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EXAMINING THE FACTORS INFLUENCING THE SUCCESS OF PROJECTS

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Abstract

My research focuses on the factors that influence the success of a project. I chose this topic because of my job, where I work on an invoice automation project. This is why I became interested in what makes a project good and what factors influence it. My aim was to answer these basic questions.

In my thesis, I will highlight the project success factors and how they vary from project to project. Among these, I will analyze in detail the impact of management on project success, the reasons for changing priorities, and the selection of professionals for a project.

To conduct my research, I will use a qualitative method, interviewing 9 managers who can provide relevant information on the topic. To this end, I will interview the interviewees in an online Zoom meeting and ask them my research questions.

These interviews reveal the interrelationships between the key success factors of the project and their impact on each other. In my view, the results of my research would provide useful and practical lessons for sustaining project success and avoiding failure.

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List of abbreviations

Activity Matrix: The activity matrix defines the tasks of the parties involved in the project.

Business Case: It brings together the benefits, disadvantages, costs, and risks of the current situation and future vision so that executive management can decide if the project should go ahead.

CSFs (Critical Success Factors): These are the areas of the business or project that are vital to its success. Identifying and communicating CSFs within an organization is essential to ensure that the business or project stays focused on what needs to be done to achieve success.

EEF (Enterprise Environmental Factors): It includes all policies, practices, procedures, and legislation that exist both inside and outside of the organization that will impact the way people manage a project.

KPI (Key Process Indicators): KPI stands for key performance indicator, a quantifiable measure of performance over time for a specific objective. KPIs provide targets for teams to shoot for, milestones to gauge progress, and insights that help people across the organization make better decisions.

OPA (Organizational Process Assets): It includes anything the organization has acquired that people can use in the management of the project. They include formal and informal plans, policies, procedures, and guidelines. These are very important for the planning stage, irrespective of the nature of the project.

PDCA cycle: this is an iterative, four-step management method used to control and continuously improve products and processes. It is also known as the Deming cycle or the Shewhart cycle and the control cycle and is also abbreviated PDSA.

Project supervisor: The representative of the client. It is his/her responsibility to ensure that the Project Steering Committee and the Project Manager have the appropriate authority to ensure that the project objectives are fully achieved. The project supervisor is the responsible manager for the area most affected by the project objectives (e.g. sectoral director, director, etc.).

Scope: It refers to the combined objectives and requirements needed to complete a project. The term is often used in project management as well as in consulting. Properly defining the scope of a project allows managers to estimate costs and the time required to finish the project.

Sponsor: A financially supporting institution or person that provides money to an artist, athlete, or charity, either altruistically or in exchange for publicity.

Steering board: In an organization, the steering board is a decision-making body for an individual project or a group of projects or programs.

Steering committee: A steering committee is a group of high-level advisors who have been asked to govern an organization or organizational segment and provide it with direction. In information technology (IT), the job of a steering committee is to make sure every IT project supports business goals and objectives.

Timeline: It is the presentation of a chronological sequence of events along a drawn line that enables a viewer to understand temporal relationships quickly. The term is also sometimes extended to mean a chronology that is tabular, year-by-year paragraphs or purely conceptual.

WBS (Work Breakdown Structure): It is a project management tool that takes a step-by-step approach to completing large projects with several moving pieces.

Introduction

"Nothing could be more difficult, more doubtful of success or more dangerous than planning and implementing a new system." (Kremmer, 2015)

The development of the last decades of the 20th century has led companies not only to invest with clear results, but also to increasingly large-scale projects within their organisations. According to Mihály Görög, these took increasingly diverse forms, with the emergence of less tangible, more complex projects that delivered new results, alongside the traditional facility investment projects. At the same time, research and development initiatives were launched (Görög, 2003).

From this point of view, the problem is that nowadays there are many more start-up projects than successful project closures, and their implementation can fail at many points (Greek, 2013).Therefore, I chose to study the success of projects as the topic of my research, in order to understand and prioritize the key factors that influence and determine whether the outcome of a project will be successful or unsuccessful.

The aim of my thesis is therefore to identify the key success factors and the barriers and failures that cause projects to fail. To do this, I looked at the success criteria for projects, effective communication and cooperation with management, changing priorities and the composition of the project team, for which I formulated the following research questions.

1. My hypothesis: There are differences in the success criteria for projects and in the evaluation of different projects.
2. My hypothesis: In my opinion, effective communication and cooperation with the management is one of the most key factors for the success of a project.
3. My hypothesis: I see that changing priorities can have a significant impact on the success of a project, causing delays, cost overruns, customer/stakeholder/management dissatisfaction.
4. My hypothesis: The project determines exactly how many and what type of knowledge professionals should be in the team.

To answer these questions, I drew on a broad literature-historical background and studies of actual results, which formed the basis of my thesis. I conducted my own research through interviews with and analysis of renowned project managers.

In order to answer my basic assumptions, I used a qualitative research method, which allowed me to get more information to answer my questions. In order to do this quickly, I conducted online interviews with a number of project managers, so that I could examine the problem from several angles.

1. Basic concepts, actors, and forms of the project

In this chapter I define the project as a concept. Clarifying this will help you understand its basic purpose. I will introduce the diverse types of projects and their groupings. I will also discuss the actors involved and the impact these actors have on the functioning and development of the project itself.

1.1. Definition and classification of projects

The project has been defined in several textbooks and journals, both in Hungarian and other languages. Two of them really caught my attention:

The first one was described by Dr. Lászlóné Balassa Ildikó Sedivi, who called a project a set of activities that are planned and implemented in a given organizational environment to achieve a given goal, while adhering to certain time, money, resource, and quality constraints. It is a challenging task, clearly delineated in time and space, which can be accomplished if the available activities and resources are used in a coordinated and rational way, in accordance with the objectives set (Sedivi, 2008).

The other is the definition of a project by Mihály Görög, who defines a project as a complex, one-off activity with a definable start and end date and costs (Görög, 2003).

The term project is derived from the Latin word "proiectum", meaning "to put something in front of". According to the original meaning, a project therefore always includes elements of planning and action for the future. (Sedivi, 2008) According to the PMBOK Guide, or Project Management Body of Knowledge Guidebook, "A project is a time-bound effort to create a unique product, service, or outcome." They can be characterised by time limits (start and end points), specific characteristics - specific tasks - and limited time activities (PMI, 2016):

- By content, by theme (construction, development, logistics, IT, or environmental projects),

- By complexity (simple, complex, multi-project, mega-, and giga projects),

- Based on the organisations involved (internal, external, intra-departmental, interdepartmental projects)

- By time horizon (short-, medium-, long-term projects), and the list is not complete... (centroszet.hu, 2022)

However, it is important to note that projects are not only basic economic units, but also social systems based on close cooperation between the project participants (individuals, groups, organisations, etc.), which require a highly developed strategic approach on the part of the members, as the results of the projects help to achieve the strategic goals of the company.

Each project creates a unique product, service, or outcome. Although some activities may be repeated, this does not change the essential characteristics that make a project special. A perfect example of this is the construction of office buildings, which may be built using the same or similar materials and the teams responsible for the project may be the same or different. However, each construction endeavour is unique because each takes place in a different area, has a different layout, is subject to different conditions and events, has a separate set of stakeholders, and so on (PMI, 2014)

To define projects more precisely, it is necessary to categorise them at some level. The most widely used classification methods include categorisation by project themes, complexity levels, initiators, and timeframes.

1.2. Project actors

When we mention the actors in a project, we always think first of the team that will conduct the tasks and implement the plan. However, this does not fully cover the concept, as there is much more to it. It includes all individuals or groups of individuals who have an interest in the project, who can influence its implementation and are therefore called stakeholders. They can be external customers, internal stakeholders, or stakeholders who are only partly internal stakeholders (centroszent.hu, 2022).

1.2.1. Internal stakeholders in the project

The internal actors involved in the project include the project manager, the project team, and the management team. Each stakeholder has their own responsibilities and tasks, which are defined before the project starts. This is important because these factors will have a major impact on the functioning of the project later on. (centroszent.hu, 2022)

The Project Manager is responsible for the overall success of the project, as well as for the tasks carried out within the project and the objectives set. To achieve these, they develop the current objectives, assigns tasks using work breakdown structures (WBS) and defines responsibilities and authorities. They are also the project team leader, whose main task is to ensure that the project team members can communicate with each other. If information slips or conflicts arise, he tries to manage and resolve them. (centroszent.hu, 2022)

It is a good idea to have a face-to-face meeting with each group member at regular intervals. These meetings can identify obstacles to progress and try to find solutions to overcome them. Team members can be effective and focused when they work in a calm, problem-free environment.

The Project Manager guides the team, monitors and follows up the implementation of the project. The project sponsor will be regularly informed of progress and the status of issues requiring decisions. Therefore, good general leadership skills, good organisational skills, excellent communication skills, a broad and generous professional knowledge are essential for this position. It is also useful to have a good knowledge of the company's past, culture, current position and activities (centroszent.hu, 2022).

One of the most important aspects that determine whether a project will be successful is the project team working on it. Experience has shown that a team is most effective when it incorporates several individual approaches at the same time. It is advisable to choose people who are open-minded, professionally up-to-date, innovative, precise, and critical, as well as practical (centroszent.hu, 2022). As the participants participate in the tasks undertaken at various times and for different durations, their continuous communication is key.

The purpose of the project is defined by the leadership, also known as management, and the project manager uses this as the basis for analysing the activity or workflow matrix. This clarifies which department is responsible for what, and also defines the tasks of individuals. (centroszent.hu, 2022) The project manager and the staff under them are assisted by the management in terms of performance.

1.2.2. External stakeholders in the project

It is generally accepted that both the client and the project sponsor are internal stakeholders in the process under consideration. The client is the one whose money is used to finance the project and the one who has the most influence on how things are fully implemented. They decide when to start, determine the optimum time for the work process and set the end goal (centroszent.hu, 2022).

The client's interests are best represented by the sponsor, often referred to as the project supervisor, who is responsible for ensuring that the project steering committee and the project manager have the necessary authority to conduct the task undertaken in accordance with the project's objectives. In addition, they are the person responsible for managing the part of the organisation most affected by the project objectives. As he has a personal interest in seeing these objectives fully achieved, he is sometimes referred to as line manager, director, or other similar title. It is easy for a single person to function as supervisor of several projects at the same time (centroszent.hu, 2022).

The project supervisor should be involved in the creation of the activity matrix and have an open communication with the management in order to guarantee the full implementation of the task undertaken. In addition, they should also keep the company's interests in mind and work closely with the project manager to find solutions to any problems that may arise (centroszent.hu, 2022).

2. Introduction to project management

Projects cannot work perfectly on their own, so it is important to organise their management and continuous monitoring. Project management is a coordinating body set up for this purpose, to help solve the basic problems - those related to the task. Project management is the application of knowledge, skills, tools, and procedures to project activities in order to achieve the project requirements (PMI, 2014).

2.1 History, importance, and practical application of project management

Project management is not a new concept, in fact it goes back hundreds of years. The Giza pyramids, the Great Wall of China, the Olympic Games and so on are all examples of successful projects. The success of these extraordinary and now world-famous facilities, events and projects is also directly attributable to the leaders and managers who oversaw their implementation. They too have adopted different practices, concepts, procedures, tools, and methodologies similar to project management. Using a wide variety of skills and knowledge areas, their managers successfully met the requirements outlined by the clients and the expectations of the participants and project stakeholders (PMI, 2006).

In the middle of the 20th century, people working in the field of project management agreed to create an information base. This collection of information is now commonly referred to as the Project Management Body of Knowledge (PMBOK), a standard terminology and guideline for project management.) The PMBOK® Guide is used by organizations to develop the basic techniques, policies, procedures, guidelines, tools, methods, and life cycle phases necessary for the practical application of project management (PMI, 2006)

In practice, this should be conceived as the project manager, together with selected professionals as members and other stakeholders, identifying and implementing specific practices that best serve the achievement of the plan. The right combination of processes, inputs, tools, methods, and outputs are applied. (PMI, 2006) Successful project management is achieved through the appropriate application and integration of the project management processes designed for this purpose.

The science of project management enables organisations to deliver projects efficiently and effectively. It enables individuals, groups, public and private organisations to achieve their business goals, meet the expectations of project stakeholders, improve predictability, and

increase their chances of success. They can also solve problems and difficulties and respond to risks in a timely manner. (PMI, 2006) In addition, they can identify failing projects, which are either corrected or eliminated.

Projects are an essential part of the process through which organisations generate value and benefits in their day-to-day operations. Organisational leaders need to be able to operate effectively in today's competitive business environment, despite tighter cost plans, shorter schedules, fewer resources, and rapidly evolving technology. The latter is constantly changing at a rapid pace, making it highly dynamic (PMI, 2006).

Companies rely on project management because they need to continuously create business value to maintain their position as a competitive player in the global economy. The ability to manage projects effectively and efficiently is therefore a key competency within organisations (PMI, 2006).

