



**VILNIUS UNIVERSITY**  
BUSINESS SCHOOL

**INTERNATIONAL PROJECT MANAGEMENT PROGRAMME**

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**MASTER'S THESIS**

<i>Minkštųjų igūdžių įtaka Projekto vadovui įgyvendinant IT projektus laiku</i>	<i>Influence Of Project Manager's Soft Skills Completing IT Projects on-time</i>
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Supervisor: Dr. Birutė Miškinienė

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# SUMMARY

VILNIUS UNIVERSITY BUSINESS SCHOOL  
INTERNATIONAL PROJECT MANAGEMENT PROGRAMME

STUDENT DOMINYKAS BANIONIS

INFLUENCE OF PROJECT MANAGER'S SOFT SKILLS  
COMPLETING IT PROJECTS ON-TIME

MA thesis supervisor – Dr. Birutė Miškinienė

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*Thesis Description.* Project management can be quite challenging for Information Technology companies. While hard skills such as technical knowledge are essential, it's equally important to have good soft skills to ensure the successful completion of projects on-time. Without effective communication, ownership, and leadership skills, even the most qualified IT teams can struggle to deliver quality results. Therefore, IT companies need to encourage a culture that values and prioritizes the development of soft skills among project managers.

*Aim and Objectives.* The thesis aim is to identify the main project manager's soft skills and how they influence successful IT project completion on-time. The main objectives are to distinguish the most important soft skills of a project manager in completing successful projects; to identify the main challenges in IT project completion on-time; to analyze the synergy between soft and hard skills from an IT project completion perspective; to analyze how much soft skills influence IT project's successful completion.

*Methodology and Results.* A qualitative research method was used for the empirical part of the study. Respondents from three different international IT companies were interviewed, and the data was collected through semi-structured interviews with 12 project managers. The main objective was to identify the soft skills that have the most influence on completing successful projects on time. The research reviewed literature and analyzed data from interviews to identify the main challenges faced in IT projects, along with the impact of soft skills on project management.

*Conclusions.* After data analysis including a literature review, the main soft skills that have the biggest impact on the IT project's success and its completion on-time were identified. The top three soft skills are communication, ownership, and leadership. There are also supporting soft skills such as empathy, task delegation, active listening, and the ability to be the bridge between different stakeholders. Along with the mentioned soft skills, the main project management challenges were identified such as too optimistic or incorrect scoping of a project or a task, not getting the full use case of a project, bad communication, and demotivated teams. The takeaway from the research is to realize how important communication as a soft skill is in the project manager's daily work in overcoming various project management obstacles.

# SANTRAUKA

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*Tyrimo problema.* Informacinių Technologijų (IT) įmonės dažnai susiduria su iššūkiais projektų valdyme. Nors profesiniai įgūdžiai, tokie kaip techninės žinios, yra esminiai, minkštųjų įgūdžių turėjimas yra lygiai tiek pat svarbus, norint įgyvendinti projektus sėkmingai ir laiku. Be tokių minkštųjų įgūdžių kaip efektyvi komunikacija, gebėjimas prisiimti atsakomybę ir lyderystė net ir labiausiai kvalifikuotos IT komandos gali susidurti su sunkumais, pristatant kokybiškus projekto rezultatus. Taigi IT įmonėms yra ypatingai svarbu puoselėti kultūrą, kurioje yra vertinama bei pirmenybė teikiama projektų vadovų minkštųjų įgūdžių ugdymui.

*Tikslas ir uždaviniai.* Tyrimo tikslas yra nustatyti pagrindinius projekto vadovo minkštuosius įgūdžius bei kokią įtaką minkštieji įgūdžiai turi sėkmingam IT projektų įgyvendinimui laiku. Tyrimo uždaviniai yra: išskirti svarbiausius projekto vadovo minkštuosius įgūdžius įgyvendinant projektus sėkmingai; nustatyti pagrindinius iššūkius IT projektų užbaigimui laiku; išanalizuoti sinergiją tarp minkštųjų ir profesinių įgūdžių iš IT projektų užbaigimo perspektyvos; išanalizuoti, kiek minkštieji įgūdžiai turi įtakos IT projektų sėkmingam užbaigimui.

*Metodologija ir rezultatai.* Empirinei tyrimo daliai taikytas kokybinio tyrimo metodas. Buvo apklausti trijų skirtingų tarptautinių IT įmonių respondentai, o duomenys renkami iš 12 projektų vadovų pusiau struktūrizuotu interviu metodu. Pagrindinis tikslas buvo išsigininti minkštuosius įgūdžius, darančius didžiausią įtaką sėkmingų projektų užbaigimui laiku. Tyrimo metu buvo apžvelgta literatūra ir analizuojami interviu duomenys, siekiant nustatyti pagrindinius IT projektų iššūkius, taip pat minkštųjų įgūdžių įtaką projektų valdymui.

*Išvados.* Atlikus duomenų analizę, įskaitant ir literatūros apžvalgą, buvo nustatyti pagrindiniai minkštieji įgūdžiai, turintys didžiausią įtaką IT projekto sėkmei ir jo užbaigimui laiku. Svarbiausi trys minkštieji įgūdžiai yra komunikacija, atsakomybės prisiėmimas ir lyderystė. Taip pat buvo išgryninti ir papildomi minkštieji įgūdžiai tokie kaip empatija, užduočių delegavimas, aktyvus klausymas ir gebėjimas būti tiltu tarp skirtingų suinteresuotų šalių. Be minėtų minkštųjų įgūdžių taip pat buvo įvardyti pagrindiniai projektų valdymo iššūkiai, tokie kaip per daug optimistiška arba neteisinga projekto ar užduoties apimtis, projekto tikslo nesupratimas iki galo, bloga komunikacija ir demotyvuotos komandos. Tyrimas padėjo suprasti, kaip svarbu turėti gerus komunikacinius įgūdžius kasdieniame projektų vadovo darbe, norint įveikti įvairias projektų valdymo kliūtis.

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## **LIST OF ABBREVIATIONS**

CWB: Counterproductive work behavior

IPMA: International Project Management Association

IT: Information Technologies

ITP: IT Projects

KPI: Key Performance Indicator

PM: Project Manager

PMI: Project Management Institute

R: Respondent

## LIST OF DEFINITIONS

**Effective leadership** –is characterized in terms of motivating an organization’s personnel to achieve its objectives (Yukl & Gardner, 2020).

**Project success**– the satisfaction of stakeholder needs and is measured by the success criteria as identified and agreed upon at the start of the project (Mkoba & Marnewick, 2016).

**Project management** –is the discipline of initiating, planning, executing, controlling, and closing the work of a team to achieve specific goals and meet specific success criteria (Iriarte & Bayona Orè, 2018).

## INTRODUCTION

In the 21st century, humans have made significant advancements in technology, computer science, software development, and robotics. However, with all these advancements, it can be challenging to understand how to handle or start projects. Automation is becoming increasingly common, which limits human contact and relies on programming code, pre-set workflows, and algorithms (Mishra et al., 2014). On the other hand, soft skills are essential for human beings, and they play a crucial role in society. Soft skills and IT projects are closely related since they combine robotic/automation and project managers' soft skills. To complete IT projects on time, it is essential to understand how project managers' soft skills influence the final steps of completing IT projects.

Achieving success in IT projects within the given timeframe largely depends on the efficient utilization of soft skills. To identify these skills, it is essential to analyze two critical factors: the relevant soft skills and the on-time completion of the projects. By comprehending the relationship between the soft skills employed and the timely delivery of a project, organizations can develop effective strategies that ensure the optimal utilization of these skills. This, in turn, leads to increased efficiency and success in future IT projects, ultimately resulting in a more successful and sustainable organization.

Therefore, a lot of IT companies are suffering from finishing IT projects on time or even not finishing at all and canceling those projects. As per successful project management practices, it seems that soft skills importance of project managers is crucial (Napier et al., 2009a)

**The problem** of this thesis is the importance of soft skills in completing IT projects on-time. As we could imagine a project manager could have a wide variety of soft skills and this needs to be identified. Furthermore, which skill is more important compared to another one, and how does that specific soft skill have an impact on other soft skills.

**The aim** is to find out the importance of a project manager's soft skills and how they correlate with successful IT project completion.

Objectives:

1. To distinguish the most important soft skills of project managers for completing successful projects.
2. To identify the main challenges in completing IT projects on time.
3. To analyze the synergy between soft skills and successful project performance.
4. To analyze how much soft skills influence finishing IT projects on-time.

**Research methodology.** In this research to analyze and identify the objectives of this master thesis, there will be used qualitative study in international IT companies and there will be semi-structured interviews with IT sector personnel including project managers, team leads, and product owners, and verification will be used by comparing different interviews and using other researchers' studies.

The aforementioned method has been selected, because it suits well the main topic and how this research should be done most suitably, as it allows make in-depth analysis of the objectives including interviewers' experience as well as perspective and real-life business examples to identify soft skills and IT projects success from the project managers point of view.

**The structure of the master thesis.** The framework comprises three fundamental components. Firstly, it involves understanding the theoretical aspects of the subject matter, identifying the available information sources, and determining the areas that require extensive investigation. The second component focuses on research design and methodologies to be employed in exploring the topic in depth. Lastly, the framework incorporates the significance of project managers' soft skills in completing IT projects on time, which includes data analysis and interpretation of results.

**Keywords.** Soft skills, leadership, project success, project management, IT projects, completing projects on-time.

# 1. SOFT SKILLS OF THE PROJECT MANAGER'S

## 1.1. The most important soft skills in project management

To achieve project management goals, it is crucial to identify the key success factors. Extensive research conducted in this area has identified two broad categories of success factors - cognitive and non-cognitive factors. Cognitive factors refer to intellectual abilities such as problem-solving, decision-making, and critical thinking skills that are essential for effective project management. Non-cognitive factors, on the other hand, include personality traits, communication skills, and leadership qualities that help project managers build a positive work environment and lead their teams toward success. Understanding and incorporating both types of success factors can lead to better project outcomes and success. (Larson & Gobeli, 1989); (Pinto & Slevin, 1987). It is widely recognized that acquiring non-cognitive skills is essential to excel in the workplace. These skills, such as effective communication, problem-solving, time management, and emotional intelligence, play a crucial role in achieving professional success and personal growth. By mastering these skills, individuals can become more productive, efficient, and collaborative team members, leading to better job performance and career advancement opportunities. Therefore, investing in the development of non-cognitive skills is a wise decision for anyone seeking to thrive in the modern workforce. (Anthony & Garner, 2016) The research is grounded in the agency theory and delves into the significance of leadership and communication as two essential non-cognitive factors. The primary objective of the study was to investigate the impact of these two human capital factors on developing effective project teams and enhancing project outcomes. The study employed a path model analysis technique that indicated that leadership is closely associated with individual, team, and project performance, whereas communication, surprisingly, has a direct impact only on individual performance and not on team and project performance. Additionally, the study concluded that improved individual performance, as a result of leadership and communication, will have a positive impact on both team and project performance (Smith et al., 2018).

As per the research conducted by Podgórska and Pichlak in 2019, the three dimensions of leadership competencies are found to have a significant impact on the success of a project. Additionally, the study also highlights the moderating effect of project type on this relationship.

The findings of the research provide empirical evidence in support of the fact that the leadership competencies and emotional and managerial skills of the project manager have a significant role in the success of a project. Moreover, the study suggests that based on the type of the project, its success may also depend on other competencies. The paper talks about how the leadership of the project manager is linked to the success of a project (Podgórska & Pichlak, 2019).

