offer them its fish. Moreover, the other benefits that the project brings to the company is the better level of competitiveness, bigger client base from the end customers, higher volume of orders by end customers, better information to end customers, better relationship between the company and end customers, strengthen of corporate image perceived by surroundings, the company is better known in the field, enlargement of variety of marketing tools, better financial stability of the company. These advantages of the project arise or will arise

during a longer time, when the new observations could be compared with the previous ones. Also, the author recommends continuing in future to attract this segment. However, firstly, the company has to go through lessons learned and learn from them.

In summary, the whole chapter is done thanks to the use of project management tools, methods, and techniques, which are described in the theoretical part. The author summarises the proposal of the project that comes out from the previous analyses. Also, the author specifies the type of the project, which should help stakeholders to understand the project in the same way, also shows the Project charter, which is signed between the project managers and the owners of the company. Afterwards, the logical framework shows the main deliverables and their indicators. This is followed by subchapter, which specifies these deliverables. In addition, all stakeholders are identified and the core team of the project is introduced. The author sets the communication ways among the team and makes sure that the quality of the project will be important as well. Besides, all the activities are divided into manageable working packages, which could be done by a responsible person. The responsibilities assigned could be found in subchapter that uses the RACI matrix tool. Also, the WBS and the Gantt chart are used in order to set the timetable of the project with emphasis on the milestones of the project. The author as well provides the risk project analysis, which is important part of every project. And finally, the last part of this chapter is an analysis of the financial side of the project, which also shows that the project should be undertaken. All these parts described above are vital parts of the project management that the company should provide in order to reach its aim and all the benefits described above.

CONCLUSION

The main aim of the thesis is to apply theoretical knowledge, tools and methods of project management in a given company. To be concrete, the thesis has the aim of forming own proposal of the solution on how the company ABC from the fish industry in the South Moravian region could reach out new customer base, namely end customers with the use of project management tools, methods, and knowledge. This topic was chosen according to its real use and contribution to company ABC.

The work firstly critically introduces project management and its methods and tools, which are used in the practical part. Also, the author focuses on the context between the parts that are presented there, which together makes a field of knowledge that is one of the most crucial for the companies in this globalised world.

The author afterwards uses tools and methods that are useful in pre-project phase such as PESTEL analysis, Porter's five forces, main competitors, key success factors of the industry, McKinsey 7S, and finally SWOT analysis in order to get an overview of the surrounding environment of the company and the business itself. So, the project is needed and also could be fully utilised for the needs of the given company.

In the main part of the thesis, the author uses essential tools, knowledge, and methods of project management such as work breakdown structure, responsibility assignment matrix, Gantt chart, milestones, risk project analysis, and financial analysis. So, in other words, the project of the company is divided into manageable work packages that are formed into the schedule and sets the milestones of the project. These working packages also have a responsible person. Also, the author provides a list of risks and their possible resume, how to lower them with the use of RIPRAN method. Finally, the author sets the financial analysis, which shows the summary of costs and estimates the revenues that could come from the project.

The main benefit of the project in this company is that the company has never before experienced the process of the project management, so applying these tools and

knowledge is brand new for them. They can use this newly gained knowledge for other following projects, thanks to which the projects will be processed in a structured, convenient and successful way.

Also, thanks to the project, the company will reach out to new potential customers. They will be as close to them as possible and be able to offer them its fish. In addition, the other benefits are that the project creates better level of competitiveness, bigger client base, higher and new volume of orders by end customers, better relationship between the company and end customers, strengthen of corporate image perceived by surroundings, enlargement of variety of marketing tools, better financial stability of the company. These advantages of the project arise or will arise during a longer time, when the new observations could be compared with the previous ones.

The project is done thanks to a friendship with the owners, so the honesty and ability to reach the company's data help to achieve the best option for the given company and its aim. However, still, the analyses are done, theoretically and it is not able to accurately cover the living environment because the world does not exist in the status quo.

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Appendix I.

Figure 17: Big tanks in the main section
(Source: Own, 2019)

Appendix II.