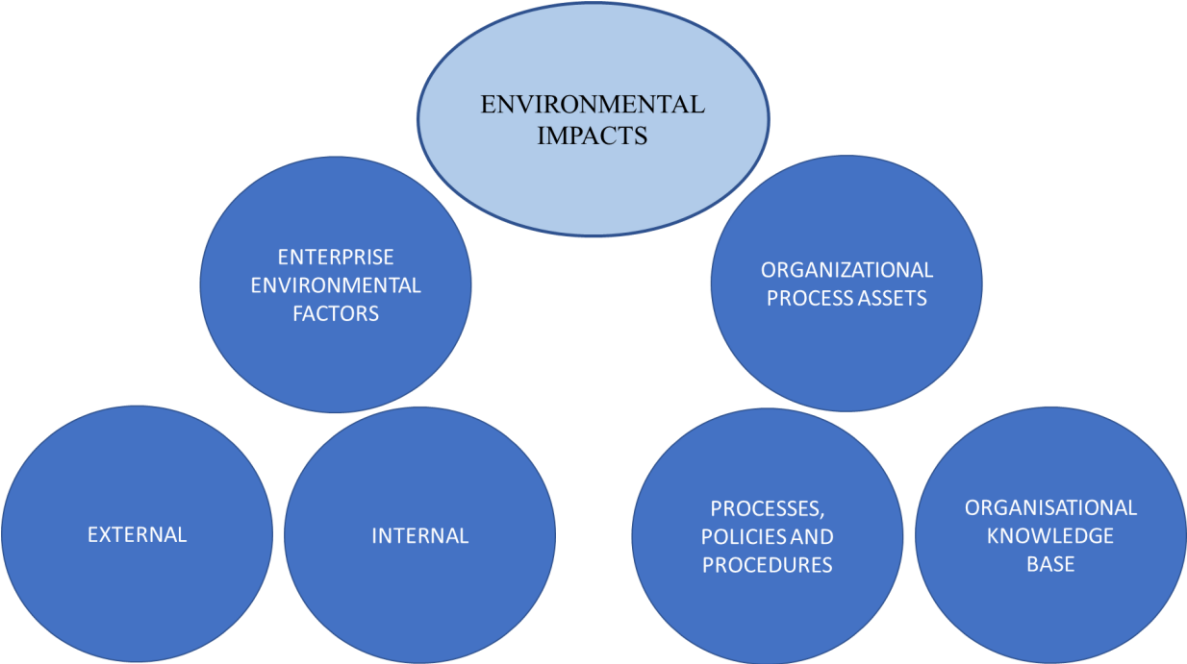## 2.2. The operational environment of the projects

1Figure 1: Impacts on the project

Source: based on PMI (2006) own edit.

The environment in which a project takes place and is implemented can have a positive or negative impact on the results of a project, depending on the specific circumstances. Enterprise

environmental factors, (EEF), and organisational process assets, also known as organisational process assets (OPA), are two key categories that can be used to identify impacts (PMI, 2017)

EEFs, also known as corporate environmental factors: these are the internal factors that determine the operational processes (the company's organisational structure, subordination, but also the equipment and machinery that ensure its survival), and the external factors (consumers, competitors, market intermediaries, the natural and technical environment, etc.) that influence the life and relations of the company. EEFs can have an impact not only on the organisation as a whole, but also on the portfolio, programmes and specific projects that make up the organisation (PMI, 2017).

2.3. Project management processes

To successfully manage a project, logically designed procedures for project management need to be built into the project management process and followed in the right way. The literature on project management identifies the following knowledge areas as essential components of the project management process.

Integration management is the function within the organisation responsible for coordinating many aspects of the project and is sometimes referred to simply as "integration management". It is the function that oversees the entire project from inception to completion (PMI, 2006).

The term **scope management** refers to the process of managing the scope of a project. This review is conducted to ensure that the objectives of the project, and only those objectives, are met. However, the role of this area is not only to recall the original objective, but also to identify new or changing objectives as the project progresses and to incorporate them into the day-to-day work. And, if necessary, to include review and redesign, as necessary (PMI, 2006).

Schedule management is responsible for keeping the initial schedule up to date and using the project schedule (also called the project time plan) as a communication tool. It is also responsible for ensuring that the project plan is used effectively (PMI, 2006).

Cost management is responsible for ensuring that the project is implemented without exceeding the available budget. It is of particular importance to determine whether cost overruns have occurred and to take the necessary corrective action (PMI, 2006).

It is **quality management that is** responsible for ensuring that project deliverables are completed within the required and desired quality parameters.

Human resource management, or HRM for short, is responsible for the most efficient use of the human resources available. HRM is sometimes also referred to as HR. In order to do this, these resources need to be trained and developed, considering both the talent they already have and the competences they need to develop (PMI, 2006).

Communication management is the part of the project that is responsible for ensuring that all organisations and stakeholders working on the project receive the right amount, quality, and consistency of information. (PMI, 2006)

Risk management requires a wide range of activities, including qualitative and quantitative risk analyses, avoidance, mitigation etc. strategies and contingency plans (PMI, 2006).

Procurement Management is responsible for overseeing the entire procurement process, which includes all relationships with partners and suppliers. Their remit covers the entire procurement process. They provide information to all organisations and stakeholders involved in the project (PMI, 2006).

Change management is treated as a separate area as it does not fit into any of the nine sub-areas. However, a significant amount of change will take place during the project. As a result of these two factors, it is considered to be a separate area. Change management provides a safeguard against making hasty decisions and the potential adverse effects of such decisions. It ensured that changes that have been discussed and agreed are implemented in the way that has been defined (PMI, 2006).

2.4. Origins, types, and application of project methodologies

In the next chapter I will write about the origins and evolution of project methodologies. I will also describe in detail the types of methodologies that have emerged and the types of projects for which these methodologies should be used. I will then describe how they should be used and the advantages and disadvantages of using them in the wrong way.

2.4.1. Origins and types of project methodologies

Project methodologies were created because the traditional procedures and activities known in project management were not applicable to all projects. For this reason, a new kind of solution had to be created to help manage specific projects.
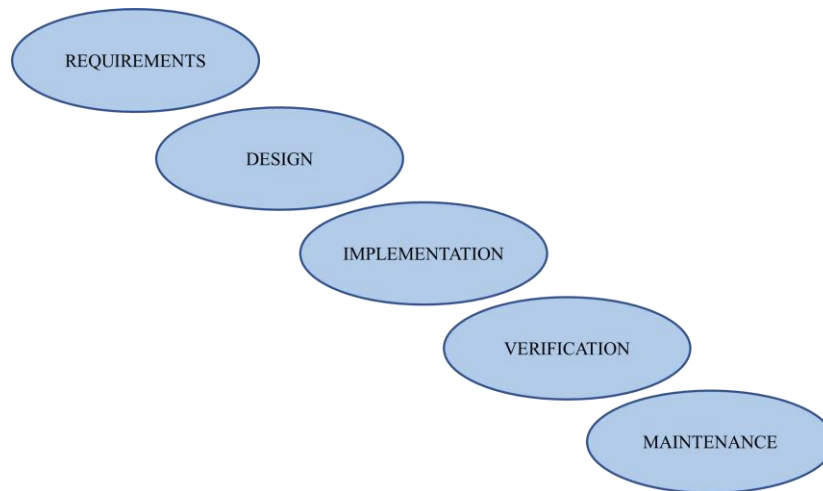
2Figure 3: Waterfall model

Source: based on Paul S. (2010) own ed.

The waterfall methodology, consists of successive stages. The starting and end points of each phase are predetermined, and successful completion of one phase is a prerequisite for moving on to the next. The operation of this model can be compared to a waterfall, hence the name waterfall model (synergia.hu, 2021).

The Project Management Institute (PMI) was established in 1969 to ensure that project management tools and practices were widely disseminated in sectors such as construction and software development. However, it was realised that a waterfall approach would not work for all types of projects. In software development, the agile methodology, which can be applied to very rapid development, has gained ground (synergy.com, 2021).
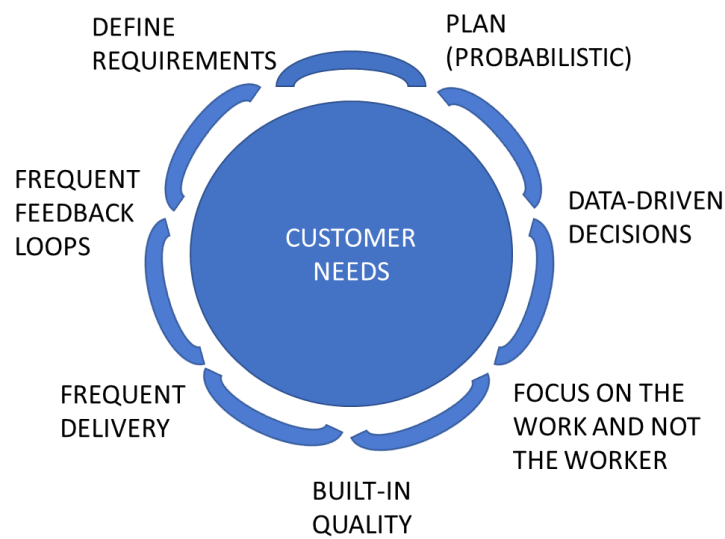
4Figure 5: Agile methodology

kanbanize.com (2022) based on own editing

Unlike traditional methodologies, this agile development does not predetermine the scope of the project. This is due to the lack of accurate estimation and continuous planning in the initial stages of the project. These software development experiences, as well as the successes and failures of ongoing experiments, have led to agile software development as a strategy for responding to changing circumstances and requirements (synergy.com, 2021).

In practice, three project management approaches have emerged: waterfall, agile and iterative (a hybrid of the two). Each technique has its place in the context and field of activity, so none of them can be called good or bad (synergy.hu, 2021).

2.4.2. Presentation and application of project methodologies

Iterative and waterfall processes are notable examples of traditional project management procedures. The framework consists of a scope, a schedule and a budget, the scope being the most important as the project only results in an end product. It may therefore be necessary to modify the project schedule or the budget. Since all the main criteria are known at the start of the project and the methodology is less tolerant of modifications, the traditional approach is much more predictable, even though the project scope is fixed, and only certain modifications are possible (synergy.com, 2021)

In the waterfall model, the project completion process can be divided into a series of phases, with the start of each phase depending on the completion of the previous phase. This requires a fairly detailed planning process, the completion of which will largely determine the success or failure of the project (synergy.com, 2021)

In contrast, when using an iterative approach, the scope, schedule, and budget of the project are also monitored. In other words, the process as a whole consists of four iterative steps, rather than a series of consecutive steps, which is the PDCA – Plan Do Check Act cycle. The cycle starts with the planning step, continues with the action step, followed by the monitoring step, and ends with the planning step. The aim of this strategy is to control goods and processes and achieve continuous improvement. This method provides a more flexible basis than the waterfall model and is more tolerant of scope changes (synergy.com, 2021)

Many internal and external elements can affect a project, so the waterfall approach cannot be applied to every business or every project. An example of an external factor is a change to an existing regulation or law, while an example of an internal change is a new or updated customer requirement. Since everything is built point by point during the project, if there is a change, much of it has to be redesigned, which is difficult to adapt to with the waterfall approach (synergy.com, 2021)

In contrast, the iterative method is already prepared to accommodate these changes. Because they continuously monitor the progress of the project, as soon as they become aware of any changes, they immediately start to research the situation, implement corrective actions and then redesign.

The agile approach differs in that. Unlike waterfall, agile planning does not provide a comprehensive and preliminary roadmap, allowing for the incorporation of changes and improvements. Therefore, it is preferable to choose the agile methodology when a complex solution is needed in combination with innovative technology and a constantly changing environment (synergy.com, 2021).

Whether at an organisational or project level, the agile methodology focuses on collaboration, continuous improvement and delivering solutions that add value for the customer. Agile solutions and agile-led projects start with the customer's needs, build a vision based on these needs, and then develop a high-level strategy to support the realisation of the vision (synergy.com, 2021)

Traditional waterfall or iterative project management methods are only suitable for projects when the scope is well defined, and the desired outcome is known in advance. Customer satisfaction can only be measured when you know exactly what the customer wants. Whether a waterfall or iterative methodology is used, this strategy can be beneficial in most cases when building projects. For example, in the construction of a condominium, identical apartments are built. When applied to this type of project, the waterfall approach often yields satisfactory results (synergy.com, 2021)

2.4.3. Impact of the right or wrong project approach on project success

Project productivity and completion rates can be improved by choosing the right technique. It is important to consider the most effective methodology at the outset of the project. By choosing an effective approach, both the client and the project team will be satisfied with the final product. In general, projects will have fewer errors and fewer delays (synergy.com, 2021)

All approaches to project management are viable, but you need to choose the one that works best for your project. To choose the approach that will deliver the best results, it is necessary to know all three alternatives, analyse each of them in terms of the advantages and disadvantages they offer, and determine when each strategy should be used (synergy.com, 2021)

If you want to implement a project with a traditional methodology, where the scope is unknown at the beginning of the project and the client does not know exactly what to expect, you may run into the problem of a large number of new requirements being added during the project. These are then more difficult to incorporate and can lead to continuous re-planning and time or budget overruns (synergy.com, 2021).

However, for a project where the scope is well defined and the necessary information is available, it makes sense to use the traditional technique, as new demands are not expected to be frequent. Of course, it is possible to adapt agile tools and techniques to a traditional project, which in my opinion is beneficial for the team and the project. This could for example be a retrospective meeting after each delivery. This meeting can be used to increase team productivity and collaboration (synergy.com, 2021)

3. Examining the success and human factors of the project

The vast majority of managers in the industry often use traditional criteria to determine the success of projects that have been the industry norm for decades. These attributes have been used for many years to determine the success of projects. However, success research journals tend to move away from the cost-time-quality triad (discussed in detail in section 3.2). New criteria and criteria have emerged, which have complemented the original concepts in different ways. As a result, the meaning of the concept of success has been extended to areas that were not previously considered and has become more complex in order to ensure project effectiveness (Sebestyén & Tóth, 2014)

3.1. The evolution of the classical concepts of project success

Baker-Murphy and Fisher are undoubtedly the researchers whose names are most often mentioned when it comes to the factors that determine the success of a project. In 1983 they gave the following definition of project success:

"A project is successful if it is delivered within budget, on time and to the expected quality level"
(Baker el al., 1983:902-909).