The objective of this research is to investigate how informal interactions between leaders and team members can help to manage counterproductive work behavior (CWB). According to the study, when supervisors increase the job satisfaction of their employees, it results in a reduction of CWB. The research supports the idea that job satisfaction plays a mediating role in this process. However, the study also reveals that job satisfaction can transmit the effect of a supervisor's behavior on CWB, targeting specific individuals (Zhang & Deng, 2016).

The study aimed to investigate the impact of stakeholder management on trust in project environments. To achieve this, data was collected from 130 project professionals hailing from different national and multinational segments. The findings of the research reveal that relational stakeholder management has a significant influence on all three types of trust - cognitive, affective, and behavioral. Therefore, it is crucial for the project manager to incorporate actions such as empathetic communication from the outset of the project to foster trust among stakeholders (Francisco de Oliveira & Rabechini, 2019). In addition, there are four IT project management leading types: General Manager, Problem Solver, Client Representative, and Balanced Manager focusing on general management, leadership, personal integrity, planning, and control, problem-solving, systems development, and team development (Napier et al., 2009b).

OpenAI (2023), provides the answer that the success of IT projects is significantly influenced by project managers' soft skills. The ability to communicate effectively, lead with vision, navigate conflicts, and adapt to change are just a few examples of the critical soft skills that contribute to project success in the dynamic and complex field of IT.

With the question of the most important PM's soft skills in literature "list the most important soft skills of project managers" the ChatGPT provided the following information on what the most important soft skills would be according to the generative language model who could process a lot of data:

- “1. Communication Skills:
  - 2. Leadership Skills:
  - 3. Negotiation and Conflict Resolution:
  - 4. Adaptability and Flexibility:
  - 5. Stakeholder Management:
  - 6. Emotional Intelligence:
  - 7. Time Management:
  - 8. Problem-Solving Skills:
  - 9. Risk Management:
  - 10. Motivational Skills”
- (OpenAI, 2023; see the transcription of text in ANNEX 3).

### **1.1.1. Strict versus loose management**

Personal insecurities can lead to micromanagement, which is when a manager tries to control everything and pays excessive attention to details. Micromanagers often have trouble trusting their employees' abilities, and they tend to closely monitor and control their team's work. This behavior can create unnecessary urgency and a non-conducive work environment (van de Ridder et al., 2020).

Trust and control among the project's management team are extremely crucial to the project's success. Trust and control shape the mental atmosphere in the organization, which also leads to employee efficiency and involvement in the project tasks. Furthermore, the size of the project team could also be a principal factor in measuring mentioned relations. Considering that various-size teams obligate proper levels of control or trust within that team. (Jørgensen & Åsgård, 2019)

Also, trust and control relationships affect the satisfaction of a team and project completion on-time successfully. Furthermore, satisfaction could be not the same because of different nationalities, how old is the employee, or how important tasks they might have during their project part (Müller & Turner, 2007). Ensuring team members' satisfaction is crucial for a company's success. However, unchecked satisfaction can lead to decreased effectiveness, so it must be balanced with control. (Zhang & Deng, 2016).

The importance of a project's success in finishing a project on time would be a strong foundation to measure relationships and the impact on success concerning project completion.



Project success depends on different factors, and it includes several steps to achieve a successful project which means that cost, quality, and time balance is being reached at the end (Bardh et al., 2011). Furthermore, clear communication, responsibilities among employees or teams, correctly set expectations, in the right time manner follow ups and lastly outcomes and trust are the key aspects of project success in the entire workflow (Anantatmula, 2010).

Even if we have research on project management and how teams perform on different projects, how impactful the right soft skills are in having successful projects completed on-time. The point of view would be through the project's team satisfaction and project's success. It is unknown how the balance between the different levels of trust types and control impacts the satisfaction of the project's team and the success of the project (Anantatmula, 2010)

As (Jagd, 2010) stated in a publication, "The relation between soft skills and hard skills has for long been a puzzling issue. Trust and control have been seen as either substituting or complementing each other. Despite much research on this issue the relation between trust and control is still not well understood." Project managers are able to identify the unequal distribution of authority and independence in their relationships with colleagues, which can bring both benefits and challenges that affect their work life (Reed, 2001).

Trust has a huge impact on a team's satisfaction and control of the progress has a positive impact on the project's success. Current research indicates that in most cases project success is directly related to micromanagement, same as trust is directly related to employee satisfaction (Jørgensen & Åsgård, 2019). Furthermore, trust and control relationships are very close and there is a thin line between these two variables. One article García Reyes (2013) stated that "Trust and control are commonly considered either substituting or complementary phenomena with many scholars arguing that when trust is high the need for control is low and when trust is low the need for control is high." Five levels of Trust from T1 to T5 are added below in Figure 1: Trust and control levels.

*Figure 1: Trust and control levels*

T1	Deterrence-based	• Required to work together
T2	Calculus-based	• Work together because benefits outweigh the costs

		<ul style="list-style-type: none"> <li>• Independent (to the group) confirmation of benefit</li> </ul>
T3	Knowledge-based	<ul style="list-style-type: none"> <li>• Positive expectation of group</li> <li>• Knowledge of group members motivates, abilities, reliability</li> </ul>
T4	Relationship-based	<ul style="list-style-type: none"> <li>• Emphasizing the quality of the relationship</li> <li>• Evidence of shared affection (concern for one another)</li> </ul>
T5	Identity-based	<ul style="list-style-type: none"> <li>• Unity of purpose</li> <li>• Group assumes one identity</li> <li>• Any member can represent the interests of the group will full confidence of the group members</li> </ul>

Source: García Reyes, 2013

The concept of control can be divided into three levels: outcome control, behavior control, and social control. Outcome control refers to the measurement and management of results or outcomes. Behavior control involves monitoring and directing the actions of individuals or groups to ensure they are in line with desired objectives. Social control, on the other hand, focuses on shaping social norms and values to maintain order and stability within society. These levels of control can be applied not only to people but also to projects and other areas of management (García Reyes, 2013).

Figure 2: Different Levels of the Control

C1	Outcome control	<ul style="list-style-type: none"> <li>• Focus on measuring outcome</li> <li>• Emphasis on clear goals</li> <li>• Divergent preferences/values</li> </ul>
C2	Behavioral control	<ul style="list-style-type: none"> <li>• Focus on measuring behavior</li> <li>• Emphasis on describing how to do something (programming of behavior/action)</li> <li>• Focus on communication systems</li> </ul>
C3	Social control	<ul style="list-style-type: none"> <li>• Establishing a 'clan' or 'tribe' [we]</li> <li>• Convergence of preferences/values</li> <li>• Internalize goals through socialization</li> </ul>

Source: García Reyes, 2013

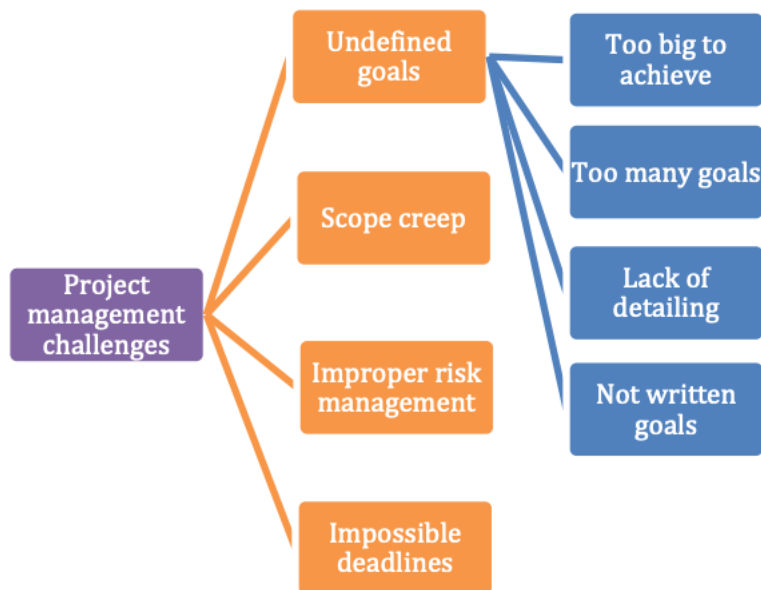
## **1.2. Main challenges in completing IT projects**

Even though this literature review is focused on IT project management, in looking for information, I had to include project management, in general, to evaluate projects to see challenges and obstacles that appear during the managing phase. Literature review shows that taking project management, in general, provides more insights into this topic.

In today's world, projects have become an integral part of the activities of companies. Organizations have widely recognized the importance of projects and have been implementing project management methodologies since the 1960s. Despite the wealth of experience and improvement in available methods, a significant number of projects, still fail. Research was conducted worldwide and the percentage of unsuccessful projects, including both failed and challenged ones, was as high as 61% in the year 2012. This highlights the pressing need for better project management practices to ensure success and improve project outcomes. (Spalek, 2014). One of the challenges is that it is often challenging to accurately estimate the time and resources required for software development projects. Due to their complexity and the potential for unforeseen issues to arise during the development process, software projects are particularly susceptible to estimation errors. This can lead to delays, increased costs, and other complications that can negatively impact the project's success. (Ahonen et al., 2015)

As an IT project manager, you are likely to encounter various obstacles and hurdles during your work. However, with access to effective management tools, you can be assured of your capability to tackle any problems that may arise with promptness and confidence (Vasantrya Patil, 2016).

Figure 3: Project management challenges



Source: Vasant Rao Patil, 2016

Although project management has advanced over time, several research studies have shown that a considerable number of projects still fail. This emphasizes the crucial role of the project manager in managing the project effectively. The manager's leadership is of utmost importance in creating a motivating work environment for the project team to overcome the challenges in today's global economy. (Anantatmula, 2010)

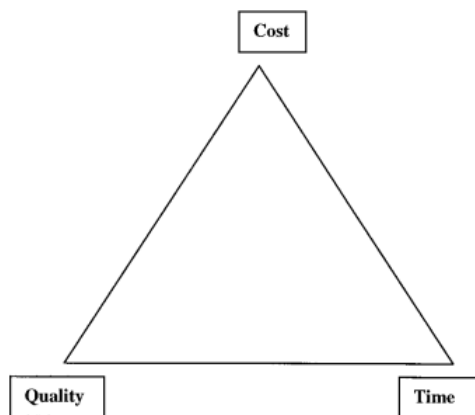
When allocating teams to specific projects and managing them, it is essential to consider project success and resource allocation. Coordination can be a difficult task when working with large teams on a project, and the efficiency of the teams can significantly decrease. Large teams often lead to productivity losses due to the increased coordination efforts required (Walter & Zimmermann, 2015). Similar to the allocation of teams, the success of project management can also be influenced by the organizational level. Enhancing an organization's capacity to initiate and execute projects is contingent upon various factors such as the organization's competency and proficiency, previous achievements, management culture, and the nature of the project at hand. A program aimed at cultivating critical success factors in project management can aid in improving an organization's project management capabilities (Kanter & Walsh, 2004). Project management basics remain the same. A successful project requires defining a project team, and their responsibilities, and including peripheral areas of concern (Bolliger, 1986).

To outline effective project management strategies and achieve success, it's crucial to follow these fundamental steps: establish the business case, define the project parameters, conclude the project, and learn from the experience. The significance of defining the project in detail, establishing a clear project-management structure and roles, mitigating risks, engaging stakeholders, creating a robust project plan, delivering on promises, adapting to inevitable changes, and avoiding project drift (Little, 2011).