Table 20: SWOT matrix

(Source: Own, 2019)

Internal factors	
Strengths	**Weaknesses**
- The company offers only healthy, fresh, bio quality trout with delicious taste rich on vitamins, omega 3 (S1). - The owners and employees have knowledge of this fishery industry (S2). - The company is next to the road where drivers as potential customers drive to their cottages in this part of the country (S3). - The system does not need good environment such as stable weather, clean ponds, rivers in perfect conditions, and so on (S4). - The recycle aquaculture system provides nearly zero-waste system of water with very low impact on the environment (S5). - The fish is available through whole year fed by certificated feed (S6).	- The company is quite new in the industry in comparison with other companies. It was established in 2015 (W1). - There are two business partners who each have fifty percent, so the decision has to be made on their agreement (W2). - Nowadays, the company only sells the fish to other business in big volumes so the prices are lower than it could be sell to end customers (W3). - The company is still quite far away from the city centre Brno. It is situated thirty kilometres away from it (W4). - The accounting of the company is outsourced (W5).

- The company wants to and willing to be close to the customers as possible, moreover is ready to care about customers individually according to their needs (S7).	

External factors	
Opportunities	**Threats**
- The political and legal environment in the Czech Republic is stable and democratic (O1). - The number of people and their wages are one of the highest in the South Moravian Region within the country (O2). - The retirees as a segment are the one that spends the most money on food (O3). - Customers more and more care about quality (O4). - The average price of the meal is one hundred and twenty Czech crowds in South Moravia Region, which is in comparison the second highest in the country (O5). - People like to live in surrounding villages in the region (O6). - Customers are interested in the origin of the food, its healthy, taste, and nutritive wealth (O7). - The customers appreciate a convenient way of delivering (O8). - People also like and enjoy farmer's markets on weekends and buy local products (O9). - Person eats about one and a half kilogram of freshwater fish per year in the country (O10).	- Salary in the country is expected to rise, which can lead to rise of wages of employees (T1). - People are still used to buy food, mainly in supermarkets and hypermarkets (T2). - Still, nowadays, not a lot of people use online shops for ordering food regularly (T3). - Customers want to have easy preparations of the meals which are possible to buy in supermarkets and hypermarkets. In addition, the bones are not appropriated by customers much (T4). - The number of vegetarians is rising (T5). - The most of trout are imported to the country, to be exact ninety percent of consumed is imported to the Czech Republic (T6). - For industry exists strict rules (T7). - The fish as a meal is not a frequent one in the country as could be (T8). - The place where customers buy a fish is mainly in supermarkets and hypermarkets during their shopping (T9).

- People perceive advertisement as a source of information (O11). - Also, TV, direct mail, newspapers, social media (Facebook, Twitter, and Instagram), and billboards are good way how to communicate with customers (O12). - The website is a key tool which is able to make a good impression to potential customers (O13). - The dryness which appears in the country is not good for the trout which are in traditional farms (O14). - There exist cases when the trout from foreign countries are ill, such as the last case, the trout from Italy (O15). - The customers also focus on eco-friendly products (O16). - The customers who are used to prepare and eat fish, do not mind shop in specialised shops and farms (O17). - In addition, people prefer to eat fish at home than in restaurants (O18).	- The main competitors of the company have a long tradition, and good name (T10). - The product is not easily consumed due to its bones (T11).

Appendix III.

The author has decided that the priority of each factor will be evaluated, so the author, as a project manager, can focus on the most important and relevant ones. The author compares each factor to another. There are used to three levels of evaluation, one means the factor is more important than the other one, 0.5 is that the importance is more or less the same, and zero means that factor is less important than the other one. All the elements are taken from Appendix II.

Table 21: Importance of the strengths' factors

(Source: Own, 2019)

Factor	S1	S2	S3	S4	S5	S6	S7	Sum	Importance (%)
S1	x	1	1	0.5	0.5	0.5	0.5	4	19
S2	0	x	1	0.5	0.5	0.5	0.5	3	14.2
S3	0	0	x	0	0	0	0	0	0
S4	0.5	0.5	1	x	0.5	0.5	0.5	3.5	16.7
S5	0.5	0.5	1	0.5	x	0.5	0.5	3.5	16.7
S6	0.5	0.5	1	0.5	0.5	x	0.5	3.5	16.7
S7	0.5	0.5	1	0.5	0.5	0.5	x	3.5	16.7

So, as could be seen from Table 21: Importance of the strength's factors, they should focus on the factor S1 and also on the S4, S5, S6, S7.