So, we can say that a project was successful if it was able to meet the boundary criteria set by the client and conclude that the project was unsuccessful if it was not able to do so.

The definition of a successful project was first attempted in the 1980s. At that time, Baker et al. revised, extended their own earlier theory, and argued that success should be judged not on the dimensions of time, cost, and delivery, but on the basis of perceived and experienced performance. Customer satisfaction, as a novel indicator of business success, first played a significant role in the work of these authors. This contrasted with the traditional method of measuring success, which focused on time, cost, and delivery (Baker et al, 669-685).

In addition to the triple bottom line and client satisfaction, the contribution of the project to the objectives of the organisational strategy was identified as an essential component, which was identified as an important criterion by various authors. According to Cleland, the significance of a successful project is not only important in terms of technical performance (achieving the goal within a given time and cost), but also in terms of its contribution to the strategic mission of the organization (Cleland, 1986:6-12).

In his work, Wateridge highlights a number of other variables that are important to the effective completion of a project, including: user satisfaction, the achievement of the project owner's business objectives, and the overall satisfaction of other partners, suppliers, and contributors to the project. Of the six dimensions he identifies, the well-known triple boundary conditions of cost, quality, and time form three dimensions (Wateridge, 1998: 59-63)

3.2. Success factors and success criteria

Project success and project management success are different. Success is judged by the overall objectives of the project, while project management is measured by cost, time, and quality. Much of the literature conflates project success and project management (De Wit, 1988).

Two main strands have emerged in project success research: influencing factors and evaluating success. Project success variables are independent characteristics that contribute to the success of a project. Project success criteria are used to determine the success of a project (Müller & Turner, 2007).

Project definitions give the cost-time-quality trinity as a success criterion. For decades, project managers have regarded the achievement of these expected values as the basis for success, and this view has become the industry norm. They capture the most specific project aspects that are, for example, a mandatory and expected part of construction contracts. They are also fairly simple to identify. They can be prioritised according to time and cost constraints, and can be well tracked, reliably and accurately measured during implementation, so that a range of mathematical approaches can be applied to them. Measuring quality, on the other hand, is a subjective criterion with well-defined parts, and its evaluation is a more complex process (Jarjabka, 2020).

According to the experts, we need to identify the important success variables, metrics (indicators). Rockart proposes a 3-step process: first, we need to define a list of Critical Success Factors (CSFs) for the success of the company. Second, the organizational objectives should be prioritized according to these factors (Rockart, 1979). If market success is critical, then the change in market share or the price/earnings (P/E) ratio should be measured. Rowe, Mason, and Dickel added significant results to Rockart's CSF theory (Rowe et al, 1985).

It is also relatively easy to judge whether the company is able to deploy its resources successfully, whether there are conflicts between sub-objectives, whether there is

environmental uncertainty, and whether policy and other external factors are helping or hindering the group's performance.

Cooke-Davies has identified characteristics that are linked to the success of the project and project management, thus sustaining the success of the project in the long term. I will mention a few of them without being exhaustive:

- time management practices,
- definition of project-wide risk management,
- organisation-wide risk management education,
- maturity of the organisation's risk-taking process,
- visible (accessible to all participants) risk management system and plan, etc.,
- budget (project management) practices,
- maintenance of a full baseline performance measurement,
- experiential learning,
- continuous communication with internal and external partners,
- short-term problem solving, etc. (Cooke-Davies , 2002)

3.2.1. Project triangle

The triple constrain condition, also known as the project magic triangle, is still the most commonly used method to determine whether a project has been successful or not.

The definition of a "project" highlights how time is a significant factor, as there is always a predetermined deadline for completion. In order to achieve the objectives, set at the expected quality level, within the time available and using the resources currently available, very careful planning and continuous monitoring and evaluation of the intermediate results are required (Sebestyén & Tóth, 2014).

The key to successful project completion lies in maintaining a healthy balance and working closely with two or three other parties to ensure optimal results.

The project triangle method is considered by Baccarini (1999) as the primary factor in determining success in the traditional method. However, in addition to these three aspects, it is essential to consider the quality of the project management process, the organisation responsible

for project ownership and the level of satisfaction experienced by the project participants, also known as project stakeholders (Daróczi, 2011).
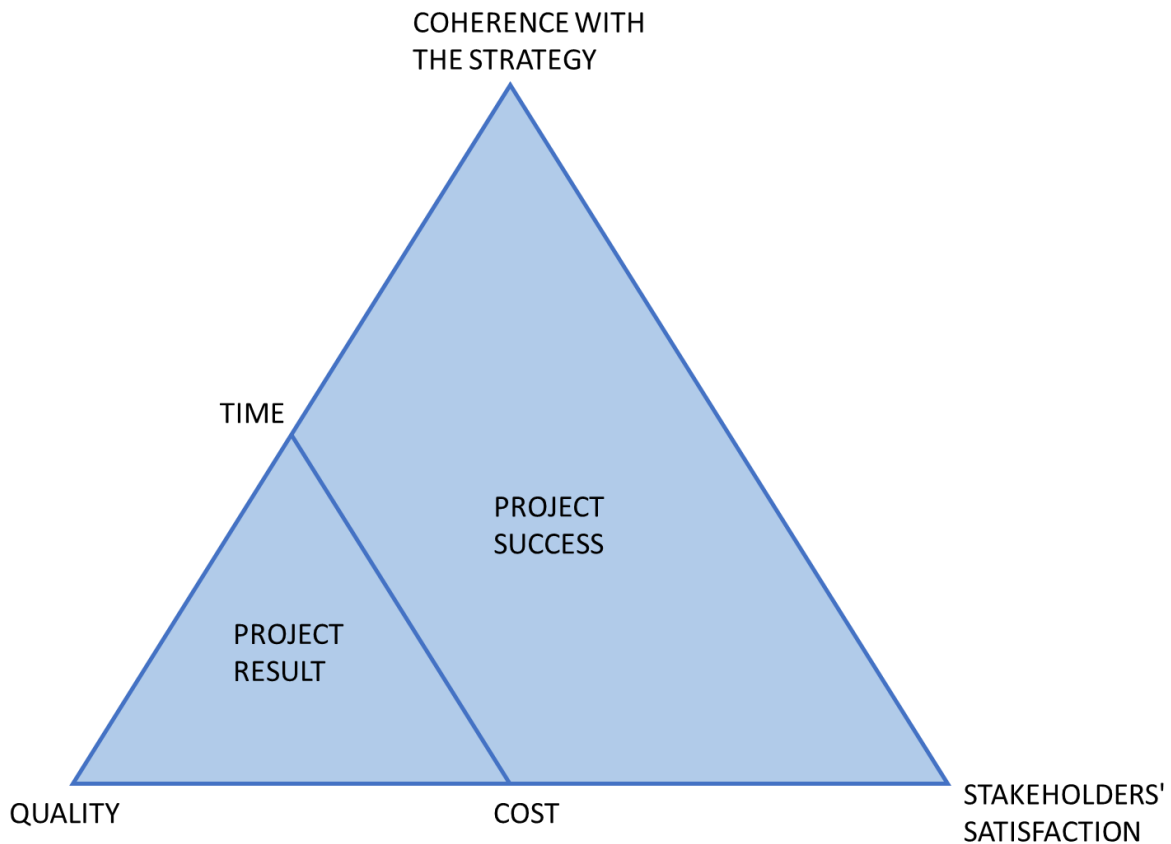
6Figure 7: Deák's extended interpretation of project success factors

Source: based on Deák (2005) own edit.

3.2.2. Project management criteria

According to the criteria of strategy-oriented project management, Mihály Görög developed the hierarchical model. According to this model, the implementation of a project can be evaluated at three different levels:

1. according to the main objectives of the project

2. in accordance with the requirements of the organisation owning the project

3. according to the satisfaction of many of the project stakeholders (Görög, 1996)

The traditional method is used to conduct the evaluation, which focuses on the main objectives of the project. This method considers the extent to which the project successfully meets the expectations initially set. Whether the actual cost and duration of project implementation deviates from what was planned, and whether the final product meets the quality requirements set at the beginning of the project (Daróczi, 2011).

The next stage assesses the project owner's satisfaction with the project organisation and focuses on the extent to which the final outcome of the project has been successful in achieving the strategic objective that shaped the project. This is followed by the stage in which the concerns of the various stakeholders are addressed, which involves the stakeholders involved in the implementation process and the stakeholders involved in determining the outcome of the project (Görög, 2003).

In the next stage of the evaluation, success is assessed not only on the basis of the project implementation process, but also on the acceptance of the final product by the stakeholders concerned. According to Jugdev and Müller (2005), a project can be considered successful if the organisation owning the project sees value in it not only for itself, but also in the extent to which the process has improved in efficiency and effectiveness. (Jugdev, Müller, 2005) An organisation can be said to be in a state of change if it implements several different projects within a given time period. This is because the organisation changes its strategy in response to changing circumstances. (Görög, 2013) The success of a project can also be compromised if stakeholders are not sufficiently involved in the project or if there is inadequate communication between stakeholders.

According to Fortune and White, the following are the most common critical success factors:

- Supporting senior management
- Clear, unambiguous goals
- A realistic and up-to-date project plan
- Effective communication tools and response time
- End-user involvement. (Fortune, White, 2006)

The third aspect is the level of satisfaction experienced by many project stakeholders. In the case of corporate projects, there is a general tendency to pay more attention to the first two aspects, while stakeholder satisfaction is not always considered as a success criterion for projects.

3.2.3. Definition of project KPIs

It is essential to measure the performance of the company's management operations, systems, and processes in order to identify and address emerging problems and to optimise improvement. This requires the establishment of tools and procedures for the continuous monitoring and evaluation of these key performance indicators. Furthermore, the definition of key performance indicators (KPIs) to measure the quality and efficiency of each function within the company (Balogh, 2015).

One of the prerequisites for good practice is a conscientious and committed attitude from management. Once the right KPIs have been set, it is important to use them to monitor the performance of the selected ones. In the event of anomalies, significant deviations, etc., inform the relevant decision making body or person of their content, extent, and conclusions (Balogh, 2015).

In practice, this can be achieved by assigning to each process measurable, quantifiable, and comparable indicators that can be used to monitor the effectiveness of the process (Balogh, 2015).

For example, in the case of HRM processes, KPI-based monitoring exercises are most commonly carried out on recruitment selection (hiring time, cost, onboarding, etc.), training (number of training hours, training missed, completion rate against plan, average test scores, etc.), remuneration (wage cost, components of wage cost, efficiency, etc.) and evaluation procedures. In addition, the vast majority of enterprises also routinely monitor the evolution of data on the general characteristics of their employees, which may overlap with certain aspects of the data to be provided to the CSO (number of employees, proportion of own and temporary employees, proportion of highest educational attainment, language skills, turnover, absenteeism rates, etc.) (Balogh, 2015)

KPIs, where they exist for labour law processes, focus on problems and business risks. For example, the number of litigation cases, their outcome rates, the rate of employee complaints (Balogh, 2015).

The most commonly found indicators for payroll are the number and proportion of legitimate and unfounded employee complaints and the number of hours spent on payroll (Balogh, 2015).

3.2.4. The role of human and organisational factors

Surely the idea has occurred to all professionals that, in addition to well-measured technological metrics, the criteria and factors for success must also include human attributes. Personal attributes such as adaptability and flexibility, passion and spontaneity, aggression and assertiveness, leadership and initiative, ambition, verbal skills, etc. also play a role. However, the crucial question of how these can be incorporated into the other quantitative criteria or elements is still not clearly answered, as their impact is difficult to quantify. It is clear that teamwork, team spirit - and the impact of leadership style on success - are correlated (Yang - Huang - Wu, 2011).

4. Primary research

The most important part of my thesis is the primary research, in which I would like to present my chosen research methods, the reasons for my choice and the circumstances of the interviews. In addition, I will explain the purpose of my research and interpret and analyse the information obtained during the online interviews. Finally, I will draw my conclusions and examine how my hypotheses relate to the results obtained.

4.1. Description of the research methodology

The choice of quantitative or qualitative research approach was an important task in the design of the thesis. For my exploratory research, it was essential to select a tool that would help to illustrate aspects of project success and the impact of corporate actors on project work across a broader spectrum. This was important because of the nature of the research. As a result, the decision was taken to use expert interviews as a qualitative research method. In what was called the exploratory phase of the research, I was able to use this to better understand the processes in the project and it allowed me to examine the elements that contributed to the success of the project.

4.2. Purpose of my research

One of the first and most important elements of a is the definition of the research objective. The aim of this thesis is to highlight the factors that influence the success of a project in a business environment and to define the main components that influence the outcome of the project. In this context, I would like to examine the importance of effective communication and cooperation with management, whether reprioritisation occurs during the work process and how this affects the project outcome. I would also like to ask what the consequences are of the lack of, or inadequate skills of the staff involved in the project. To obtain this information, I sought the views of qualified project professionals who have been involved in project coordination for between 5 and 25 years. This was necessary in order to get an overview of the areas in which projects are run and the differences between them. In order to identify these, the following research hypotheses have been developed:

1. My hypothesis: There are differences in the success criteria for projects and in the evaluation of different projects.