### 1.2.1. Project performances - Success

The main project performance factors are project success and project team satisfaction. The success measurements are widely analyzed by various authors. There are critical success factors that should be taken into consideration. For a project to succeed, we would need different success factors, but overall, it leads to the same basics of the Iron Triangle (Bardh et al., 2011). Project management success according to Bardh et al. (2011) is based on cost, time, and quality criteria.

*Figure 4: The Iron Triangle*



*Source: Bardh et al., 2011*

The major determinants of a project's outcome are considered critical elements known as project success factors. The execution of capital development has long been measured by the iron triangle of cost, quality, and time. However, recent times have challenged this concept. In reality, the role of the capital asset should influence the project success factors in executing the core functions of the organization. Project managers in higher education institutions

expanded project success factors beyond the iron triangle, as capital assets are a crucial success factor following the iron triangle's success factors (Ogbeifun et al., 2016).

The success of a project depends on various factors, such as its timely completion, observance of budget limits, and the quality of the end product. Focusing on these aspects can lay a strong foundation for the project's success and help ensure its smooth execution. By prioritizing these critical elements, project managers can mitigate risks, reduce costs, and deliver a high-quality output that meets or exceeds the expectations of stakeholders. (Ahonen et al., 2015). The success of a project is influenced by the methods used by project managers. The functions of both managers and leaders have an impact on the outcome of a project. It has been found that to achieve a successful outcome, it is essential to set clear objectives for the project and communicate them clearly to all involved parties (Bardh et al., 2011).

When evaluating the success of a project or initiative, it's important to consider more than just the hard skills. The soft criteria, such as stakeholder satisfaction, team morale, and overall impact on the community, can also play a significant role in determining the success of the endeavor. Taking into consideration the following success criteria that are listed in Table 1: Success criteria.

*Table 1: Success criteria*

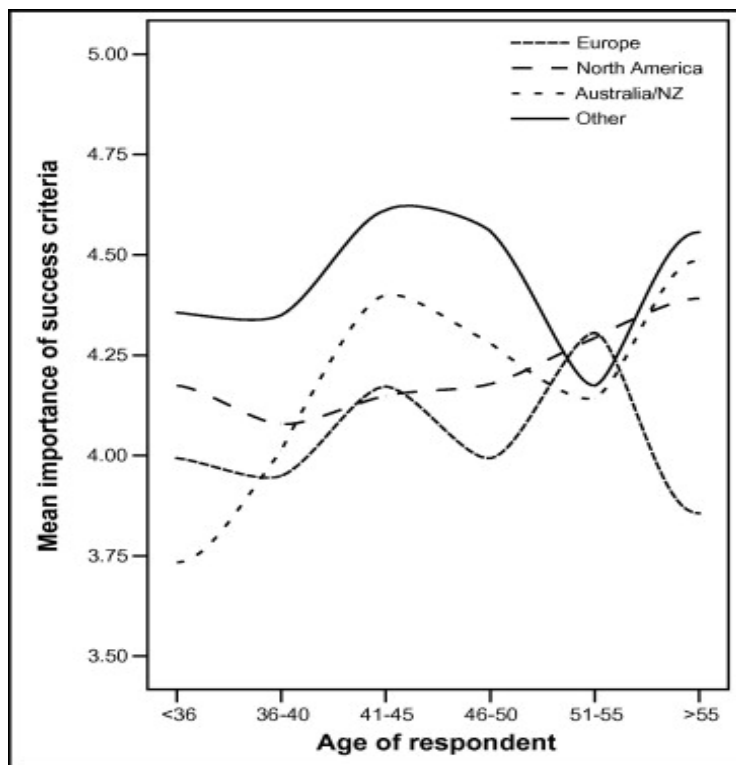
<b>Project Success Criteria</b>
End-user satisfaction
Supplier satisfaction
Team satisfaction
Other stakeholders' satisfaction
Performance in terms of time, cost, quality
Meeting user requirements
Project achieves its purpose
Customer satisfaction
Reoccurring business
Self-defined criteria

*Source: Rodney Turner, 2007*

Therefore, it's essential to incorporate both hard and soft criteria when defining success criteria and selecting appropriate success measures. The results showed a clear link between

the importance of the criteria and the actual success achieved in the project (Rodney Turner, 2007). Furthermore, success criteria vary considering by age of project managers as per Figure 5: Importance of success criteria by age.

Figure 5: Importance of success criteria by age



Source: Rodney Turner, 2007

However, according to the Project Management Institute (PMI), the success of project management can be attributed to a number of variables that have been classified into four groups: management skills, critical success factors, monitoring and control, and lessons learned. By understanding and mastering these variables, project managers can effectively plan, execute, and monitor projects, and ultimately achieve their goals (Ozmen, 2013).

### 1.3. Synergy of Soft Skills and Success of a Project

According to Orouji's (2016a) research, Six Sigma implementation has been proven to play a significant role in the success of various projects. The Six Sigma project comprises five

key stages, which are defined, measured, analyzed, improved, and controlled. Each phase involves specific processes and techniques aimed at achieving better results and ensuring the project meets its goals.

*Figure 6: Structure of Six Sigma Implementation*



*Source: Orouji, 2016*

In recent decades, there has been a great emphasis on identifying and analyzing the factors that affect the success or failure of projects. Meeting deadlines and staying within budget limits are some of the biggest challenges faced by the project managers. The objective was to identify the critical success factors in project management. Quite many success factors were provided according to Gunduz & Yahya (2018), which identified 25 project success factors. These success factors are listed in, however, not all factors are listed, because such as political conflicts and corruption, harsh climate conditions have less importance under soft skills topic.



Table 2: Success factors

<b>Success factors</b>		
Company's technical capacities	Planning efforts	Team motivation
Scope and work definition	Effective scheduling	Unforeseen conditions
Control system	Commitment to the project	Adequate risk analysis
Project manager capabilities and commitment	Adequate project management techniques	Client consultation and support
Clarity of project mission	Effective communication between stakeholders	Adequacy of plans and specifications

Source: adapted from Gunduz & Yahya 2018

The project environment faces a significant challenge in the domain of knowledge management due to inadequate analysis of project success and insufficient documentation of previous project outcomes. To address this issue, an investigation was carried out to determine how project success analysis, presented as a comprehensive framework, can enhance knowledge management in a project environment. The study involved empirical research to determine the extent of the contribution of the project success analysis framework to knowledge management in a project environment. The research findings revealed that a well-defined project success analysis framework consisting of critical success factors, key performance indicators, and a performance-measuring process has a highly positive impact on knowledge acquisition and transfer in a project environment (Todorović et al., 2015).

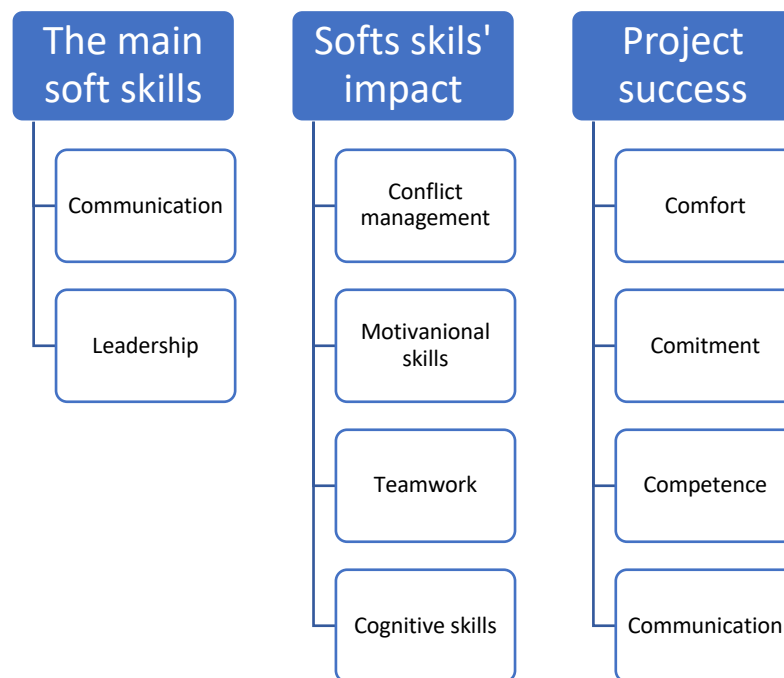
Project management and soft skills play crucial factors in an urgent environment. Project management principles apply to disaster response and recovery efforts. In these types of projects, where there is a sense of urgency and unpredictable factors, it is crucial to collaborate effectively and efficiently. Collaborating should be based on precise communication and must establish trust and control to build confidence among stakeholders (Kalkman & de Waard, 2017). According to Kalkman & de Waard (2017), trust and control are interdependent and support one another.

#### **1.4. Importance of soft skills in completing IT projects on time**

Soft skills, such as interpersonal and social abilities, are becoming increasingly important. Employers frequently express concerns that their employees lack these skills. The responsibility for these skill deficits is often attributed to individuals, their families, or the government. However, this article takes a critical perspective and examines three case study establishments, where some managers blamed soft skills gaps on skills withdrawal. After investigating the withdrawal, the study revealed more about the employees who had left the organizations and the tendency of employers to blame employees for soft skills gaps. Furthermore, the study found that organizations may be responsible for their soft skills gaps if they do not properly integrate selection, induction, and training practices with their skills requirements (Hurrell, 2016).

Another study regarding soft skills' importance in completing IT projects was conducted by a team of researchers who aimed to shed light on the soft skills necessary for successful project management, as well as their influence on project success. The results confirmed a four-dimensional structure of project success factors and showed that the soft skills possessed by project managers played a significant role in achieving project success. However, the researchers acknowledged that the conclusions drawn from the study may be limited geographically, and despite a high response rate, the sample size was relatively small. Nonetheless, this study provides a valuable understanding of the relationship between soft skills and project success factors, an area that is not frequently analyzed in the existing literature (Zuo et al., 2016). In Figure 7: Model of soft skills influence on project's , there is a model that represents how soft skills have an influence on a project's success. This means that communication and leadership impact conflict management, motivation of the team, teamwork, and cognitive skills. Resolving the aforementioned areas of the project manager's daily work allows for have successful project in the areas of having under under-control project, commitment to the project's success, competence in leading the project, and seamless flow of information.

Figure 7: Model of soft skills influence on project's success.



Source: adapted from Zuo et al. 2016

The focus is on exploring the public sector project managers and imparting training to project managers in a way that ensures their success in contributing to project success. The research found that some project success factors were concentrated mainly on project management and overlooked the process of training and educating potential public project managers. After an iterative approach, the research identified that managing innovation, team performance, risk management, resource control, and schedule monitoring were the top five success factors for educating project managers in the public sector, including training (Nugroho, 2018).

The success of IT projects is determined by several factors, such as cost, quality, time, scope, customer satisfaction, financial impact, and strategic impact. However, IT professionals tend to prioritize adherence to scope and customer satisfaction over other factors. They often overlook the financial and strategic impact of project success. Therefore, organizations and project management associations should consider the significance of customer satisfaction and develop IT project success criteria that account for the financial, business, and strategic impact of IT projects in organizations. By doing so, IT professionals can ensure that they assess project

success holistically and thereby enhance the performance of organizations (Joia & Melon, 2020).