Table 22: Importance of the weaknesses' factors

(Source: Own, 2019)

Factor	W1	W2	W3	W4	W5	Sum	Importance (%)
W1	x	1	0.5	0	1	2.5	25
W2	0	x	0	0	0.5	0.5	5
W3	0.5	1	x	0.5	1	3	30
W4	1	1	0.5	x	1	3.5	35

| W5 | 0 | 0.5 | 0 | 0 | x | 0.5 | 5 |

So, the company has to focus mainly on W4, W3, and W1. These should be included in the proposal of the solution of the project, for more information, see Table 22: Importance of the weaknesses' factors .

Table 23: Importance of the threats' factors

(Source: Own, 2019)

F	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	S	Importance (%)
T1	x	0	0	0	0	0	0.5	0	0	0	0	0.5	1
T2	1	x	0.5	0.5	0.5	0.5	1	0.5	0.5	1	0.5	6.5	12
T3	1	0.5	x	0	0.5	0.5	1	0.5	0.5	0	0.5	5	9.3
T4	1	0.5	1	x	1	0.5	1	0.5	0.5	1	0.5	7.5	13.9
T5	1	0.5	0.5	0	x	0.5	1	0.5	0	1	0	5	9.3
T6	1	0.5	0.5	0.5	0.5	x	1	0.5	0.5	1	0.5	6.5	12
T7	1	0.5	0	0	0	0	x	0	0	0.5	0	1	2
T8	1	0.5	0.5	0.5	0.5	0.5	1	x	0.5	1	0.5	6.5	12
T9	1	0.5	0.5	0.5	1	0.5	1	0.5	x	1	0.5	7	12.9
T10	1	0	1	0	0	0	0.5	0	0	x	0	1.5	2.7
T11	1	0.5	0.5	0.5	1	0.5	1	0.5	0.5	1	x	7	12.9

The company has to be interested in threats such as mainly T4, T9, T11, T2, and T8. The rest of the results could be seen in Table 23: Importance of the threats' factors.

Table 24: Importance of the opportunities' factors

(Source: Own, 2019)

F	O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O13	O14	O15	O16	O17	O18	S	I (%)
O1	x	0.5	0	0	0	0	0	0	0	0	0	0	0	0.5	0	0	0	0	1	0.7
O2	0.5	x	0.5	0	0.5	0.5	0	0	0	0	0.5	0.5	0.5	0.5	0	0	0.5	0	4.5	2.9
O3	1	0.5	x	0.5	0.5	0.5	0	0.5	0	0	0.5	0.5	0.5	0	0	0	0.5	0	5.5	3.6
O4	1	1	0.5	x	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	10	6.5
O5	1	0.5	0.5	0.5	x	0.5	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0	0	0	0.5	6.5	4.2
O6	1	0.5	0.5	0.5	0.5	x	0	0.5	0.5	0.5	1	1	1	1	0.5	0.5	1	0.5	11	7.2
O7	1	1	1	0.5	1	1	x	0.5	0.5	0.5	1	1	1	1	0.5	0.5	0.5	0.5	13	8.5
O8	1	1	0.5	0.5	1	0.5	0.5	x	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	10.5	6.9
O9	1	1	1	0.5	0.5	0.5	0.5	0.5	x	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	10	6.5
O10	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	x	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	10	6.5

O11	1	0.5	0.5	0.5	0.5	0	0	0.5	0.5	0.5	x	0.5	0.5	1	0	0.5	0.5	0.5	8	5.2
O12	1	0.5	0.5	0.5	0.5	0	0	0.5	0.5	0.5	0.5	x	0.5	1	0.5	0.5	0.5	0.5	8.5	5.6
O13	1	0.5	0.5	0.5	0.5	0	0	0.5	0.5	0.5	0.5	0.5	x	1	0.5	0.5	0.5	0.5	8.5	5.6
O14	0.5	0.5	1	0	0.5	0	0	0	0.5	0.5	0	0	0	x	0	0	0	0	3.5	2.3
O15	1	1	1	0.5	1	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	1	x	0.5	0.5	0.5	11.5	7.5
O16	1	1	1	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	x	0.5	0.5	11	7.2
O17	1	0.5	0.5	0.5	1	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	x	0.5	9.5	6.2
O18	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	x	10.5	6.9