2. My hypothesis: In my opinion, effective communication and cooperation with the management is one of the most key factors for the success of a project.

3. My hypothesis: I see that changing priorities can have a significant impact on the success of a project, causing delays, cost overruns, customer/stakeholder/management dissatisfaction.

4. My hypothesis: The project determines exactly how many and what type of knowledge professionals should be in the team.

4.3. Sampling and information collection

My aim in sampling was to talk to people from different disciplines, as this gave me a broad picture of the subject. Unfortunately, I did not have enough contacts to do this, so I asked internal thesis supervisor, László Kremmer, who is the head of the PMI Budapest, Hungarian Chapter, to help me contact people who might be relevant to my research.

I chose a qualitative research method for the collection of information, including interviews. To carry this out, I created an online booking interface, as the selected interviewees were able to book an appointment with me. This was necessary in order to suit everyone and to be able to interview them within a few days. In the booking interface, I set up that I wanted the meeting to be via Zoom and set a time limit of 30 minutes. The interviews took place over two days and were also recorded for data capture. The interviewees included 6 men and 3 women.

4.3.1. Contacting us

My consultant put out a call for PMI (Project Management Institute) members to interview people for my thesis. Anyone who would like to participate in a study on project success should contact me by email. In total, 40 people contacted me to say they would be happy to help with data for my thesis. In order to be able to finish on time, due to my finite capacity, I was able to interview 9 Project Managers, Program Managers, Business Operation and Project Manager, PMO Manager and PMO OTR (Sub Region) Leader with more than 5-25 years of professional knowledge.

4.3.2. List of persons and companies interviewed

I made a list of the people and companies I interviewed. To present this, I asked the interviewees for their consent to mention their names and positions in my research. As I mentioned before, I conducted a total of 9 interviews and each interviewee represented a different company, which I would like to present below.

My first interviewee, **László Babócsy** was the **programme manager** of **NISZ (National Info communication Service Provider Ltd.)**. This organisation helps the Hungarian public sector overcome the difficulties of innovation by using the latest ICT technology. In addition to consistently improving the quality of government ICT services, they aim to enable users to access innovative e-government solutions. The majority of their clients are governmental organisations and national institutions, but they also serve companies, enterprises, and individuals (nisz.hu, 2022)

The second participant was **Katinka Halász, PMO Manager,** representing **Getronics.** Getronics as a company is known for its primary focus on innovation and world-class customer service. It currently has around 3700 employees in 20 countries: in Europe, Asia, and Latin America. Getronics' transformation portfolio is market-leading: digital workplace, business applications, cloud services, security - and intelligent geospatial Internet of Things (IoT) solutions that enable businesses to navigate the modern world (getronics.com, 2022)

The third guest was **Gusztáv Haberle, Senior Project Manager** at **ASH Szoftverház Kft.** This company was founded by private persons in Hungary in 2012. Their goal was to address our partners' IT problems with excellent services and to meet all their specific needs. This means that they are mainly engaged in the design, development and maintenance of custom software systems. They have established trusting, long-term relationships with many of our partners thanks to their consistent quality work (ashszoftverhaz.hu, 2022)

The fourth party was **Tamás Ali, CEO** of **NATURAQUA Zrt**. It is worth knowing about Naturaqua Zrt. that it replaced NATURAQUA Betéti Társaság in December 1995 and became a limited liability company in 2019. NATURAQUA Ltd. designs and builds environmental and water management projects and also provides consultancy services. Their professionals have many years of experience in engineering and environmental science. The knowledge of their staff, the software they use (hydrogeological modelling, soil, and water quality risk analysis,

spatial information and planning software) and their state-of-the-art measuring and sampling tools allow them to conduct the most complex works.

The fifth guest was **János Huk Test and Project Manager** from **DXC Technology.** DXC Technology was formed when Computer Science Corporation merged with Hewlett Packard Enterprise in April 2017, spinning off Hewlett Packard Enterprise's enterprise services segment. This merger combined the two companies (HPE). DXC is engaged in providing "IT", or information technology, services to a wide range of customers (DXC Technology, 2022)

The sixth was **Tamás Buti**, **Project Manager** at **Commsignia Ltd.** Commsignia develops end-to-end V2X solutions to support smart city deployments and autonomous car functionality with middleware and applications. The company delivers OBU, RSU and OEM integrated software to support V2X connectivity, safety, and applications, helping to build the next generation of autonomous vehicles and smart mobility ecosystems that make driving safer, reduce congestion and lower emissions.(commsignia.com, 2022)

The seventh stakeholder is **Krisztina Hosszú Project Manager**, who works **at Nokia.** Nokia as a company creates technology that connects people. As a trusted partner for core networks, it is committed to innovation and technology leadership. Nokia Bell Labs' intellectual property and long-term research creates value. They create productive, sustainable, and inclusive capabilities while maintaining high standards of integrity and security. (nokia.com, 2022)

The eighth interviewee was **Jenő Vincze**, who is **PMO OTR Leader at General Electric.** As far as the company is concerned, General Eletric has a deep and extensive history of invention. From Thomas Alva Edison's first incandescent light bulb to the latest jet engines with internet-connected sensors and 3D-printed parts, GE has pioneered innovations that have transformed the world and made billions of lives better. They highlighted GE's global impact in nine industries and four major technical transformations where GE has played a leading role. (ge.com, 2022)

The ninth subject was **Marianna Sárvári**, who is a **Programme Manager at Deloitte**. It is important to know about the company that Deloitte Könyvvizsgáló és Tanácsadó Kft. (Deloitte Ltd.), Deloitte Üzletviteli és Vezetési Tanácsadó Zrt. (Deloitte Business and Management Consulting Ltd.) and Deloitte CRS Kft. (Hereinafter collectively referred to as Deloitte Hungary) provide services in Hungary. Deloitte Hungary comprises more than five

hundred Hungarian and international experts in the fields of audit, tax, management, and financial advisory services (deloitte.com, 2022).

4.4. Analysis and results of the interviews

In preparation for the interview, I put together six questions that were given to the selected people before the interviews so that they could prepare for them. I used these as a starting point for the analysis to better link the questions asked, and the answers and results obtained.

I have divided the analysis and interpretation into two major groups, with the first two questions and the following four questions being separated. In the first part, I looked at the organisations and the types of projects within them and their success criteria, while in the second part I sought answers to the more specific factors that influence the success of projects and their success.

4.4.1. Types of organisations, projects, success criteria

In the first half of my interview, I asked the participants two questions, which were related to the companies where the interviewees worked. The aim was to get an overall picture of the nature of the organisations, the projects running within the organisation and their success criteria.

Q1: What is the nature of the company/organisation and the type of projects within it?

For this question, I have characterised the companies separately, as each place has different types of projects. Therefore, it is important to mention them separately in order to better define them.

The first such organisation to be examined was the NGO, where projects can be classified as main or other projects. The main projects are government projects, mainly dealing with the construction of data centres and other services (hardware, software, IAS, operating system services, DBALSTAT, SAS). Other projects include EU funded and nationally funded projects.

The second was Getronics, which, unlike NISZ, only deals with services and collaborates with external customers. Within the company, the nature of projects is transition and transformation projects, which means taking over some service from a former service provider, such as an industrial manufacturer, hotel, bank. This is necessary to improve the internal management of the organisation. What Getronics can help with is the management of IT infrastructure, Cloud

services, Network operations and deployment, Helpdesk services, and Information Security services and provisioning.

ASH Szoftverház Ltd. is a company that, like Getronics, focuses on both the development of IT projects and the supply of goods. The primary element of their business profile is the implementation of public and government projects. Within this framework, they develop and operate their own customised applications and software.

NATURAQUA Zrt. is also engaged in public procurement, the criteria for which are set out in a contract. Its main clients are large companies and individuals who are usually repeat customers. The organisation participates in the recultivation of hazardous waste landfills, groundwater treatment, water treatment systems and the management of radioactive materials (spent fuel from the Paks nuclear power plant).

DXC Technology is a company where IT projects are also prevalent. They also deal in electronic and communication equipment, but their main profile is software development and enterprise systems development. The focus is on information technology services such as SAP management.

At Commsignia, there are 3 types of projects, which operate according to different criteria. The first is the Smart City infrastructure, where hardware and software projects are implemented to make transport safer. The second is the automotive section, where small and large projects are implemented. And the last area is Research, where new methods are developed for a specific problem, either perceived by customers or defined internally.

Nokia works on both internal and external projects. Internal projects include ERP implementation, process/departmental optimisation, and automation, while external projects include customer relations and administration. This includes activities to build a network and to deliver and sell it to the customer (Vodafone, Telekom) using best-of-breed solutions closer to European systems.

At General Electric, you will be involved in projects involving the manufacture of machinery, the installation of various components in power plants and the maintenance/overhaul/replacement of existing control systems. The duration of these projects depends on the complexity of the project: the shortest can be as short as 6 months, while larger

projects can take up to 2-3 years. 90% of customers are private companies such as Eon, NL, Shell, Exon mobile.

Deloitte implements digital strategies for large companies. This can be replacing legacy systems with modern IT solutions, where IT application systems are replaced with Cloud solutions. It also includes technology projects (e.g., Enterprise Service Bus implementation) and enhancements.

Q2: What are the criteria for project success within the organisation, and is there a difference between the evaluation of different projects?

The interviews revealed that each company defines success criteria differently, and that even within the organisation, this can vary from project to project. In short, there is no universal success criterion for a project. It is especially important that they are well defined and accepted by the customer (customer acceptance criteria), as this will enable the project manager to plan for the task.

For each project, the Business Case defines the expected benefits at the time of approval of the start-up, against which the management approves the project. Once the project is launched, these are usually assessed by the sponsor and the steering committee, not by senior management. The steering board decides whether the project should be modified, whether additional time or money should be spent on it, or whether it should be abandoned.

In the next section, I have split these success criteria into two parts to better define and analyse them. Within this framework, I will discuss classic and new success criteria.
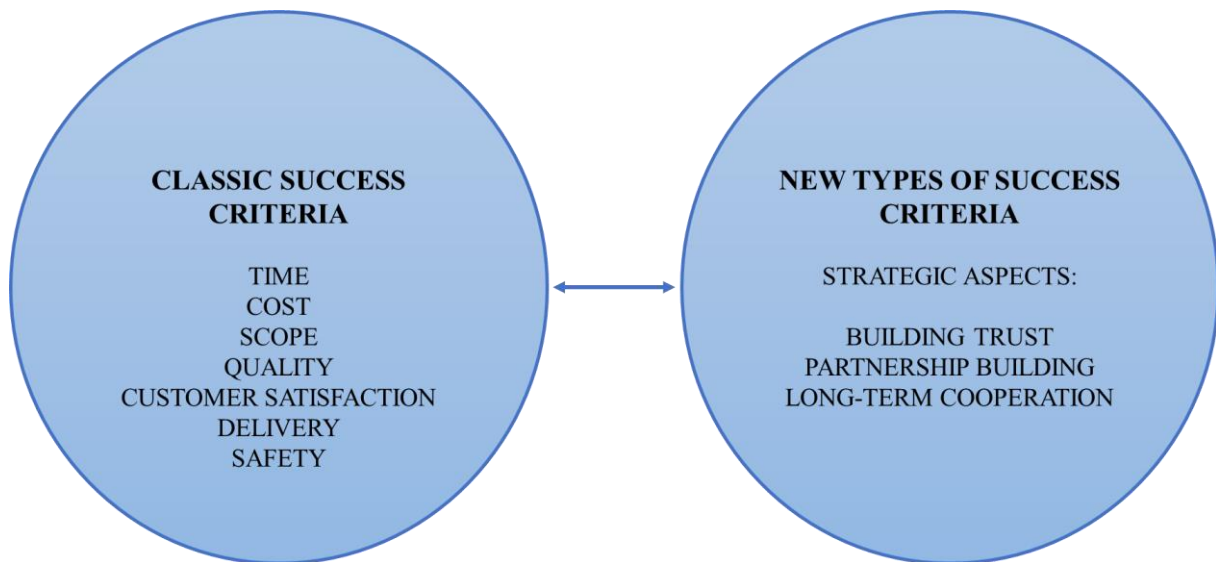
8Figure 9: Comparison of classic and new types of success criteria

Source: own edit 2022

Classic success criteria:

The classic criteria for success are those mentioned in the textbooks, in particular the project triangle, which defines the need to deliver the product within the given budget and timeframe. These criteria were mentioned by the majority of respondents.

In addition to the project triangle, quality and customer satisfaction can also be mentioned. In these terms, it is important to ensure a high level of customer satisfaction at all times. The interviewees defined this as being able to listen to and adapt to needs in all situations.

Interview responses showed that there are projects where these success factors are complemented by other essential components. One participant gave the example of construction projects, where safety and delivery are key factors, alongside cost and quality. Of course, if one of the components does not play its role, the project is considered a failure, in this case:

- S (Safety) - If a certain safety event occurs

- Q (Quality) - If a quality event occurs that affects the customer

- D (Delivery) - If a delivery event occurs that affects the buyer

- C (Cost) - Expectation that the cost of a project will decrease by a certain percentage during its implementation.