The importance of trust and collaboration in achieving success in project management (PM) cannot be overstated. While the exact relationship between these three factors is not entirely clear, a recent study has shown that improving collaboration increases the likelihood of PM success. This, in turn, can be achieved by increasing the level of trust among team members. The two main factors that influence PM success are project performance and knowledge integration/innovation. Understanding the key factors that affect collaboration and trust can help project managers and practitioners increase their chances of success. The findings highlight the significance of human factors – soft skills that impact the perceived success of a project and are valuable assets in completing a successful IT project (Bond-Barnard et al., 2018).

In various sectors, the number of complex projects is on the rise, along with the accompanying considerable challenges. For a better understanding of project success, a field study was conducted, focusing on how project managers' emotional intelligence contributes to the success of a project. The study has shown a link between emotional intelligence and project success, while also examining how project managers' job satisfaction and trust mediate this relationship. The results indicated that emotional intelligence has a positive impact not only on project success but also on job satisfaction and trust. Additionally, the study found that job satisfaction and trust play a mediating role in the relationship between emotional intelligence and project success (Rezvani et al., 2016).

## **2. RESEARCH METHODOLOGY**

In this chapter, we will delve into the practical aspect of soft skills and their role in successful project implementation, with a focus on project management. We will provide detailed information about the research process, including the research goals and objectives, the sample size and selection criteria for participants, and the methodology used to conduct the research. Additionally, we will discuss the interview questions used and provide a summary of our findings. In the research analysis section, we will explain the structure of our data and how it was analyzed. Finally, we will compare the theoretical framework with the practical research results to meet our research objectives and achieve our research goals.

While the theoretical section of the master's Thesis provided a comprehensive overview of soft skills and their relationship with successful project management, this part of the study will focus specifically on the most important soft skills and the impact they have on successful project leadership in the IT sector. Despite the theoretical literature available on the topic, there remains a dearth of information regarding the most important soft skills required for success in IT projects. However, given the rapid growth of the IT sector and the increasing importance of project management, there is a growing need for IT project leaders with the right soft skills to manage these projects effectively. This research aims to identify the main tendencies and provide recommendations for IT project leaders to improve their soft skills and succeed in their roles.

### **2.1. Research design**

The empirical part of the master's Thesis requires an effective research method to unveil objectives and run the research. For this purpose, the qualitative research method has been chosen. This method has been selected for its ability to provide detailed insights into concrete cases and understand the experiences, meanings, and processes involved (Turner, 2010). Besides, this research technique is used when the research topic is not extensively investigated, as per the academic literature. The IT sector is always evolving, and new challenges arise with the introduction of new trends and technologies like Artificial

Intelligence, which has impacted the industry. Therefore, it is essential to analyze the soft skills and project management techniques that are required to evolve accordingly.

To strengthen the importance of the research method chosen, qualitative research has been selected to widen the theories, align, and compare them, and discover new insights. Since projects within the IT industry have not been analyzed extensively, this methodology allows the analysis of respondents' thoughts to understand them deeper by raising sub-questions and identifying the dominant tendencies(Boyce & Neale, 2006). Additionally, the choice of qualitative research was crucial since it is easier to understand the influence of the surroundings within the IT sector(Kumar, 2011).

In addition, qualitative methods demonstrate different perspectives compared to quantitative approaches. Even though previous research discussed the legitimacy of the qualitative method. However, in recent times seems like this method is being used more than more as the important factor is to have knowledgeable responders (Adams, 2015).

However, qualitative analysis has some research limitations, and it cannot present the technical part since it focuses more on respondents' mind flow and is more subjective. After comparing the key features of different interview types, semi-structured interviews were chosen to gather as much information from the participants as possible for analysis purposes. Semi-structured interviews have an open-minded approach that allows follow-up queries whenever needed, and sub-questions were crucial to gather the most recent information for analysis and relate the theory(Adams, 2015). It is crucial to acknowledge the significance of the independent thoughts of each individual when it comes to gathering opinions and feedback. In some cases, there might be sensitive topics that require a deeper understanding and cannot be discussed in a group setting. In such scenarios, conducting one-on-one interviews with key respondents can provide an opportunity for follow-up questions and generate valuable insights. It is also important to explore unfamiliar territory to identify useful leads that can contribute to the overall understanding of the subject matter (Adams, 2015).

Main advantages and disadvantages of different types of interviews per Table 3:  
Advantages and disadvantages of qualitative interviews:

Table 3: Advantages and disadvantages of qualitative interviews

Type of interview	Advantages	Disadvantages
<b>Structured interview</b>	<ul style="list-style-type: none"> <li>• Can be used for quantitative research.</li> <li>• Data can be compared.</li> <li>• High reliability and validity</li> <li>• Time-effective for the interviewer and the respondent</li> </ul>	<ul style="list-style-type: none"> <li>• Researcher can't ask additional questions for more clarification or nuance.</li> <li>• Limited scope: you might miss out on interesting data.</li> <li>• At risk of response bias</li> <li>• Due to the restricted answer options, people might have to choose the "best fit"</li> </ul>
<b>Semi-structured interview</b>	<ul style="list-style-type: none"> <li>• Can be used in quantitative research.</li> <li>• Relatively high validity</li> <li>• You can ask additional questions if needed</li> </ul>	<ul style="list-style-type: none"> <li>• Lower validity than the structured interview</li> <li>• At risk of Hawthorne effect, observer bias, recall bias, and social desirability bias.</li> <li>• You need to have good conversational skills to get the most out of the interview.</li> <li>• Preparation is time-consuming</li> </ul>
<b>Unstructured interview</b>	<ul style="list-style-type: none"> <li>• You can ask additional questions if needed.</li> <li>• Respondents might feel more at ease.</li> <li>• You can collect rich, qualitative data.</li> <li>• Can be used if little is known about the topic</li> </ul>	<ul style="list-style-type: none"> <li>• Low reliability and validity</li> <li>• You need to have excellent conversational skills to keep the interview going.</li> <li>• At risk of Hawthorne effect, observer bias, recall bias, and social desirability bias.</li> <li>• Easy to get sidetracked.</li> <li>• Hard to compare data.</li> <li>• Preparation is very time-consuming</li> </ul>

Source: adapted from George T., 2023

In order to emphasize the importance of conducting qualitative research through interviews, it is necessary to highlight its benefits. Interviews are a widely recognized method of gathering information, particularly when seeking to understand a specific group or organization. Qualitative interviews can help to develop theories based on collected data and provide an interpretative perspective of the social world as seen by research participants (Creswell & Creswell, 2018).

Moreover, the qualitative study was crucial in identifying key arguments from project managers within the IT sector. By aligning different work experiences and situations, it is possible to compare individual attitudes as we are covering social aspects – looking for soft skills(Adams, 2015). Semi-structured interviews were advantageous in that they allowed for modification of questions, enabling a more focused and aligned approach to the research objectives of the Master's Thesis:

- To empirically distinguish the most important soft skills of the project manager for completing successful projects.
- To analyze the synergy between soft skills and hard skills to complete IT projects
- To analyze how much soft skills influence the completion of IT projects.
- To identify the main challenges in completing IT projects.

The research was primarily focused on identifying soft skills and their influence on project leadership, as well as exploring the synergy between the two worlds. To achieve this goal, semi-structured interviews and qualitative research methods were employed. These methods proved to be effective in providing detailed insights into the subject matter.

In-depth interviews will provide valuable information. The general rule on sample size for interviews is that when the same stories, themes, issues, and topics emerge from interviewees, then a sufficient sample size has been reached (Boyce & Neale, 2006)

As (Creswell & Creswell, 2018) mentioned the main parts of the interview include:

- The preparation for the interview.
- Constructing effective research questions.
- The actual implementation of the interview(s).

During the interview process, participants will be presented with up to 15 questions along with a consent form. The questions will be designed to elicit responses regarding the success or failure of projects that the team has worked on. The interview will be initiated with ice-breaking questions, and gradually move towards the main questions, with probes included wherever necessary. These probes will help the interviewer gain a deeper understanding of the responses provided by the respondent.

Some examples of the probes that will be employed during the interview are as follows:



- "Can you give me an example?",
- "Can you provide more details on that idea?"
- "Is there anything else you would like to add?"(Boyce & Neale, 2006)

In order to prepare for the interview, it is essential to have a sampling strategy in place that enables the recruitment of qualified candidates and the gathering of credible information. Additionally, it is crucial to select participants who are honest and open to sharing information. (Creswell & Creswell, 2018).

Performing a pilot test is an essential next step in order to prepare for an interview. This will enable the identification of any potential flaws or weaknesses in the interview process, allowing the researcher to make necessary revisions based on the gathered information (Kvale, 2011). The pilot test will be conducted with the participant, who has similar criteria as all the next respondents of the research.

For the constructive and effective research questions. There are suggestions and a few recommendations for the creation of the questions:

- "Wording should be open-ended (respondents should be able to choose their own terms when answering questions).
- Questions should be as neutral as possible (avoid wording that might influence answers, e.g., evocative, judgmental wording).
- Questions should be asked one at a time.
- Questions should be worded clearly (this includes knowing any terms particular to the program or the respondents' culture).
- Be careful asking "why" questions." (McNamara Carter, 2009).

To ensure unbiased results in the research, questions will be framed in an open-ended manner that does not influence the respondent's answer in any particular direction. This approach will allow for a more comprehensive and accurate analysis of the data collected, thus increasing the reliability of the research findings.

## **2.2. Interviews, respondents, and sample size**

Upon deciding on the appropriate research methodology, it became imperative to establish a comprehensive framework for participants. As the trend of companies and industries

adopting project-based approaches continues to grow, the role of project management has expanded beyond just project managers. Considering this, it was deemed necessary to involve employees from different roles and companies who were responsible for leading projects in the IT sector. However, to ensure that the participants accurately represented the research informants, specific requirements were introduced. These prerequisites included:

- a minimum of two years of experience in the IT sector,
- prior experience in project management
- experience in successfully completing projects.

Once the requirements were met, employees with diverse roles, such as Project Managers, Product Owners, HR Managers, and Team Leads, were included in the research. A detailed account of the respondents and their experience in the IT field and as project managers is documented in the Table 4: Respondents experience and brief background:

*Table 4: Respondents experience and brief background*

Respondent No.	Occupation	Background
1 (R1)	Team Lead, Senior developer	Male, 35 years old, senior developer in Team lead position. Front-End development team. 2 years in a leadership role and 8+ years in an IT sector.
2 (R2)	HR Manager	Female, 33 years old, Human resources manager in an IT company. 2 years of experience in manager's role.
3 (R3)	Product Owner	Male, 44 years old, product owner in back-end development team. 2 years of experience in project lead role.

4 (R4)	Department Manager	Male, 38 years old, department manager with a technical background - programming. 6 years of experience in a leading position.
5(R5)	Department Manager	Female, 32 years old, department manager in a research and development team. 4 years of management experience.
6(R6)	Data Scientist, Product Manager	Male, 32 years old, data science/solution architect working in a product team. 5 years of experience in management role and 3 years in leading projects
7 (R7)	Department Manager	Female, 39 years old, department manager in human resources team. 10 years of experience in a leadership role, all those years in an IT sector.
8 (R8)	Product Owner	Male, 33 years old, product owner in a Front-End development team. 6 years of experience in a leadership role and 3 years of experience leading IT projects.
9 (R9)	Program Manager	Male, 43 years old, senior project and product manager. 8 years of experience in a leadership role and last three years in project management position.