The company, according to the project and the opportunities that are perceived (see Table 24: Importance of the opportunities' factors), should mainly focus on O7, O15, O6, O16, O8, and O18. Also, opportunities such as O4, O9, O10 should be considered as well. The opportunities O17, O12, O13, and O11 could be taken into the account too.

Appendix IV.

Personality

- Reliable
- Helpful
- Sociable
- Dedicated
- Patriotic

About

Libuše lives in the block of flats in Brno. She has one husband, two children and four grandchildren, with whom she loves spending time. She used to be a teacher of literature.

She usually buys food in supermarkets, but nowadays she would appropriate service of delivery because she is no more so fit as she used to be. In addition, her husband is quite ill, so she cares about the food and vitamins she gives to him.

Libuše Stojanová

62, Brno
———
Retired person

| **Status** | **Archetype** |
| married | caregiver |

Motivations to buy food

| Quality | Time of cooking |
| Price | Country of origin |

Satisfaction

- When her children still keep their cottage in order.
- Spending quality time with family.
- Health is in first place.

Frustrations

- People who do not appropriate someone's hard work.
- No ability to keep with the grandchildren.

"When my family comes around, I do love to cook them."

Places, where she eats

Home

Restaurants

Fast foods

Bistro/canteen

Influences

- Husband
- Newspapers
- Family
- Books
- Television
- Radio

Frequently used media

G+

Figure 18: The first persona

(Source: Own, 2019)

Personality

- Conscientious
- Smart
- Caring
- Empathic
- Stubborn

About

Jonáš lives in a village near Brno. He works as a backend Python developer in one multinational company in Brno. He has a girlfriend and two years old daughter.

He cares about the environment, tries to be zero-waste as much possible. As a father, he buys products that are healthy, quality, and local. On the weekends he spends his time with family on trips, on the garden, or local actions, markets and other events.

Motivations to buy food

Quality ———●——— Time of cooking ————●——
Price ——●———— Country of origin ——————●—

Satisfaction

- Supporting local shops with healthy and quality products.
- Spending quality time with family.
- Work-leisure balanced time.
- Keep it real.

Frustrations

- People who do not care about the environment and future of the planet.
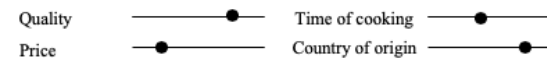- Giving price over the quality of the products.
- People without their own opinions.

Jonáš Konečný

34, Česká

Backend Python developer

Status
in relationship

Salary
35K Czk per month

Archetype
sage

"I want to give my daughter only healthy food, which I am can be sure where it is from."

Places, where he eats

Home

Restaurants

Fast foods

Bistro/canteen

Influences

· Friends and family · Trends
· Newspapers · Books
· Social media · Colleagues

Frequently used media

Figure 19: The second persona

(Source: Own, 2019)

Appendix V.

Table 25: Project status report template

(Source: Own, 2019)

			Project name	
🔴	RISKS		Project manager	
🟡	POTENTIAL RISKS		Date of status	
🟢	ON TRACK			

Project status this period			
Overall project status			

Project status			
	Status	**Team**	**Notes**
Scope			
Schedule			
Budget			
Quality			
Risks			

Table 26: Lessons learned paper template

(Source: Own, 2019)

Lessons learned paper							
Project							
PM							
This paper collects all information and impressions, which are learned during the project of what worked well and did not. It is updated during the entire time of the project.							
ID	Date	Name	Role	Lesson description	Recommended items to be added	Recommended items to be removed	PM phase

Table 27: Project change template

(Source: Own, 2019)

Project				Date	
Project manager					
Change of project					
Proposed change					
Reasons for change					
Intended outcome/aim					
Estimated time					
Estimated costs					
Other factors and risks	Potential positive effects		Potential negative effects		
Other notes					