New types of success criteria:

For the new kind of success criteria, I have mentioned the elements that have become a priority today. This group includes strategic aspects such as long-term cooperation, building trust and developing partnerships. In this interpretation, from an internal point of view, a project can be successful even if the cost is not within reach if the aim is to win new customers. Of course, it also depends on the focus of what the management wants to get out of this "partnership". Therefore, it is necessary to consider first which type of success factors are more appropriate for the project, the traditional ones, or the newer ones.

Differences for different projects:
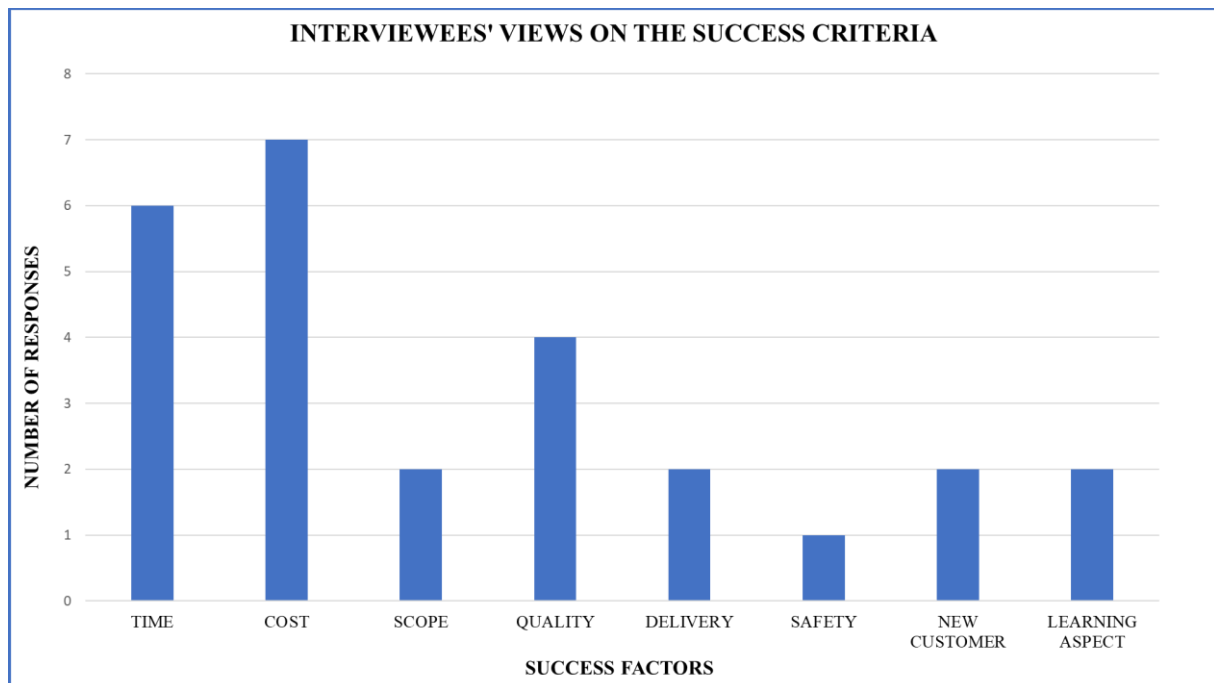
10Figure 11: Interview respondents' views on success criteria

Source: own editing, 2022

The interviews revealed that the success factors of the projects differ, as shown in the figure above. For all of them, the outcome is important, but if they want to get a reference in a new field, the learning aspect will be the priority.

In addition, there are differences in the cultures of firms, crucially in what they can accommodate. This means that a methodology needs to be developed that is appropriate for all.

The company's ideas, problem insights and resulting research also contribute to the success or failure of the project.

4.4.2. Analysis of factors influencing projects

Q3: What are the factors that can affect the success of a project and what are the key factors that can prevent a project from failing?

The interviews revealed that the success of projects is influenced by a number of factors. A project can fail at any time if something is not done properly in the design or implementation phase. Therefore, it is important to monitor the entire process from the design phase of a project until its closure.
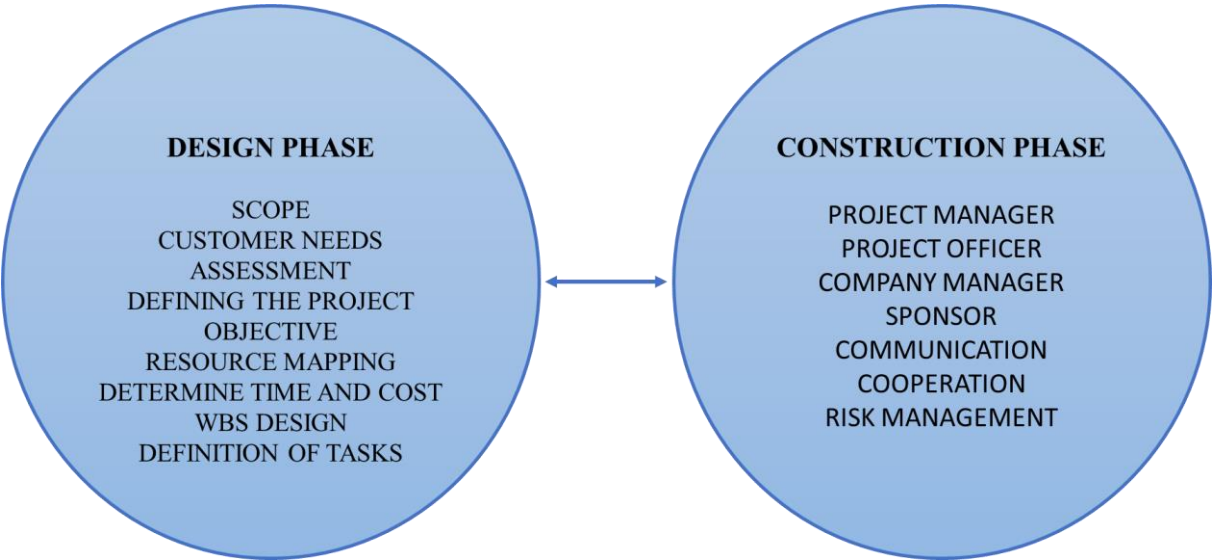
12Figure 13: Key factors for successful project design and construction phases

Source: own editing, 2022

In the design phase, I have listed the elements that will define the processes before the project starts. These include refining the scope (assessing the customer's needs, defining the project's objectives, mapping resources, defining time and cost), developing the WBS (Work Breakdown Structure) and allocating the associated tasks, and listing the risk factors.

At the beginning of the process, during the bidding phase of the project, thorough preparation is especially important. It is here that the client's expectations and the final product he will accept must be determined. These requirements should be put in writing, as this will prevent the client from proposing more drastic changes.

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This part includes defining the purpose of the project and agreeing on the products to be delivered. It is also where the precise mapping of tasks and the definition of task boundaries is done between the contractor and the customer. At this stage, it is important to discuss who is responsible for the performance of a task in the different cases. If this is not made concrete, it can be a source of problems because the client will expect feedback from the project team and the team from the client.

Before starting a project, human resources should be mapped to see how many people can be involved in the project, and limits should be set on how many hours they will spend in the functional organisation and how much time they will spend working on the project. This is important to keep in mind because during the course of a project, time and cost budgets are always tight and it is a major effort to keep them within limits. Only in justified cases should deviations be made from what has been previously agreed between the client and the team.

Before starting the project, it is important to carry out a basic situation assessment at the planning stage. This will help to identify in advance the risk factors that could hinder the success of the project.

In the construction phase, during the physical implementation, when the actual work starts, the success of the project depends on the project leader, the project team, the company management and sponsor, and proper communication, cooperation, and risk management.

This requires the project manager to actually act as a leader, to manage the team, to be able to carry out the leadership tasks. They must also create the right atmosphere to maintain the project dynamics. This is where resource management is particularly helpful, as it allows the project manager to judge when to bring new people into the team and when to let them go.

Delegating a team with the right experience is a key factor for the success of a project. For this reason, it makes sense to involve in the planning and implementation a workforce that is either familiar with the client or, if not familiar with the client, an experienced expert who can handle new situations. If a factor affecting the success of the project arises that the project team cannot resolve, the problem should be reported in a timely manner through the appropriate channels. If an unexpected situation arises during the project process and this could be a risk factor, it should be reported to the management in a timely manner. They are instructed to review this and propose changes.

The decision and cooperation of company managers has a significant impact on the success of the project, as it can move it in the right or wrong direction. The general attitude of managers towards a project depends, for example, on the culture of the company and the size and importance of the programme undertaken. According to their competences, they are responsible for prioritising plans and then communicating the individual objectives to the project manager. If these are communicated inaccurately or only partially, the project can slip. There will be a lack of agreement between the project manager and the managers, resulting in a conflict situation. In addition to the managers, the sponsor is the one who supports the project and participates in the decision-making. Delays or omissions in reporting can jeopardise the planned implementation of the work.

As I mentioned earlier, it is especially important to communicate honestly and in detail during the project work. This is expected at all levels, towards the professionals, the management, and the team and with the client. It can help to identify any points of failure that may limit the progress rate set out in the plan. Their correction is necessary and requires an immediate solution.

In this question, I was also looking for an answer to the question of whether there is an actual project failure. By project failure I mean that a project is started but work on the project is stopped due to time or cost overruns. From the interviews on this, it appeared that there is no actual project failure, as all projects have to be completed or closed.
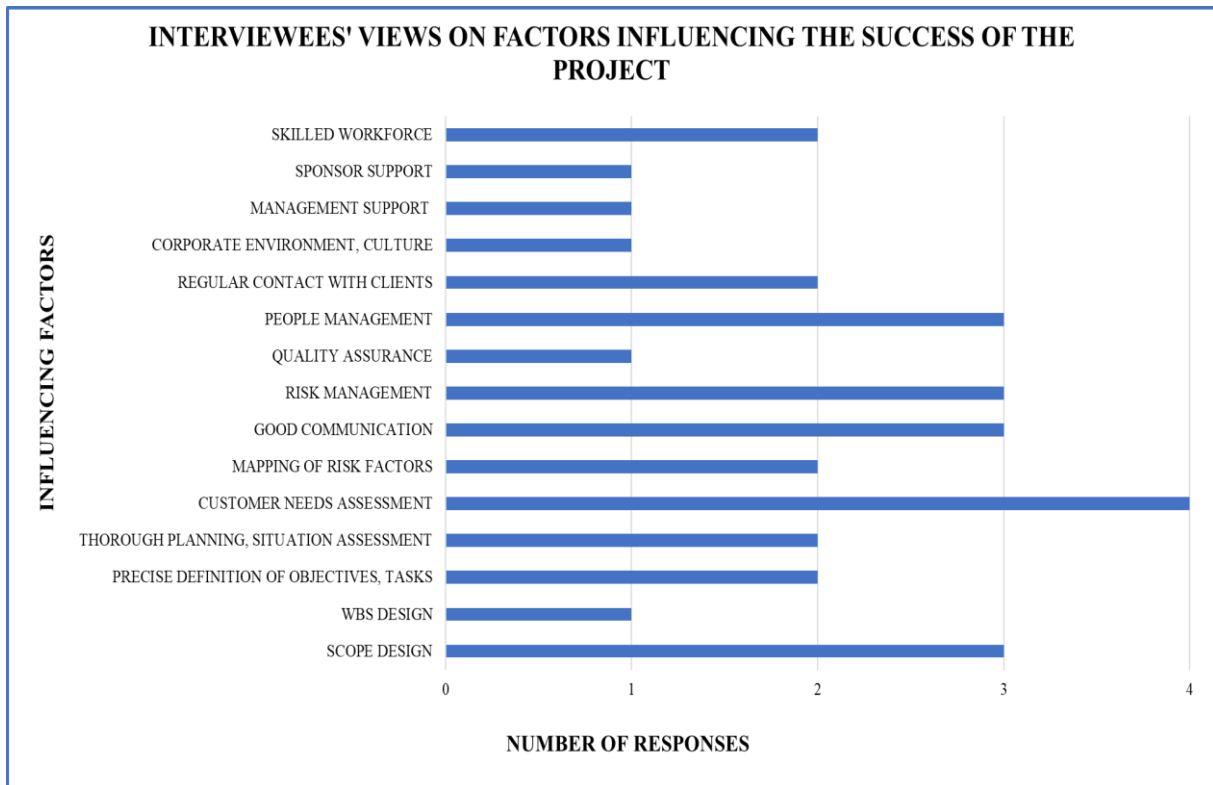
14Figure 15: Interviewees' views on factors influencing project success

Source: own editing (2022)

I aggregated the responses I received during the interviews and assessed which components had the greatest impact on the success of the project. This revealed, as can be seen in the diagram, that the most important aspect is the assessment of the client's needs. This is quite understandable, as the client's needs are always the basis for the implementation of a project. Other important components are people management, risk management, effective communication and scope design.

Q4: In your opinion, how much does effective communication and cooperation with the management determine the quality and success of the project?

Effective communication with management is essential to the quality of the project, especially if management is the sponsor or management is involved in the project. Management support is important as it is the management that can influence the project, for good or bad. The following figure illustrates the relationship between the quality of the relationship with management and success.