10 (R10)	Product Owner	Male, 42 years old, product owner in a back-end technical development team. 5 years of experience in IT sector leading projects.
11 (R11)	Product Manager	Male, 29 years old, product manager in a product team creating proof of concepts. 3 years of experience in leading projects.
12 (R12)	Product Manager	Female, 28 years old, product manager in a research and development team. 5 years of experience in product management.

*Source: created by the author*

At the beginning of the master thesis writing and the research, the number of potential participants was not determined. Once respondents were selected and key trends emerged after interviews, the pool of participants was suspended. Different samplings have been adopted. Mainly Purposeful sampling has been chosen and looking into this sampling deeper and strategy has been selected as Convenient sampling (Bell et al., 2022).

Sampling which covers all needed aspects. Nonprobability methods of sampling involve samples that are available to the researcher or are selected by the researcher (Naderifar et al., 2017). This method was chosen because it analyzes people who are working in a hardly calculatable population – individuals who have experience in project work in varied sizes of teams. It is important to note that while qualitative research offers multiple methods for selecting participants, convenient samplings were utilized in this study. Even though it is efficient, fast, inexpensive, and one of the most commonly employed strategies (Patton, 2015), convenient sampling also has a negative side as the least desirable sampling strategy because of the data saturation perspective (Bell et al., 2022). It could be a situation where responses are no longer available or hard to reach in a timely matter. However, data saturation and sufficiency

would be enough because comparisons of collected qualitative data among respondents will start to become common.

During the research process, judgmental sampling was employed to guarantee that certain criteria were satisfied, including work experience and team management duties. The sample size was not predetermined, but the researcher concluded the study once twelve participants were interviewed and no new patterns emerged, and data saturation was achieved.

### **2.3. Research method**

Subcategorizing the questions was done to maintain a structured approach. This approach aided in recognizing the main trends and analyzing the data once the answers were combined and coded accordingly. The interview guide was designed to ask simple and clear questions, and participants were encouraged to ask additional questions or seek clarification during the interview. Participants will receive the same open-ended questions (Gall et al., 2003). Open-ended questions give the possibility for participants to answer as much in detail as they would like and on the other hand it allows to researcher to ask exploratory questions to follow-up. Therefore, the participants were not provided with the questionnaire before the interview. The coding process was utilized not only for data classification but also for identifying concepts and establishing relationships between them. All the interviews with the participants were conducted in English and with the explicit consent of each participant.

Interviews were conducted in different environments. One-to-one or face-to-face, and also remotely by using different software tools, for example, “MS Teams” or “Google Meets” platforms, depending on the responders' convenience. All recordings were saved and transcribed. The video conversations were recorded solely for the purpose of this research and transcription.

The primary tool used for conducting the interviews was a questionnaire, which is included in ANNEX 1, Table 11: Interview questions, in the master thesis. The questionnaire was structured into different sections, as evident from its layout, to ensure a comprehensive and organized approach to data collection: Table 5: Topics of the questionnaire.

Table 5: Topics of the questionnaire

Four subjects of Interview questioner	
Part 1	General Information about the Respondent
Part 2	The key competencies needed for effective leadership
Part 3	Projects management success and completion on-time
Part 4	Synergy of soft skills and successful project management

Source: created by author

According to (Middleton, 2023), throughout the interviews, there was a significant emphasis on ensuring the validity and reliability of the research instrument. It was emphasized that these two aspects are crucial in evaluating the suitability of any instrument for conducting proper research. In particular, validity is of utmost importance in research as it helps to ensure that the findings accurately represent the truthfulness of the topic under investigation. It is the extent to which the research instrument measures what it is intended to measure, and it is essential to ensure that the findings can be generalized to other settings or populations. Reliability, on the other hand, is the consistency of the research instrument in producing the same results when administered to the same population in different settings. Ensuring both validity and reliability in research is essential for producing reliable and trustworthy results that can be used to conduct analysis following the conclusions or recommendations.

During the interview process, utmost importance was given to ensuring complete anonymity, data protection, and ethical practices (Taherdoost, 2022). Adequate measures were taken before, during, and after the interview to ensure complete confidentiality and protection of the data obtained (Saunders et al., 2014). The ethical aspects of the interview were of paramount importance; the highest standards were followed to ensure that the interview process was conducted in an ethical and responsible manner. Prior to conducting the interviews, a crucial step was taken to ensure the participants were well-informed about the research process. Specifically, they were made aware of the anonymity measures in place, the importance of safeguarding their personal data, and the significance of their voluntary participation in the study.

## 2.4. Research analysis

When it comes to analyzing data after conducting interviews and collecting information, there are five important steps that should be followed. According to Bhandari, (2020), there is the following steps outlined, which are applicable to most types of qualitative research:

1. First, data preparation and organization are crucial. This involves organizing and cleaning the data, ensuring that it is in a format that can be easily analyzed.
2. The second step is to review and explore the data. This step is important as it helps to identify patterns and trends in the data. Researchers must scrutinize the data to identify any gaps or inconsistencies that may exist.
3. Developing a data coding system is the third step. This involves developing a set of codes that can be used to categorize the data. The codes should be relevant to the research question and should be mutually exclusive to avoid any overlap.
4. The fourth step is to assign codes to the data. Researchers must read through the data and assign the relevant codes to each piece of information. This step requires careful attention to detail and accuracy.
5. Finally, the fifth step is the identification of recurring data. This involves identifying common themes and patterns that emerge from the coded data. Researchers must then analyze these themes and patterns to draw conclusions and insights from the data.

Data coding is an essential process of organizing and structuring data by assigning specific labels to particular information. It enables researchers to identify recurring data, detect patterns, and draw meaningful insights from qualitative data. In essence, qualitative data coding involves creating and assigning codes to categorize data extracts into meaningful categories(Crosley, 2020).

During data analysis, a hybrid approach is usually employed to avoid a biased view. Consequently, this approach combines the inductive and deductive methods of qualitative data analysis(Crosley, 2020). The inductive method involves allowing the patterns to emerge from the data while the deductive method involves the use of a pre-existing theory or framework to guide the analysis process.

Additionally, from a literature review, some patterns have been identified that aid in the data analysis process. All in all, the process of qualitative data coding is crucial for researchers looking to draw meaningful insights from their data. Below could be find a list of research objectives in the thesis and the topics elaborate on the content within these categories:

- To empirically distinguish the most important soft skills of the project manager for completing successful projects.
- To analyze the synergy between soft skills and successful project performance.
- To analyze how much soft skills influence the completion of IT projects.
- To identify the main challenges in completing IT projects.

During the research process, it was found that having clear objectives in mind was crucial in conducting a structured analysis. All the questions were related to these objectives to ensure that the analysis was focused and relevant. To ensure a smooth review of the data, the research will include citations of the informants and the subchapters will be named accordingly. This will enable readers to easily navigate through the report and locate the relevant information.

After conducting a thorough qualitative research analysis, the main insights will be pointed out and presented visually in an organized and well-structured manner. This approach will enable readers to obtain a clear understanding of the "trending" soft skills and the latest challenges that are faced in project management within the IT sector. The insights presented will be based on the findings obtained from the research, which will provide a comprehensive view of the current state of project management within the IT sector.



### 3. RESEARCH RESULTS

Upon completion of the research, the forthcoming chapter will delve into the analysis of the findings. The research was conducted through semi-structured interviews with twelve respondents, with the aim of obtaining sufficient knowledge to meet the main objectives of the study as outlined above. To facilitate seamless data analysis, the interviews with the research respondents were transcribed, highlighting the primary Soft Skills, Leadership, and key attributes of completing projects on time in the IT sector.

As part of the research, ten employees from the IT sector were selected to participate. The selection criteria included a minimum of two years of experience in the field and a proven track record of leading or implementing projects within the sector. The focus was on the experience of the employees rather than their job title as it was essential for the research to have employees with a minimum of two years of experience in running projects. The participants represented various departments, including IT development, product department, and various roles such as team leads, project managers, product owners, or HR managers, from companies of different sizes, ranging from small-sized businesses to medium-sized businesses.

*Table 6: Respondents authority level in organizations and soft skills*

Responsibility	Respondents	Top soft skills in leading projects
Human resources	R2, R7	Communication, delegation, ownership
Technical background	R1, R6, R11	Communication, delegation, humble, empathy
Team level	R3, R8, R10, R12	Communication, ownership, guidance, humble
Department level	R4, R5, R9	Communication, ownership, guidance

*Source: created by the author*

During the months of November and December in 2023, a series of interviews were conducted using a range of communication platforms, including "Microsoft Teams" and "Google Meets." The interviews, which lasted between 17 and 38 minutes each, provided a spacious opportunity to delve into various topics and engage in productive interviews.

It is noteworthy that the respondents' experience leading the projects varied from two to ten years, providing a diverse range of perspectives and insights into the research. The

research included four women and eight men, and it should be noted that gender or age was not considered a significant factor in selecting the participants. The data was analyzed based on experience as a project manager, team lead, etc., providing valuable insights into the challenges and opportunities of leading projects in the IT sector.

*Table 7: Seniority of respondents*

Seniority	Years of experience	Respondents
Low	2-3	R1, R2, R3
Medium	3-4	R5, R6, R8, R11
High	5+	R4, R7, R9, R10, R12

*Source: created by the author*

During the analysis of the interviews with the respondents, the primary emphasis was placed on the objectives of the empirical part of the thesis. Additionally, the framework of the research part was organized in accordance with the research objectives that had already been identified. This ensured that the research was conducted in a structured and focused manner, with all efforts aligned towards achieving the desired objectives:

- To empirically distinguish the most important soft skills of the project manager for completing successful projects on time.
- To analyze the synergy between soft skills and successful project performance.
- To analyze how much soft skills influence the completion of IT projects.
- To identify the main challenges in completing IT projects.

### **3.1. Literature review and soft skills influence based on respondents.**

Hard skills refer to the technical expertise and knowledge required to perform a job, while soft skills are interpersonal qualities and personal attributes that one possesses. In the field of project management, soft skills are highly valued and considered an important attribute. Employers today are seeking candidates with strong soft skills, in addition to hard skills. According to a literature review, the top soft skills that are most important include integrity,

communication, courtesy, responsibility, social skills, positive attitude, professionalism, flexibility, teamwork, and work ethic. After conducting interviews with the respondents, it can be concluded that the theory presented in the frame of reference, which includes Kotter's functions of managers and leaders, in combination with The Iron Triangle, is not entirely relevant in all situations when measuring the success of a project. All functions of Kotter are not necessary, and all criteria in The Iron Triangle are not important for measuring success. The study also found that setting clear objectives for a project in advance is essential for its success (Bardh et al., 2011).

The research data has been analyzed and segmented in a manner that provides a more comprehensive understanding of the responses received. This approach aims to achieve a clearer and more organized presentation of the findings.

*Table 8: Soft skills mentioned in the interviews*

Soft skill	Mentioned / Importance
Task delegation	R1, R2, R3, R10
Empathy	R2, R9, R10, R11
Communication	R1, R2, R3, R4, R5, R7, R8, R9, R11, R12
Charisma	R1
Active listening	R3, R9, R11, R12
“Translator”	R2, R3, R8, R11
Ownership	R2, R3, R5, R4, R8
Creative	R1, R2
Open minded/openness	R1, R9
Luck	R1
Motivating others	R1, R2, R7
Growth mindset	R2
Connect with ST holders	R3
Prioritization	R2, R3, R8
Empower	R2, R3, R8, R9
Leadership	R7, R11

*Source: created by author*

### 3.2. Soft Skills Importance and Influence

The initial step involves conducting a comprehensive analysis of soft skills, followed by an evaluation of soft skills importance. Additionally, analyzed the frequency with which the respondents mention each soft skill. This provides valuable insights into the skills that are most valued and sought after in the industry.