GOOD MANAGEMENT + GOOD TEAM **SUCCESS**	**GOOD MANAGEMENT + BAD TEAM** **FAILURE**
BAD MANAGEMENT + GOOD TEAM **FAILURE**	**BAD MANAGEMENT + BAD TEAM** **FAILURE**

16Figure 17: Management and project team functioning and their impact on success

Source: own editing, 2022

There is a general correlation between the impact of project management and the project team on project success. As shown in the figure, I have grouped this into four separate categories. This shows that a project can only be successful if the management and the project team are good and can work well together.
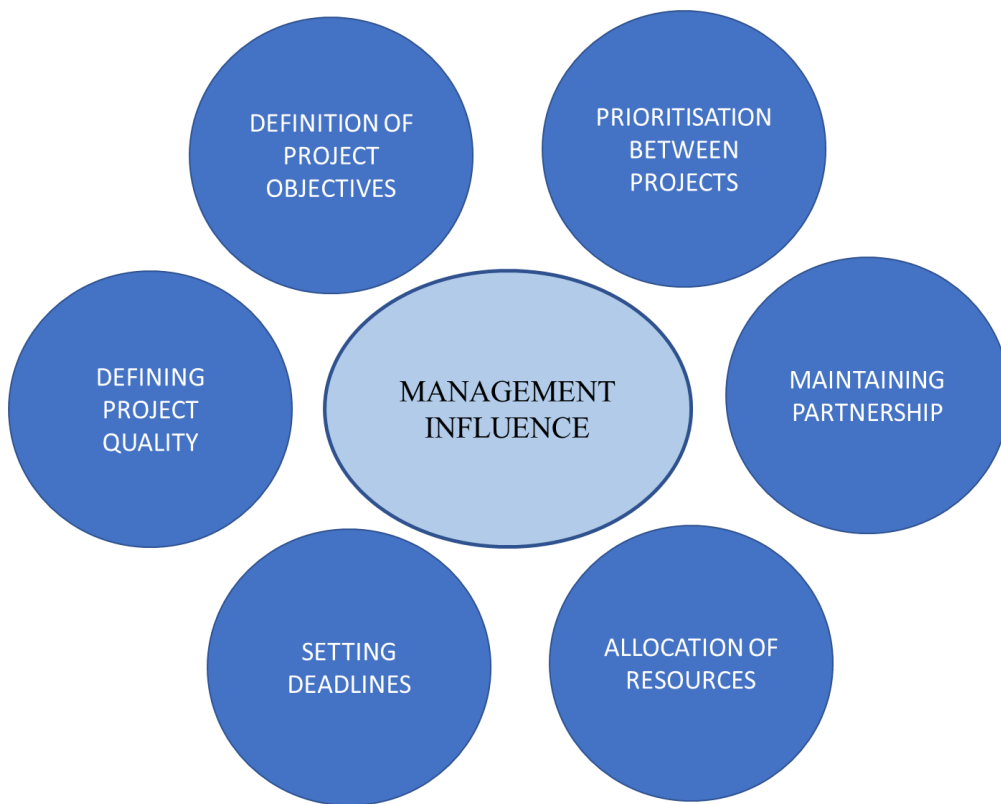
18Figure 19: Authority of management

Source: own editing, 2022

The management's primary responsibility is to maintain a good relationship between the client and the company, so to do this, the management must maintain the "partnership" and manage tasks within the company, such as prioritising and running projects. This should include informing the project manager of the importance of the project and its objectives, as well as the implications of success or failure. In addition, management decides how to allocate resources and how much cost and time to give to a project.

Problems can arise because management is usually not fully involved in the project professionally, so deadlines and costs are sometimes set by management on a tight schedule. In addition, reprioritisation, and inadequate communication of this can also damage the success of the project. To avoid this, internal communication with management, colleagues and between teams is important.

Q5: How often do project objectives change and how does this affect the quality and outcome of the project?

Impact studies and business cases are prepared before the project starts in order to define the objectives of the project, so the basic objectives of the project are very rarely changed. However, some projects start from an undefined customer need, and therefore the scope is not well defined. The client only knows roughly what he wants, but new information is also revealed to him during the project, which is corrected by change management. If the change management does not work, the scope has to be changed and agreed with the management.

In the case of complex projects, the objectives are more often adjusted or fine-tuned due to changing circumstances, new information, or correcting design errors. These adjustments can change the quality of the project and its chances of a good outcome.

EXTERNAL ENVIRONMENTAL FACTORS

MODIFICATION OF OBJECTIVES

MANAGEMENT

CLIENT
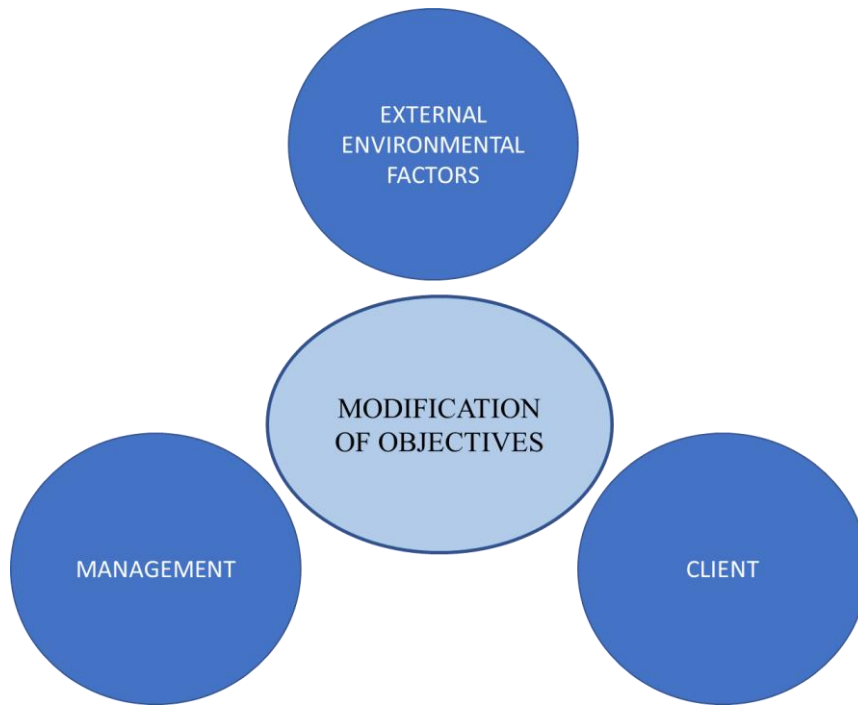
20Figure 21: Factors influencing and modifying project objectives

Source: own editing, 2022

Three factors have an impact on the project's objectives. The first is the external environment, which includes government laws and ministerial decisions. In addition to these, the client and management must be satisfied. According to the interviewees' perception, the need to adapt to the customer is more important than to the management, which was defined as 60% customer, 40% management percentage.

Q6: What determines the quality of the professionals to be employed in a project and how does it affect the project if the wrong people are hired or if few people are employed?

The size, complexity and urgency of the project will determine who should be on a team. They are mainly allocated based on the Skills test and the qualifications already defined in the Scope and Timeline. The Scope defines the competencies needed to complete a project and the Timeline defines the experience required. They also look at the complexity of the projects and tasks that each person can manage.

Within the company, it is primarily the team leaders who need to be consulted on who can take on the project and who has the capacity. The chosen project manager sets the expectations that the future professionals must have. This is usually looked at in terms of levels within the

company, for example level 4 is senior, so people are selected for the team according to levels. If the project is left simpler and there is still some spare budget left to use, then juniors are put in to help with the simpler work.

Experience has shown that the success of a project can be jeopardised by inadequate staff, especially if someone has the wrong attitude and does not cooperate with the project team and the manager. If the wrong people are hired, it is extremely detrimental to the project, resulting in a poor-quality product and delays.

If resources are scarce, all the success criteria (safety, delivery, cost, quality) may be compromised. Employing fewer people than necessary will result in a slipping, protracted project.

People within the project team sometimes have to work overtime to meet the delivery time and ensure the quality of the product. In such cases, the workload of the individuals must also be considered, as the increased workload can put people at risk of burnout.

During the interviews I was given several solutions to reduce or eliminate these problems. One interviewee suggested that the best decision in such situations is for the project manager to constantly prioritise tasks, as there are times when the project manager is not collaborating with his own colleagues, but with someone who participates in several places at the same time. Another interviewee believes that not everything has to be done within the small team, because if it is a larger company, they can bring in people from anywhere to help them complete the project faster.

However, the analysis showed that many companies have a central core and add extra human resources by outsourcing. This term means that tasks are outsourced to external resources who work together with the project team to achieve the project's objectives. This can be done by employing people on a contract basis and bringing them in as resources. Or they can put out a public procurement tender and use it to attract additional resources.
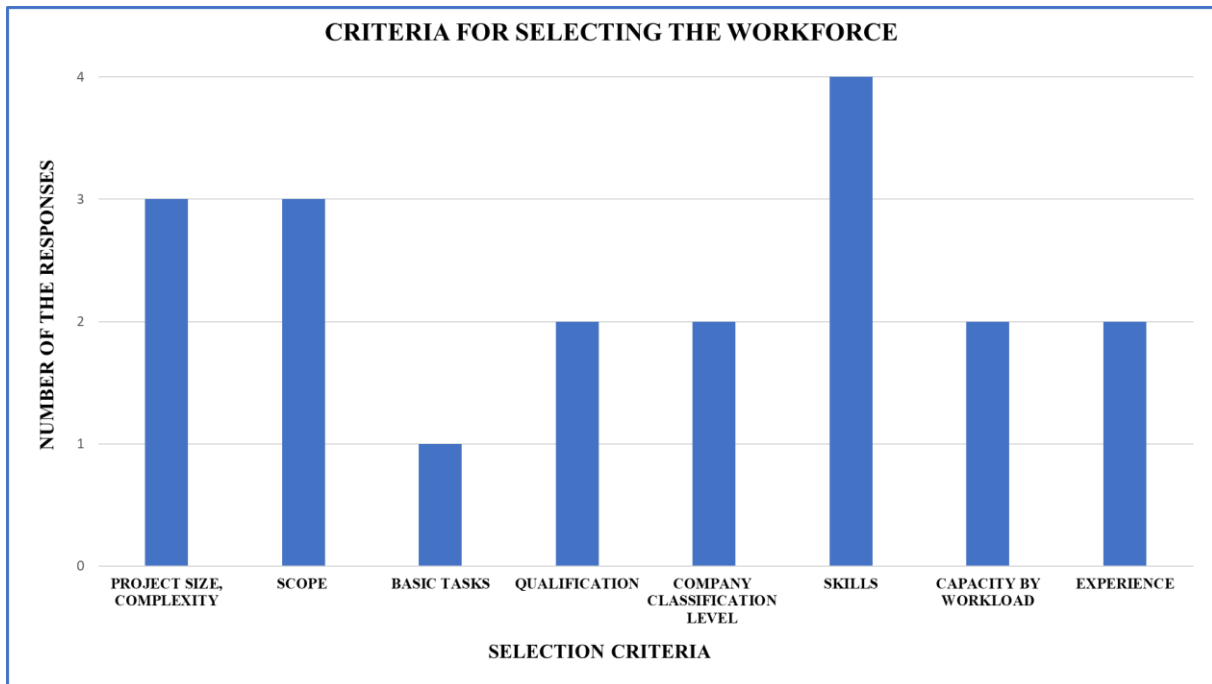
22Figure 23: Workforce selection criteria

Source: own editing, 2022

During the interviews, the criteria used to select a new team member for the project were revealed. The result was that the most important selection criteria were knowledge of the skills needed for the job, the professional's company classification level and the conditions set out in the scope.

4.5. Conclusions

In this chapter, I will outline my hypotheses, draw conclusions, and describe the extent to which my claims are confirmed or refuted by the results of the interview responses.

<u>Hypothesis 1:</u> In my first hypothesis, I argued that there are differences between the success criteria of projects and between the evaluation of different projects.

I fully justify this assumption, as I believe that the qualitative research has shown that success criteria are defined differently in each company and that they may even vary from project to project within the organisation. In short, there is no universal success criterion for a project.

It also showed that these can be broken down into two broad categories, classic and new types of success criteria, which companies tend to mix and match to the project.

After quantifying the opinions of the interviews, it was shown that the project triangle is still the most widely used, and within it, cost, time, and quality. However, it also appears that companies are increasingly open to making changes to the aforementioned components in order to learn.

Hypothesis 2: My second hypothesis was that effective communication and cooperation with the management is one of the most key factors for the success of the project.

The unanimous response to this assumption was that it is fundamental to the success of the project. Management support is especially important, as management can influence the project, for good or bad, especially if management is the sponsor or management participates in the project.

This is possible because management is responsible for managing tasks within the company, deciding priorities between projects, allocating resources, and setting deadlines. If management does not support a project and these changes cannot be discussed with the project team, the project is doomed to fail.

Hypothesis 3: My third hypothesis was to see what impact changing priorities would have on the success of the project. Whether it could cause delays, cost overruns or stakeholder dissatisfaction.

I only half refute this statement, since the main objectives of the project are not usually changed, only adjusted and fine-tuned more often. According to the interviewees, it is necessary to adapt more to the customer than to the management, which was defined as 60% customer and 40% management.

According to interviewees, the main reasons for changing objectives are changes in circumstances, new information and design errors. These corrections change the quality of the project and its chances of a good outcome for the better.

Hypothesis 4: My fourth hypothesis is that the project will determine exactly how many and what type of knowledge professionals should be in the team.