One of the noteworthy soft skills that came up in the responses was the ability to delegate tasks efficiently and effectively. Respondents emphasized the importance of being able to identify the right tasks to delegate, communicating clearly with team members, and providing support as needed to ensure the successful completion of delegated tasks.

R1: *"the main soft skill that I would see myself that I have is to move tasks around and delegate it to specific people that are more capable of doing it or seeing that people need to learn in something then delegate that."*

R2: *" to delegate tasks*

Furthermore, having charisma can prove to be extremely advantageous when it comes to spearheading projects, as it greatly facilitates effective communication.

R1: *"You know basically it's a lot easier to communicate with different departments if you have a big charisma and so people are communicating with you easier and faster."*

During my analysis of the data collected from the respondents, I noticed a recurring theme. The participants highlighted the significance of certain soft skills that they deemed to be crucial for success. It was evident from my observations that active listening was one of the frequently mentioned soft skills among the respondents.

R4: *"it's called active listening. And being able to communicate problems once they arise to your manager to your clients.", " now you need to be able to really listen to everyone inside your team and also motivate them."*

One of the respondents highlighted the significance of empathy as a soft skill. Empathy is the ability to understand and share the feelings of others, and it plays a crucial role in building positive relationships and effective communication in both personal and professional settings.

R2: *"the soft skill it's kind of similar to empathy, the ability to understand other people."*

Another valuable soft skill that can greatly assist in the project development process is creativity. With its help, a project team can come up with innovative solutions to various issues that may arise during the development lifecycle. By leveraging creative thinking, the team can improve the project's outcome and ensure that it meets the desired objectives. Thanks to its versatility, creativity can be applied to a wide range of project-related tasks, making it an indispensable asset for any project team.

R2: *"Everything keeps changing and you have unusual situations on every day. You have to approach it with a creative mindset."*

Possessing the ability to maintain continuity while working on various projects is a crucial aspect of having the right soft skills. It indicates that an individual can manage their time effectively, prioritize their tasks, and adapt to changing circumstances while ensuring that their work remains consistent and of high quality.

R1: *"then you have an unhappy team and probably the second project or third project will fail"*

R3: *"But the important thing is that it is what is needed, and people are left with a desire to be on board another project."*

Based on the data collected, it is evident that possessing soft skills alone is not enough to ensure the success of a project and its timely completion. While skills such as creativity, empathy, and active listening are undoubtedly important, but the most critical soft skills for achieving project success are effective communication, ownership, and leadership in different aspects. These three skills play a crucial role in keeping the stakeholders informed, teammates

motivated, and focused on the project's goals, thereby giving the most influence on the chances of success.

### 3.2.1. Communication

Effective communication is widely considered to be the most valuable soft skill when it comes to ensuring that projects are completed successfully and on time. Good communication skills are essential for motivating teammates, impacting positive working relationships, sharing information and ideas, and keeping everyone involved in a project informed and up to date. By communicating clearly, concisely, and thoughtfully, team members can work together more effectively and increase the likelihood of project success.

R2: *"I think communication skills are very important because communication is the key and if you cannot communicate clearly, you may Get Lost in Translation, So this definitely benefits the communication part."*

R4: *"Communication I guess is one of the most important parts of the manager's role which can solve many problems."*

Because communication is a critical soft skill that plays an important role in successfully managing projects. However, it is important to recognize that communication has different layers or supporting soft skills, which could be specified in a more detailed way. Tailoring your communication approach to the specific needs and preferences of your audience can help ensure that your message is received and understood effectively.

R3: *"communication is the transferring of all the usage of soft skills because communication is not just talking it's and listening."*

R5: *"It's constant communication and constant also a reflection of the things what was good and bad", "so it's kind of communication and ownership."*

R9: *"I'm not so familiar with what the soft skills management is, but I could maybe expect that it has something to do with communication and relationships and stakeholder management and so forth."*

R10: *"And this is again going with same good communication and if you're all time in touch"*

Table 9: Top soft skills selections by respondents

Top soft skills for leading projects	Respondents
Communication	R1, R4, R5, R7, R8, R9, R12
Task delegation	R1, R2
Guide people	R3, R9
Ownership	R2, R4, R8
Being humble	R6, R10
Empathy	R10, R11
Ability to “Translate”	R3, R12

Source: Created by author

### 3.2.2. Importance of Communication in Leading Projects

Through the feedback obtained, it has been determined that the ability to communicate efficiently and effectively is a crucial aspect of being a successful project leader and manager. Clear and concise communication fosters mutual understanding and trust among team members, leading to improved collaboration, increased productivity, and ultimately, the successful completion of project objectives.

R1: *“if you don't communicate then probably somewhere along the way you will fail”, “Without those things, it's basically impossible to finish a project.”*

R5: *“So here the most needed skill is communication skill, you need to communicate and there is a way how you can communicate, if you're going to dictate nobody wants to work.”*

Effective communication plays a crucial role in bridging the gap between individuals or groups with different backgrounds, experiences, and perspectives. It helps to establish a common ground and align the diverse understandings, thoughts, and ideas of the parties involved, leading to better collaboration, mutual understanding, and successful outcomes.

R3: *“And the ability to translate, because even in our organization, we have different types of people, different types of jobs, and the most important task I see is actually to get those people to talk together.”*

R3: *“Communication is to get the information from A to B and if and most of the time I'm not at A or B because I'm not doing the project, I'm managing it”*

R12: *“So we are the people who are working with the stakeholders either users or management and we are the bridge”*

### **3.2.3. Ownership**

To ensure the success of a project, it is crucial to have a responsible and accountable project lead who possesses key soft skills such as ownership, effective communication, problem-solving, decision-making, and collaboration. The project lead must take ownership of the project and be dedicated to its successful completion, from planning to execution and delivery. By demonstrating ownership, the project lead can inspire and motivate team members and stakeholders to work together toward achieving the project's goals and objectives.

R2: *“To take responsibility for whatever their team did.”, “but if a team member owns a project, he will be responsible for checking in with others making sure everyone, is following up”*

R3: *“I use to create ownership, to create a desire to help each other”*

R4: *“It also matters that people feel ownership of what they are doing.”*

R5: *“Everything depends on the ownership. If we have the team who owns it then we're going to have a successful thing (project)”, “with strong ownership you can do everything”.*

R8: *“I think that ownership is necessary for different levels, as one part is looking from the company's perspective and another while leading a project”*

R11: *“like ownership means that each person is focused on what they are responsible for.”*

R12: *“we need an owner in order to make decisions basically”*

### **3.2.4. Leadership**

The concept of leadership can vary significantly from one organization to another, depending on the perceptions and preferences of the individuals involved and the company itself. This means that various forms and styles of leadership may be employed by different groups, each with its unique set of characteristics and approaches. Ultimately, the type of leadership that is most effective will depend on the specific needs and goals of a particular organization, as well as the personalities and values of its members.



R4: *“In one company, the leader must have technical skills. In some companies, it doesn't require any technical”*

In the past, leaders were known to be more strict and rigid due to their tendency to micromanage everything. Additionally, companies were relatively less widespread across the globe, and therefore, businesses operated in a more localized and limited manner.

R4: *“were fewer social aspects in the team. I guess the communication was very dry, very official.”*

Effective leadership plays a pivotal role in driving progress and successfully executing projects. In contrast to the rigid hierarchical structures of the past, modern leadership styles prioritize flexibility and open communication, enabling teams to collaborate more effectively and achieve better results.

R3: *“But essential would be to know when to do what because it's not all that wants to have a nice talk.”*

R8: *“Need to take tough decisions leading projects, then to cancel or move forward with projects as a lot of things could happen”*

Having numerous soft skills is crucial for every leader as it enables them to effectively collaborate and communicate with people, build strong relationships, manage conflicts, and inspire their team to achieve common goals. Soft skills such as empathy, active listening, emotional intelligence, and adaptability can make a significant difference in a leader's ability to lead and succeed. While hard skills are essential for performing specific tasks, soft skills are indispensable for building a positive work environment, fostering innovation, and driving long-term growth and success.

R1: *“so the more communication skills you have the better”*

R2: *“You have to be empathetic and not judge others because they didn't do something but just try and understand them”*

R5: *“in a sense, we need to be more and more careful about the human being.”*

R7: *“so you need to be a very self-aware leader that knows your strengths because I would say that there is no receipt or unique ingredients for effectivity”*

To successfully lead a team or manage a project, it is essential to maintain an open-minded approach and consistently keep the bigger picture in mind. By doing so, you can ensure that your decisions and actions align with the overarching goals and objectives, while also being approachable to new ideas and perspectives that can contribute to the success of the effort. This requires a balance of strategic thinking, effective communication, and adaptability to changes and challenges that may arise throughout the process.

R1: *“you should be an open-minded leader so you should take in the things that people tell you around, so you need to figure out if not your idea, but someone else's idea is better”*

R9: *“it's my role to have the overall overview of all the moving parts in a project and it's my role to understand which dependencies and the various parts should be put together”*

Effective leadership demands continuous learning and development. Every leader must stay on a path of education to hone their skills and acquire new knowledge. This not only enhances their own personal growth but also benefits their team and organization, making them better equipped to handle challenges and drive success.

R2: *“a person with a fixed mindset. Will not actually face challenges he or she will avoid challenges as he/she doesn't have to deal with them. Whereas a person with a growth mindset will look at challenges”*

A great leader not only takes charge but also focuses on uplifting and enabling their team to perform their best. They create a conducive work environment, equip their team with the necessary resources, and provide guidance to ensure the smooth and effective execution of tasks.

R3: *“It's to gauge a room, to set up a room and be able to connect with all the stakeholders and all the participants at the same level and to make it a joint effort that everyone has an ownership in.”, “If you have the soft skills, then as I understand it, the approach and the communication with people, then they will also know what to do.”*

R4: *“now you need to be able to really listen to everyone inside your team and also motivate them”*

R5: *“I think only if you care about the people, you can become actually a good leader”*

R8: *“You have cleared the way and let others to work, so you are like an obstacle remover”*

### 3.3. Successful project versus on-time project -Project management

In order to achieve success in any project, it is crucial to bring together different teams, stakeholders, and business needs. The combination of diverse expertise, skills, and resources can lead to innovative solutions and effective outcomes. Collaborating with others can also help to identify potential challenges and mitigate risks, as well as foster a shared sense of purpose and ownership in the project's success. Overall, building strong partnerships and working collaboratively can be a key driver of success in any project.

R1: *“businesses that the project was fast delivered, got a lot of money for the company, management is happy.”, “from a team perspective - we could work with some newest technologies that are fun to work with”*

R7: *“At first when you start the project you have the requirements and you have needs that all the team get, gathered from the client side and it's successful if through the way you manage as a product manager to transfer this message in the team what client actually need and if at the end all the sides are happy about the result.”*

Having a healthy and conducive environment can significantly boost one's motivation levels and increase productivity. When the surroundings are pleasant and well-maintained, it gives a sense of calmness and positivity, which encourages individuals to approach their tasks with greater enthusiasm and passion. As a result, they are more likely to complete their work with higher efficiency and accuracy, leading to better outcomes and the success of a project.

R1: *“The team is happy together and so on and are ready to tackle new problems. Then I think the project is successful so the team should be happy, and the business should be happy.”*

R3: *“if you haven't succeeded in making it a common victory and a good experience and it ends up.”*

R4: *“and also secondary, I guess the whole team is also satisfied with the work we've done. “*

R5: *“meeting the deadlines and delivering good quality products on time with happy people”*

R10: *“like on time and everybody's happy about what you have delivered”*

R12: *“When all the involved parties are happy, the end client, the development team.”*

On the other hand, several respondents have noted that achieving timely completion of a project can be quite challenging.

R1: *“if you want a successful project probably it will be a bit late but so you have to alleviate between those things.”*

R2: *“at all costs but it will not be successful. It will be shallow.”*

It is possible for a project to be considered successful even if it is not completed on time. Success can be measured by different factors, and completing a project on schedule may not always be the most important one. From the customer's point of view, it is often more satisfying to have the entire project fulfilled, even if it is delayed, rather than having it completed on time but with unsatisfactory results. Ultimately, customer satisfaction is key to determining the success of a project.

R4: *“So in being able to deliver on time is just the part and a successful project might even be the one which is not delivered on the agreed time, but the client would still call it a success”*

R11: *“if you complete it on time but not successfully, then I would say that it's not successful.”*

R12: *“I wouldn't link this too much on just your deadlines because it's not the right definition, I would say”*

Good planning is essential for successful project completion and helps in estimating the time accurately. The planning phase should include the entire list of requirements.

R5: *“So you need to take into consideration when you plan things that there might be some regressions and that there you have to allocate some test periods at the end of your project.”*

R11: *“So that's going to be in setting the requirements of a project, you need to be very clear on what those are.”*

When it comes to evaluating the success of a project, Key Performance Indicators (KPIs) serve as a key metric. These indicators help measure the progress toward achieving specific goals and objectives, and they provide valuable insight into the overall health of a project. By tracking KPIs, project managers gain a better understanding of where their team stands in relation to their targets, allowing them to make informed decisions and correct course as needed to ensure project success.

R7: *“I would look into a successful project where all the sides are feeling that you reached the KPIs and why I'm saying so because then it means that you managed to connect the dots”*

R11: *“simply delivers based, delivers a majority of its requirements that were defined at the start of the project, and it does it on time.”*

A successful project can be defined as a well-planned and executed effort that meets or exceeds its objectives within the specified time frame, budget, and quality standards. It requires effective communication, collaboration, and management skills to ensure that all stakeholders are satisfied with the outcome. Additionally, a successful project should be able to deliver measurable benefits to the organization or individuals involved.

R2: *“A successful project is a project that has been delivered on time.”*

R3: *“A successful IT project delivers on time and within budget the product needed and hopefully what was asked for.”*

R4: *“is on time, on the budget, and with the tasks completed which were agreed upon”*

### 3.3.1. The main factors of not making IT projects on-time

Some of the individuals who participated in the survey brought up the issue of a poor use case of a project.

R1: *“bad use cases for example from management so when you start delivering tasks and then management brings more and more things into the same task that we didn't prepped up”*

R8: *“after not complete estimation or not full requirements it could be a failure in completing a project on-time”*

R10: *“but generally understanding what you are doing and why you are doing this probably is at the basic points”*

One of the other participants in the discussion pointed out that there were communication issues that were negatively impacting the situation.

R2: *“if the responsible person or the owner of that project didn't communicate.”*

R7: *“if you're not communicating then it's already a blocker at the beginning.”*

R9: *“The most risky part in project management is if you have a culture or organization that is not aware of their roles and responsibilities.”*

R11: *“for people is when they feel like their leader is like a dictator who's imposing things on them.”*

It also could be an overestimation of the scope that could mean that the estimation of the project's size or requirements may have been exaggerated or miscalculated.

R4: *“in our industry underestimating difficulty of tasks and projects overall”*

R5: *“also wrong estimations if we estimate the wrong scope for the wrong deadline.”*

R7: *“and maybe you evaluate wrongly the scope of the project”*

R12: *“I would say poorly defined. I believe the ability to scope things to understand what the key thing is we are delivering and then when the scope is too large.”*

It's easy to get too caught up in perfecting the quality of a project and lose sight of the bigger picture. This can cause one to lose track of important deadlines, goals, or milestones. It's important to find a balance between striving for excellence and staying on track with the project's overall objectives.

R4: *“So having too much emphasis on some part is also I think dangerous because then you lose track of your budget or your deadline of delivering”*

As always, we should include and a force majeure factor in the project planning and success which could be unavoidable or tough to predict:

R5: *“A war. Covid and stuff like that”*

*Table 10: Issues preventing projects from successful completion on-time*

Main causes of project completion	Mentioned / Importance
Bad use case	R1, R11, R12
Bad scope	R1, R4, R5, R6, R7, R10, R11
Demotivated team	R1, R4
Bad communication	R2, R3, R8, R9
Force major	R5

*Source: created by the author*

### 3.4. Synergy of Soft Skills and Project management

Taking ownership of a project is a crucial aspect that helps in leading it successfully to completion within the designated time frame. It involves assuming full responsibility for the project, making decisions, delegating tasks, and keeping a close eye on the progress, all while maintaining an unwavering commitment to meeting the project goals. By taking ownership, the leader can instill a sense of accountability and motivation in the team, which can lead to a more cohesive and productive work environment.

R1: *“if you're owning it personally, yeah, so what ownership gives you, so it gives you responsibility for that project.”*

R3: *“I use to create ownership, to create a desire to help each other.”*

R1: *“if you're good at motivating your team, they will probably push themselves a bit harder and try to finish that project faster”*

R4: *“Motivation has become important, and it discovers what motivates each person”*

R4: *“And motivating the team, caring about it, even like what tasks they are doing, how they are feeling inside the team”*

R9: *“So All in all, it's a project that has a culture of transparency and collaboration within the various departments and a successful project is also having stakeholders that are not working in silos.”*

When you have ownership of a project, it means you have the power to take responsibility for its success or failure. It also means that you have the authority to make decisions and take actions that will move the project forward. Having ownership can be a powerful motivator and can lead to an accomplishment when the project is completed successfully.

R6: *“that's the most important because if you don't have ownership then you get messy projects because everyone would give their own opinion and think their own opinion is the best.”*

R9: *“But the framework should make it, how to say a more fun and not so stressful environment in achieving the goal.”*

Additionally, it appears that possessing a creative mindset can be advantageous when it comes to managing and overseeing projects.

R1: *“So you have to have a creative take on some of the tasks that you are doing because not always you're getting the right decisions from the product management and so on.”, “And sometimes you need to talk and be creative, provide some other solutions to get work going and to make that work going in the better way.”*

When it comes to taking charge of projects, do we have to emphasize the importance of soft skills such as communication and teamwork, or can we solely concentrate on technical skills and still be able to competently lead the project? Furthermore, in project management



soft skills help to keep a healthy environment, including a sense of empathy as a project manager has to be sensible and balance between strict and loose leadership.

R2: *“it depends on the team. If for example a team that is working on a project has been Maybe working for many years together and they kind of understand each other”” because I spoke a lot about the communication. Maybe those people wouldn't need as much. so yes, it's possible but soft skills. Help a lot.”*

R6: *“You don't need to have soft skills to drive a successful project, but you will waste a lot of time if you don't have soft skills.”*

R9: *“But it will not be a healthy environment, or the risk of an unhealthy environment is quite high.”*

It is all about information and it is crucial to maintain a smooth flow of information and promptly address any issues that arise. This helps ensure that problems are resolved in a timely manner and that everyone involved is kept up-to-date on any developments or changes. By prioritizing effective communication and swift action, we can work together more efficiently and achieve better outcomes.

R4: *“communicating issues that arise during project development so being able to communicate those and resolve”*

R8: *“Communication is a key factor because you are moving information around, and it helps to run projects smoothly”*

R9: *“And one of the ways I'm doing that is simply to have many touch points with the individual stakeholders for those who need it.”*

R11: *“And then obviously you're going to have to share that information with others, which requires, you know, simply the soft skill of being able to communicate effectively.”*

## CONCLUSIONS AND RECOMMENDATIONS

The research discussed in this thesis is focused on identifying the influence of the soft skills of project managers in the successful completion of IT projects within the given timeframe. The study was conducted in international software development companies and involved gathering empirical data through semi-structured interviews with project managers, team leaders, and specialists in leading positions. The aim was to identify the challenges faced by project managers during project implementation and how soft skills can help in achieving project goals.

The research findings revealed that project managers of IT companies encounter various challenges during the implementation of a project and that soft skills play a critical role in achieving project goals. These challenges were identified and grouped into the most beneficial soft skills, which include communication, ownership, leadership, and skills that support the primary soft skills such as empathy, task delegation, active listening, and the ability to translate indirectly by speaking in one language and being on the same page.

The most common challenges during the process of project management were identified as occurring during the scoping phase, getting not full use case of a project, bad communication, demotivated teams, not forgetting force majeure cases such as wars, pandemics, etc. This group of issues includes outlining communication skills, lack of empathy, and ownership skills, including a bad estimation process.

The data analysis revealed that the following soft skills were the most important: communication, ownership/responsibility, empathy, task delegation, active listening, empowering others, and the ability to be a bridge between different people. The most commonly found challenges during the process of project management were incorrect estimations or scoping of tasks, having a bad use case of a project, and bad or misleading communication in general.

The study determined that communication is the most critical soft skill that influences the successful and timely completion of an IT project. 83 percent of respondents mentioned communication as the most crucial soft skill in completing IT projects successfully. Other soft skills that support communication, such as empathy, active listening, or ownership, were also highlighted as essential for a project's success.

The study also identified the most common challenges in project failures, and the most crucial issue was incorrect work estimation. This means that teams tend to estimate too positively without including any additional time for unforeseen work. 50 percent of respondents mentioned this challenge as the top issue for project failure or unsuccess.

In addition to the data gathered from respondents, literature analysis also supported the importance of soft skills in completing projects on time. Communication was identified as one of the key factors in managing projects successfully, and the most common issue in managing projects was bad communication or lack of communication. Furthermore, successful projects were described as fulfilling pre-set requirements of the project, which means budget, time, and resources. Failure to meet important project requirements leads to the incompleteness of a project. This means that bad scope, which was identified by respondents as a top factor of failures, has a significant relation to literature analysis.

In conclusion, ensuring timely and successful project management soft skills is essential for every project manager. Communication is a leading skill in influencing project success and timely completion. Project scopes should be estimated, and ownership should be taken into consideration when leading a project. Another critical aspect of successful projects is a healthy environment and teammates to continue with success and maintain the continuity of successful projects. By following these conclusions, project managers can develop the necessary soft skills and become more successful in completing successful projects on-time.

## **Recommendations**

Even though the research does not allow for generalizing research results about the influence of the most important soft skills for completing IT projects on time, it does provide several practical insights and solutions that are highly relevant to the IT industry and project management. These recommendations can be beneficial for project managers in IT companies to gain insights into the necessary soft skills for project management and to acquire some useful soft skills.