This is borne out by the fact that the interviews showed that the size, complexity, and urgency of a project determine who should be in a team. They are mainly allocated based on the Skills test and by qualifications, already defined in the Scope and Timeline. Both the Scope and the

Timeline define the competencies needed to complete the project, but the Timeline also defines the experience needed to complete the project. It also assesses the complexity of the projects and the responsibilities that individuals can take on.

Inadequate staffing can seriously jeopardise the success of a project, especially if a member of the team behaves negatively and is uncooperative with the rest of the project team and the leader. Past experience has shown this. If inappropriate staff are employed on a project, this can have a negative impact on the outcome, i.e., poorer product quality and delays.

Summary

The aim of this research was to identify the key success factors and the barriers and failures that cause projects to fail. To do this, I looked at the success criteria of projects, effective communication and cooperation with management, changing priorities and the composition of the project team. Both my secondary and primary research contributed to my understanding of these.

In the first half of the essay, I described the general literary assumptions, which I used books, articles, and videos to help me understand. Since project success is a broad concept and a relatively frequently studied area, I found a large amount of literature that described the topic from different approaches. The materials I collected helped me to build a knowledge base that helped me to understand and analyse my subsequent primary research.

A key component in the preparation of my primary research was the ongoing contact with the interviewees. This was necessary in order to gain a sufficiently in-depth understanding of the selected professionals and to obtain personal information from the interviewees about exactly where and in what positions they work. I then asked their permission to include this information in my thesis.

To sum up, I have gained a surprising amount of new experience and knowledge in the course of working on this topic. There was some content that I had already encountered several times during my previous studies. I tried to use as much of this as possible to create relevant content. I wanted to present the topic from all angles and use professionally correct sources in all cases. I am confident that my work will provide useful information for others.

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Annexes

In-depth interview questions and interview notes

1. What is the nature of the company/organisation and the type of projects running within it?

2. What are the criteria for project success within the organisation and is there a difference between the evaluation of different projects?

3. What are the factors that can affect the success of a project and what are the key factors that can prevent a project from failing?

4. In your opinion, how much does good communication and cooperation with the management determine the quality and success of the project?

5. How often do project objectives change and how does this affect the quality and outcome of the project?

6. What determines the quality of the professionals to be employed in a project, and how does it affect the project if the wrong people are hired or few people are employed?

László Babócsy

He has been working on projects since 1998, and in 2017 he was appointed Project Manager - **Programme Manager for** the Government Data Centre project.

Question 1.

- **Company name: NISZ (National Infocommunication Service Provider Ltd.)**
- They do the IT for the public administration - basic infrastructure
- Project Management Directorate: with 32 project managers
- They are organised into 3 programmes:
    - Infrastructure programme (by László Babócsy) - about government data centres and especially their cloud operations
    - Dissemination programme
    - Networking programme
- Project orientation: 2 types - one is an EU funding operational programme (CIP: 10+ projects);
- Main project:
    - government data centre since 2015 , took over the project in 2017
    - hardware, software, IAS, operating system service, DBALSTAT, SAS service (government cloud)

-
- Other projects: EU funding + nationally funded projects (public service contracts with institutions)
- Workers: 1500 people
- Big data centres: IT (public administration + new developments)

Question 2.

- 2 project:
  - EU funding (billions) - multi-year programmes - grant contract with managing authority (contract specifies what to do)
  - domestic funding - projects usually shorter than one year - public service contracts (to carry out a specific task)
- They operate by rule

Question 3.

- No actual project failure - all projects must be closed
  - It is a failure if the contract is not concluded at the preparation stage
  - If they conditionally launch procurement:
    - If the contract has not been concluded it counts as a failure because the project work has already started but had to be stopped
    - Once the contract has been signed, there is no project failure, as the product has to be delivered anyway - deadlines can be delayed (this can cause problems)
- Hardware and licenses are purchased (upgrades) - Basic infrastructure is already in place and just needs to be deployed

Question 4.

- Good communication with management is essential to the quality of the project
- Project level: there are 2 levels: middle management operational + senior management strategic
- Discussions:
  - weekly: operational meeting (Friday)
  - Every 2 weeks: senior management meeting
- The project is divided into working groups
- Project decisions/issues
  - Level 1: Project Team - Middle Managers
  - Level 2: Project team - Senior managers
  - Level 3: Project Team - Sponsor
- If the project team and senior management disagree, this is resolved by involving the 3rd party (Sponsor)

Question 5.

- The project objectives are already defined when the contract is signed - they are summarised in the contract
- Change is minimal - scope may change
- Top-down management does not vary the purpose of the contract, it can only be modified by external environmental factors (government decisions, ministries)

Question 6

- Separate development project
- Problem could be lack of resources + lack of competence - Solution: contract people and bring them in as resources or put out a public tender and bring in resources
- If new competences are introduced - training is also organised so that team members can learn (be able to operate
- In Scope you have to visualise the purchases (can be done in half a year)+ you can involve people in the meantime (own performance)

Katinka Halász

Question 1.

- **Company name:**
- IT system integrator company
- Working for external clients - client projects
- Type: transition and transformation projects (taking over a service from a previous provider) - Industrial manufacturer, hotel, bank
  - IT infrastructure management
  - Cloud service
  - Network operation and deployment
  - Provision of HelpDesk service
  - Information Security service and provision
- 2 parts to the project: take over the service, if the company is new then set it up + operate it

Question 2.

- The most important criterion is that the product is delivered to the customer on time
- To do this, it is important that the success criteria are well defined at the beginning, and that the customer acceptance criteria are
- Stay in the company within a given budget, keep it below the margin - change management can be used to solve this (first you need to convince the customer why this needs to be changed)

- Deadline: there are times when it is critical e.g. services are to be taken over from others
- From an internal point of view, a project can be successful even if it does not fit in the budget if the aim is to win new customers (strategic aspects).
- It depends on what the management wants to get out of this "partnership" and what is involved in the process

Question 3.

- Clearly define the client's expectations and acceptance at the very beginning of the project
- Accurate definition of scope + out of scope elements
- Thorough planning and situation assessment - you can avoid going over budget, then resource management is much more accurate
- Working in a waterfall: design it, do it and then accept it
- Skilled workforce:
  - If the client is known - have someone who already knows the client
  - If you do not know the client - experienced expert
- Risk management: risk analysis, appropriate assumption
- Good communication at all levels (with professionals, management and the team)
  - Team: there are no dedicated Project Teams, you always pull in the resources you need - you have to plan who comes after who and what needs to be done
  - Client: depends on the type of client and how much communication is needed
  - Suppliers
  - Management: getting the support you need

Question 4.

- Management support is very important
- Maintaining the client-firm relationship - management must maintain the "partnership",

Question 5.

- Scope management - seek to align with change management
- If the scope changes, it's a new baseline (new time. budget etc.) - but this has to be accepted by the management
- Everything needs to be documented for a decision to be made - Steering board

Question 6.

- Scope - WBS breakdown - definition of basic tasks: this is used to describe the type/skills of the professional and who can perform these tasks

- Technical architect + Project manager : they can determine which expert should be which qualification (junior, senior) - they pass this on to resource management
- Team leaders need to be talked to to see who can take it on
- If there is money left in the budget, they will put junior in the project
- The urgency of the task also depends on the composition of the team
- Communication: 1. team, 2. client, 3. management
- Until you have the right human resources, they will try to communicate this to the client

Gusztáv Haberle

Question 1.

- **Company name: ASH Szoftverház Kft.**
- Hungarian-owned small company
- They mainly do public, government projects (they are the main contractors and there are also subcontractors)
- Public procurement portal project: being a government project, it has to be managed using the Waterfall methodology, but also some Agile methodology is used
- Develop and operate custom software
- There are IT projects, public procurement
- Scope is defined, however they cannot be so precise, thus benefits Agile approach, Kanban board (internal work organisation)
- For customers every 2 weeks - iteration + release (they send a sample of the project)

Question 2.

- Success condition: contract must be respected (strict compliance with the contract), legal compliance, customer satisfaction
- They must respect the deadline - a legal obligation
- There are fixed price projects - sometimes for some reasons this is extended within the company, the customer pays the same

Question 3.

- Communication + quality assurance
  - Communication: both to the customer and to management, you need to communicate well, so that the problems can be identified as soon as possible, solved as soon as possible, and everyone understands the same thing
    - Weekly: reporting to management, half-day meeting - what problems may arise, what will happen that week
    - Company manager is the sponsor, who keeps in touch with the client

- o Serious contact with the client during the design phase, depending on the phase of the project
- Quality assurance:
  - o deliver good quality consistently - start testing at the outset
  - o clients are always consulted

Question 4.

- Absolutely
- Management is usually not so professionally involved in the project, so deadlines are sometimes tightened by management

Question 5.

- The main objectives are not usually changed, as they are government projects
- However, they cannot always define the scope exactly, so there are some discrepancies (this is up to the team)

Question 6.

- "We work with what we have" - development managers are not always satisfied with the human resources - high demand for IT people, not always enough human resources
- Sometimes they have to work overtime, they try to focus on quality
- Outsourcing is also there

Tamás Ali

He has been working on projects and project management since 2007. He worked for many years in public administration: management of EU funding schemes, organisational projects, IT projects (NÉBIH),

Transferred in 2020 to an environmental, design and services company (private sector) - **project leader**

Question 1.

- **Company name: Naturaqua Zrt.**
- work under contract, bid for public contracts, have a permanent repeat customer
- Larger companies + one individual
- locating, excavating, planning the removal of contamination, examining legal/regulatory regulations, preparing technical plans, sealing and papering the implementation

- result products define the project
- status, scene, factual description, technical intervention plan, documentation
- e.g. hazardous waste landfill reclamation, groundwater treatment, establishment of water treatment systems, stormwater drainage systems, radioactive waste management (management of spent fuel from Paks nuclear power plant)
- team: hydrogeologists, chemical engineers, civil engineers, environmental engineers
- work in a loose matrix organisation: expert + design team (the project determines who works together) - there is not much hierarchy between the two groups - no separation between the groups
- Working mainly with Waterfall methodology

Question 2.

- Criteria for project success: to be completed within budget and on time
- Requirements set out in legislation
- Mail product : Documentation, preparation of taste management system
- Project divergence: results are important, but if you want to get refereeing in a new area, the learning aspect will be the priority
- Project size:
  - 123 projects in 2022
  - smallest: HUF 1-2 hundred thousand: water permit
  - biggest: HUF 620 million: revitalisation of the **Ráckeve** (**Soroksári**)-Danube
- Group: around 20 people - extensive network of subcontractors

Question 3.

- They are undergoing a change in organisational methodology
- They liked to neglect the beginning of the project: precise definition and agreement of requirements with the client, development of the WBS - these have an impact on the outcome of the project
- Project planning from the beginning + proper communication with the client
- Inadequate planning tends to be at the expense of time + cost
- Slippage of deadlines is rare but occurs; internal resources are "burned" (more are used)
- Engineering office: they sell their time for a project, and the quote is based on this (man-hours + margin)

Question 4.

- Internal communication is very important (with management + colleagues + between groups)
- Problem : information not getting across between colleagues + teams - home office problem - information not getting across; may slip due to miscommunication

- Whether they communicate more with management or the client varies from project to project:
  - some where the customer has already specified the product/ destination to be delivered, in which case there is little communication with the customer
- Team meeting: daily standup (went agile) - everyone is there
- Every 1-2 weeks: team + administration team - They go through projects in batches
- Monthly: discuss with colleagues how each project is progressing (in terms of working hours - to secure resources)
- There is no separate senior management: CEO (Tamás Ali) + Technical Manager + Strategic Project Manager (he has a role in the bidding phase and the beginning of projects - he starts the procurement, he gets the work) + Team Leaders: experts + designers (they manage the work of the team)

Question 5.

- There are projects where work is started on the basis of an undefined customer requirement - the customer only knows roughly what they want, but new information is revealed to them during the project - and almost at the end of the project they have to change
- **Ráckeve** (**Soroksári**)-Danube revitalisation project: client changed (different from original client's ideas) + many stakeholders involved - shift of focus - time overrun
- Adapting to customers more than management

Question 6.

- Project size and complexity determines who should be in a team - based on skills assessment; qualifications; who can handle projects/tasks of what complexity
- There is outsourcing: there are specialisms that are not worth keeping in-house; subcontractors + retired colleagues - it is important how much it costs to get them to do it

János Huk

Graduated in 1987 from the Faculty of Electrical Engineering of the BME + second degree in Economics. After a few years of teaching, he joined Tungsgram General Eletric , where he was part of a project team. He is a PMP Scrum Master, ISTQB Certified Tester with international qualifications. He has worked for General electric, Sanofi, Deutsche Telekom, Sony. Currently 2 jobs in international projects

Question 1.

- **Company name: TXC Technology;
  Global Project Delivery Organization**
- Matrix organisation
- the organisation is project oriented - there is project assignment
- Each client is an account: a methodology is created for each client - there is a PMO for each account - they are summarised in the central PMO
- Waterfall + Scrum
- Project type: IT project - SAP implementation, Softer development
- Colleagues from around the world can be involved

Question 2.

- time + budged + quality product
- difference depends on the culture of the company what they can accommodate - develop a methodology that works for everyone (subtle, slow introduction of changes)
- change request - can be solved with change management - start a new project

Question 3.

- Human resource management (fear of change, project obstacles)

Question 4.

- Very specific , especially if the sponsor is from management or management is involved in the project - larger projects
- Management needs to say how important the project is or what it will entail if it succeeds/fails - different prioritisation, perception, mood
- At the start of projects: define how many hours people will spend in the functional organisation and on the project
- If an important task comes up, you can refer back to the importance of the task/project
- Priorities can be debated on the budget
- Communication:
  - with management 2 weeks/monthly consultation
  - with clients 1 time a week or daily, rarely invited to Daily Standup (but you can follow everything in Jira to see how the project is progressing)
- In practice, it is never the goal to have crystal clear methodologies, this is done on the basis of how the client requests e.g. modified scrum, hybrid methodology

Question 5.

- If the changes can be covered by a change request - change management change, sometimes scope change - then the "new" project is continued

Question 6.

- international company - they can bring people in at any time
- there are levels within the company (e.g. level 4 senior) - people are selected for the project according to their level
- for the project it is important that everyone knows who has what tasks, in order
- There is a central core and additional human resources can be added (outsourcing)

Tamás Buti

He started his career in the telecommunications industry, where he was first introduced to project management. He has worked in the automotive industry: mainly as a softer, but also tried his hand at the hardware side. He is currently working at a Startup, in the middle of a small company - small company shift (140 people), but the company culture is still Startup.

Question 1.

- **Company name: Commsignia kft.**
- Small to medium-sized business, but still with a Startup philosophy of life
- Company profile: communication between cars and urban infrastructure
- 3 types of projects - they operate according to different criteria
    - Smart city infrastructure (hardware, software projects)
    - Automotive department (small and large projects)
    - Research

Question 2.

- Projects:
    - There are normal success criteria
    - Smart city:
        - Short-term financial success stories
        - projects can be delivered with little development - work and meet customer needs
        - fast, cost-effective projects are needed
    - Automotive industry:
        - Long-term cooperation, building trust and partnership
        - Keep the customer constantly satisfied - listen to needs, adapt to needs
        - They have moved towards large mass production projects (1.5-2 year projects)
    - Research: from an idea, a desire, a need, a problem, you have to learn the way to create a new product
        - Research according to clients' needs
        - Company ideas, problem insights and resulting research

Question 3.

- Project start:
    - How to take over from Sales
    - How much is already planned (scope, timeline, milestone)
    - A lot can be protected if a project is well started and planned at the beginning
- Risk management from the start
    - Risk management and project run in parallel
- Act as a project manager leader, manage the team, can perform leadership tasks
    - People management

Question 4.

- Management can influence the project, for good or bad:
    - Good leadership - good team : success
    - Good management - bad project manager: failure
    - Bad management - good team (if the team is isolated, it can be a success): failure
    - Bad management - bad team: failure
- Most important is to define the project objectives clearly - this needs to be communicated by the management to the project team (important client; one-off job)
- Accurate identification and communication of resources Management - project team
- Influencing factors: reprioritisation, inadequate communication of this, failure to think through the benefits
- Important factors - depends on management decision: prioritisation of projects, resource allocation, budge + project manager (type, whether there is an interface to report to management, whether he/she can escalate)
- Who to communicate with (1. team, 2. client, 3. management)
    - Who to communicate with more depends on the company culture, project type and project progress/phase
    - Reports to management - roughly 1 per month
    - Towards the client - 1 per week: agree, keep satisfied by presenting progress

Question 5.

- Often, it depends on how we manage these changes
- How good the relationship is with the management, how supportive they are of the team
- Changing needs: 60% customer, 40% management from whom this information may come
- Internal, intra-Chip changes are the most common

Question 6.

- Scope (what competence is needed) + timeline (what experience is needed)

- Quality tends to suffer mainly
- If someone has a bad attitude, cooperation, scope, quality problem

Krisztina Hosszú

Master of Management Organization at Corvinus. She has worked at Nokia for 5-5,5 years on various projects. Currently business operation and project manager.

Question 1.

- **Company name: Nokia**
- There are several types of business units that operate completely independently of each other
- Various projects:
    - small projects - within your own group
    - large projects - company-wide projects
- 2 types of projects:
    - customers - they have to build a network and these are delivered to customers (Vodafone, Telekom)
    - internal project: ERP implementation, process/departmental optimisation (automation - application of AI)
- 30-50 project

Question 2.

- every project has KPIs (key performance indicators):
    - KPIs that can and will be measured during the course of projects
- Varies depending on the theme
- Steering board decides how these indicators evolve
- The steering board is where the managers put forward their requests - they decide whether the project should be modified (extra time, money spent or whether the project should be cancelled)

Question 3.

- how supportive company managers are of the project, how well they define the objectives
- company managers must also prioritise
- schedule must be respected and budge , striving for quality

Question 4.

- Very specific
- Project objectives are good if they are set in advance - keep a timetable

Question 5.

- When changing the target
  1. Risk management + change management
  2. Change Scope

Question 6.

- Selecting relevant people
- Sometimes the Project Manager is not working with his/her own colleagues, but with someone who is involved in several places at the same time - prioritisation is important

Vincze Jenő

In 2006, he graduated as a mechanical engineer and joined Siemens, where he commissioned power plants. In 2009, he and his family moved to Germany, where he commissioned a steam turbine at Siemens.

He has been with General Eletric since 2012. First as Contract Performance Manager, managing power plants. Job role: working in the PMO team since 2017 (managed 10-15 teams) and PMO OTR Leader since July 2021. He has a team of 4 people reporting to him - in total they manage 40-60 projects per year so 5 people.

Question 1.

- **Company name: General Eletric**
- The company has a matrix organisational structure with strong functions (engineering, purchasing, parts transfer/transportation, maintenance) and therefore project management has a weak influence on the functions.
- Project manager only delegates tasks, which teams implement according to their own knowledge and KPIs
- The projects we manage are of the Waterfall/ Traditional Project type, due to the complexity of the technology and the cost of changing the project task and objective.
- Project type: mechanical engineering, installation of various components in power plants, maintenance/upgrading/replacement of existing control systems
- Shortest project 6 months
- Complex large projects last 2-3 years
- Manufacture of gas turbine components, steam turbines, generators

- Customers/clients: 90% private companies (Eon, NL, Shell, Exon mobile)
  - Tender phase - contract / agreements

Question 2.

- The success of a project is determined by the following and there is no difference in the way different projects are judged to be successful.
- S (safety) - If a certain work event occurs, the project cannot be considered successful.
- Q (Quality) - If a quality event occurs that has an impact on the customer, the project cannot be considered successful.
- D (delivery) - If there is an event that has a significant impact on the buyer, the project cannot be considered successful.
- C (cost) - The amount of money spent on a project during its implementation.
- The contract specifies the time and budget - you can negotiate with the buyer - but then the project's status quo changes

Question 3.

- In our case, the success of the project is determined/affected by several factors:
  - The preparation phase is done, the project is agreed with the client, internal analysis is done from the engineering side (assumptions have to be written down - they are assigned to risk factors)
- Thoroughness of preparation during the project bidding phase
  - project objective: what are the things to be delivered
  - precise mapping of tasks and precise definition of task boundaries between the contractor and the client: it is important to define who is responsible for delivering a task (this can be a problem if it is not clearly defined, because the client will expect feedback from the project team and the team from the client)
  - time allocated to the project: discussion between the client and the team
  - resource mapping, availability
  - mapping critical routes in the timetable
  - assumptions and risk listing and analysis
  - determining costs by taking into account various known and unknown risks
  - proper coordination of bid and contract - how clear are the task definitions
- The handover of the project between the ITO preparing the project/proposal and the functions implementing the project, the main reasons for this are: - the quality of the handover is not always such, even though the tasks have been carried out in vain; the importance of communication, all the descriptions
- Experience of the project team
- Efficiency of existing administrative processes - management, one person is involved in several projects, so this has to be taken into account
- Other, non-trivial key issues with no or very little influence of religion (COVID19, Chip hiany, globalization difficulties)
- The following are key ways to avoid projects failing:

- As the project's overall performance has a great influence on the success criteria of the above-mentioned tenets, the quality of the planning and the quality of the project is a key factor.
- The most important things you can do to ensure success in this phase:
  - analysis of the risks and opportunities involved in the project schedule
  - Appropriate seasonal adjustment or collocation based on the risks
  - adapting the mistakes made in the past (BP Best Practice and LL Lessons Learnds) and those avoided
- The implementation of the project is an important factor for its success:
  - Delegalasa biro team with unprecedented experience
  - If there is a problem that affects the success of the project and the project team cannot solve it, the problem will be reported to the appropriate channel at the time of the problem.
  - If something comes up during the project process and may be a risk factor, it should be escalated in time to the management, who will make the decision

Question 4.

- Between team - project manager - PMO there is communication about the project, but between PMO and executive (regional organisation) only presentation of trends
- 140 projects - no measurement at project level, only at portfolio level, only 5-6 major projects
- Good communication within the project team and with the client is one of, if not the most important task of a project manager and often the success of the project depends on it.
- Half of the management, our religion, is to communicate according to the project's compexitas. If the project is a priority then there are regular project contacts, otherwise the communication is more at protfolio level.
- In operational matters, communication is not of great importance, but in strategic matters, such as the need to

Question 5.

- It is common for the projket to modify its purpose. This could be broken down into two parts.
  - In case the goal of the project is changed because of a modification by a third party, for whatever reason, this will affect the outcome of the task/idea/resource
  - If, within the scope of the project, a modification is to be carried out that is included in the scope of the contract, there may be a negative impact on the SQDC creteries, depending on the scope of the project.
  - Sometimes they forget to include a task, a material cost in the contract, and then it has to be covered from the internal budget - the project is not successful
  - if you also accept a third party's request for a change, you have no influence on the project

Question 6.

- The quality of the professionals involved in a project is determined by the complexity of the project, but the range of different actors can also have a big influence. However, high visibility, complex projects should always be pursued by the most experienced professionals in the field.
- The experience is that the not available or even insufficient labour cannot be replaced in any other way, so the success of the project may be in danger.
- You also need to take into account who has what capacity - resources to manage
- If resources are scarce, all success criteria may be compromised (safety, delivery, cost, quality)

Marianna Sárvári

She spent most of his career in the banking sector, 18 years at Raifeisen Bank, started as a corporate administrator, in the mid 90's she was entrusted with securities management, in 2005 she was appointed to head the IT area at Reifeisen bank: application development, process management, in parallel he managed 40 projects, T-systems: service desk management. Management of projects, programmes, management of 100-200 people (MÁV project, Eon project). Now he is at Deloitte, working on a project that will be implemented in 18: professional services automation tool - process control system (11 000 people will be using it within Deloitte). She is managing projects/programs + giving business relationship management trainings

Question 1.

- **Company name: Deloitte**
- Implementing a digital strategy - for large companies
  - replacing legacy systems with modern IT solutions (6 large projects): replacing IT application systems with Cloud solutions, based on Sales cost technology
  - the implementation of the central tools expected by the Group
  - technology projects (e.g. Enterprise Service Bus implementation)
  - improvements due to legal frameworks, regulations
  - company restructuring, reorganisation

Question 2.

- There are no validly defined success criteria for all projects. For each project, a business case defines the expected benefits at the time of approval of the start-up, against which the management (Project Committee, Investment Committee) approves the project.
- The most important criterion is the achievement of expected benefits. These can be of many types (replacing old, expensive, obsolete technology, creating more efficient processes through the IT system, etc.).
- The "classic" aspects are also taken into account when assessing success.

1. Implementation on time
2. implementation of the planned scope (project content to be delivered to the project) - supplier, project team and finally the customer test the quality of the project - so the scope has quality criteria
3. Respecting the budget
+ Benefit analysis: what will the project deliver, what benefits will it bring
- Difference in evaluation: usually the sponsor and the steering committee evaluate, not the senior management

Question 3.

- (See the presentation sent to you.)
  - the right corporate environment and culture: an accepting, supportive environment
  - The sponsor - whether the sponsor is fulfilling its role (supporting the project) - main responsibilities
  - project manager: creating the right atmosphere, maintaining project dynamics (when to bring people in and when to let them go) - soft skills are key
  - The project team - assesses customer needs
  - The "right place" (corporate environment, culture).
  - honest communication

Question 4.

- In a big way. Good communication and cooperation ensures that the management is good
  to make decisions about the project.
  - the speed of decisions has a major impact on the success of the project
- The project leader presents the progress of the process to the steering committee
  - disseminate the results - prepare the decisions
  - raise problems in the language of leaders, present alternatives
- it is important to define who has what role in decision-making / decision-making power
  - defined in the project charter

Question 5.

- The basic objectives of a project are very rarely changed. In the case of complex projects, adjustments and fine-tuning of objectives are more frequent, due to changes in circumstances, new information, or corrections of design errors. These adjustments can change the quality of the project and its chances of a good outcome for the better.
- Impact studies and business cases are prepared before the project starts in order to define the objectives of the project
- If the project manager and the PMO are good and the objectives are well defined, then no major changes are usually made, only minor corrections.

Question 6.

- The project deliverables determine the quality of people to be employed in the project. In an IT project, e.g. system development, you need business analysts, IT architects (enterprise, solution, infrastructure), developers, testers, etc. (major project)
- If it's a simple project: there can be juniors to help you with the simpler work
- If the wrong people are hired, it is extremely detrimental to the project, the product is not of the right quality, delays occur.
- The same applies to using fewer professionals than necessary. This is inevitably will result in a slipping, protracted project.
- Overwork can burn people out - making it important to employ enough people