To begin with, project managers should have clearly defined roles that are well understood by all stakeholders and team members to avoid communication issues and confusion. This helps in setting expectations and ensuring everyone is on the same page. Secondly, project managers must develop active listening skills as it is one of the key pillars of

communication. By listening actively, project managers can understand the needs and concerns of their team members, which can help in addressing issues before they escalate.

Moreover, ownership skills and responsibility for decisions, and transparency are vital for project managers. By taking ownership of the project, project managers can take charge of the project and ensure that it is completed within the given time frame. Additionally, transparency is crucial in any project, and project managers need to be transparent in their communication with stakeholders and team members to avoid any misunderstandings or misinterpretations, furthermore, transparency allows others to check any time workflow and roadmaps.

To avoid not completing a project, project managers must be able to estimate the project scope and resource requirements as early as possible. This helps in planning and allocating resources to ensure that the project is completed on time and within budget. A lack of information about the project scope can lead to serious issues later in the process, and this can delay the project's completion.

### **Limitations of the study**

It's imperative to bear in mind that the responses to this study might differ depending on the company. This is because each organization has its unique structure, culture, and policies that may influence the opinions of the respondents. Therefore, it's possible that some answers might be biased due to these factors.

Furthermore, the study concentrates on the viewpoint of a project manager regarding the relevance of soft skills in leading projects. Soft skills are essential skills that are non-technical in nature, such as communication, leadership, ownership, and empathy. The research aims to shed light on how project managers perceive these skills and how they impact project success.

However, it is crucial to note that this study does not explore the opinions of project team members. This limitation means that there is no insight into how team members perceive the importance of soft skills in project management. This information could provide a more comprehensive understanding of how soft skills impact project outcomes.

## **Implications for further studies**

The challenges faced by project managers leading IT projects and the critical soft skills required to overcome them were identified through a research study. However, it is clear that further investigation is necessary in this area. One possible avenue for future research could be to examine team management in different projects, such as more technical development versus front-end development in software companies with minimal business-to-customer focus and external dependency.

Another potential area for future research would be the validation of the identified critical soft skills using quantitative research methods, with a larger research sample. This would aid in comprehending the interdependencies of soft skills, their relationship with timely project completion, and the development of a framework for effective leadership and ownership in IT projects.

It should be noted that this study did not gather feedback from the teammates or project stakeholders who do the "hard work" in an IT company. Additionally, the application of Agile practices in project management is an intriguing and promising perspective, as not all employees may be comfortable with constant changes. This can reveal the challenges in project success that are more important for team members.

## LIST OF REFERENCES

- Adams, W. C. (2015). Conducting Semi-Structured Interviews. *Handbook of Practical Program Evaluation: Fourth Edition*, 492–505. <https://doi.org/10.1002/9781119171386.CH19>
- Ahonen, J. J., Savolainen, P., Merikoski, H., & Nevalainen, J. (2015). Reported project management effort, project size, and contract type [Article]. *Journal of Systems and Software*, 109, 205–213. <https://doi.org/10.1016/j.jss.2015.08.008>
- Anantatmula, V. S. (2010). Project manager leadership role in improving project performance [Article]. *EMJ - Engineering Management Journal*, 22(1), 13–22. <https://doi.org/10.1080/10429247.2010.11431849>
- Anthony, S., & Garner, B. (2016). Teaching Soft Skills to Business Students. <Http://Dx.Doi.Org/10.1177/2329490616642247>, 79(3), 360–370. <https://doi.org/10.1177/2329490616642247>
- Bardh, M., Bokedal, M., & Stensson, V. (2011). Project Success – Application of Kotter’s functions of managers and leaders when evaluating project success: using The Iron Triangle [Dissertation]. *Jönköping INTERNATIONAL BUSINESS SCHOOL*.
- Bell, E., Bryman, A., & Harley, B. (2022). Sampling in Qualitative Research. *Business Research Methods*. <https://doi.org/10.1093/HEBZ/9780198869443.003.0030>
- Bhandari, P. (2020). *What Is Qualitative Research? | Methods & Examples*. <https://www.scribbr.com/methodology/qualitative-research/>
- Bolliger, K. (1986). Successful project management [Bookitem]. *International Journal of Project Management*, 4(1), 22–24. [https://doi.org/10.1016/0263-7863\(86\)90058-X](https://doi.org/10.1016/0263-7863(86)90058-X)
- Bond-Barnard, T. J., Fletcher, L., & Steyn, H. (2018). Linking trust and collaboration in project teams to project management success [Article]. *International Journal of Managing Projects in Business*, 11(2), 432–457. <https://doi.org/10.1108/IJMPB-06-2017-0068>
- Boyce, C., & Neale, P. (2006). Conducting in-depth interviews: A Guide for designing and conducting in-depth interviews. *Evaluation*, 2(May), 1–16. <https://doi.org/10.1080/14616730210154225> Conducting in-depth interviews: A Guide for designing and conductin. *Evaluation*, 2(May), 1–16.

- Creswell, W. J., & Creswell, J. D. (2018). Research Design: Qualitative, Quantitative and Mixed Methods Approaches. In *Journal of Chemical Information and Modeling* (Vol. 53, Issue 9).
- Crosley, J. (2020). *Qualitative Data Coding 101 (With Examples) - Grad Coach*. <https://gradcoach.com/qualitative-data-coding-101/>
- Francisco de Oliveira, G., & Rabechini, R. (2019). Stakeholder management influence on trust in a project: A quantitative study [Article]. *International Journal of Project Management*, 37(1), 131–144. <https://doi.org/10.1016/j.ijproman.2018.11.001>
- Gall, M. D., Gall, J. P., & Borg, W. R. (2003). *Educational research : an introduction*. 656. [https://books.google.com/books/about/Educational\\_Research.html?hl=lt&id=E9DhnQEACAAJ](https://books.google.com/books/about/Educational_Research.html?hl=lt&id=E9DhnQEACAAJ)
- García Reyes, L. E. (2013). Examining the control-trust nexus in new venture teamwork Pamela. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- George T. (2023). *Types of Interviews in Research | Guide & Examples*. <https://www.scribbr.com/methodology/interviews-research/>
- Gunduz, M., & Yahya, A. M. A. (2018). Analysis of project success factors in construction industry [Article]. *Technological and Economic Development of Economy*, 24(1), 67–80. <https://doi.org/10.3846/20294913.2015.1074129>
- Hurrell, S. A. (2016). Rethinking the soft skills deficit blame game: Employers, skills withdrawal and the reporting of soft skills gaps [Article]. *Human Relations*, 69(3), 605–628. <https://doi.org/10.1177/0018726715591636>
- Iriarte, C., & Bayona Orè, S. (2018). Soft Skills for IT project success: A systematic literature review. *Advances in Intelligent Systems and Computing*, 688, 147–158. [https://doi.org/10.1007/978-3-319-69341-5\\_14](https://doi.org/10.1007/978-3-319-69341-5_14)
- Jagd, S. (2010). Balancing trust and control in organizations: towards a process perspective. *Society and Business Review*, 5(3), 259–269. <https://doi.org/10.1108/17465681011079482>
- Joia, L. A., & Melon, M. (2020). The social representation of success in IT projects [Article]. *International Journal of Managing Projects in Business*, 13(7), 1578–1599. <https://doi.org/10.1108/IJMPB-01-2019-0005>

- Jørgensen, L., & Åsgård, T. (2019). Trust and control in project management. *Procedia Computer Science*, 164, 397–406. <https://doi.org/10.1016/j.procs.2019.12.199>
- Kalkman, J. P., & de Waard, E. J. (2017). Inter-organizational disaster management projects: Finding the middle way between trust and control [Article]. *International Journal of Project Management*, 35(5), 889–899. <https://doi.org/10.1016/j.ijproman.2016.09.013>
- Kanter, J., & Walsh, J. J. (2004). Toward more successful project management [Article]. *Information Systems Management*, 21(2), 16–21. <https://doi.org/10.1201/1078/44118.21.2.20040301/80417.3>
- Kumar, R. (2011). *Research Methodology 3e*.
- Kvale, S. (2011). *Doing Interviews. Doing Interviews*. <https://doi.org/10.4135/9781849208963>
- Larson, E. W., & Gobeli, D. H. (1989). Significance of project management structure on development success. *IEEE Transactions on Engineering Management*, 36(2), 119–125. <https://doi.org/10.1109/17.18828>
- Little, B. (2011). The principles of successful project management: It takes careful planning, skilful leadership ... and a little bit of luck [Article]. In *Human Resource Management International Digest* (Vol. 19, Issue 7, pp. 36–39). Emerald Group Publishing Limited. <https://doi.org/10.1108/09670731111175597>
- McNamara Carter. (2009). *General Guidelines for Conducting Research Interviews*. <https://management.org/businessresearch/interviews.htm>
- Middleton, F. (2023). *Reliability vs. Validity in Research | Difference, Types and Examples*. <https://www.scribbr.com/methodology/reliability-vs-validity/>
- Mkoba, E., & Marnewick, C. (2016). IT project success: A conceptual framework for IT project auditing assurance. *ACM International Conference Proceeding Series*, 26-28-September-2016. <https://doi.org/10.1145/2987491.2987495>
- Müller, R., & Turner, R. (2007). The Influence of Project Managers on Project Success Criteria and Project Success by Type of Project [Article]. *European Management Journal*, 25(4), 298–309. <https://doi.org/10.1016/j.emj.2007.06.003>
- Naderifar, M., Goli, H., & Ghaljaie, F. (2017). Snowball Sampling: A Purposeful Method of Sampling in Qualitative Research. *Strides in Development of Medical Education*, 14(3). <https://doi.org/10.5812/SDME.67670>



- Napier, N. P., Keil, M., & Tan, F. B. (2009a). IT project managers' construction of successful project management practice: A repertory grid investigation. *Information Systems Journal*, *19*(3), 255–282. <https://doi.org/10.1111/J.1365-2575.2007.00264.X>
- Napier, N. P., Keil, M., & Tan, F. B. (2009b). IT project managers' construction of successful project management practice: a repertory grid investigation [Article]. *Information Systems Journal (Oxford, England)*, *19*(3), 255–282. <https://doi.org/10.1111/j.1365-2575.2007.00264.x>
- Nugroho, R. H. B. B. (2018). Transformational Leadership Laboratory: The Project's Success Factors [Article]. *International Journal of Contemporary Educational Research*, *5*(2), 79–86. <https://doi.org/10.33200/ijcer.467868>
- Ogbeifun, E., Mbohwa, C., & Pretorius, J. H. C. (2016). Project success factors: The opinion of facilities managers [Proceeding]. *IEEE International Conference on Industrial Engineering and Engineering Management, 2016-Decem*, 1176–1179. <https://doi.org/10.1109/IEEM.2016.7798063>
- Orouji, M. (2016). Critical success factors in project management. *Journal of Project Management*, *10*, 35–40. <https://doi.org/10.5267/J.JPM.2017.1.001>
- Ozmen, E. (2013). *Project management methodology (PMM): how can PMM serve organisations today?* <https://www.pmi.org/learning/library/project-management-methodology-serve-organizations-5803>
- Pinto, J. K., & Slevin, D. P. (1987). CRITICAL FACTORS IN SUCCESSFUL PROJECT IMPLEMENTATION. *IEEE Transactions on Engineering Management*, *EM-34*(1), 22–27. <https://doi.org/10.1109/TEM.1987.6498856>
- Podgórska, M., & Pichlak, M. (2019). Analysis of project managers' leadership competencies: Project success relation: what are the competencies of polish project leaders? [Article]. *International Journal of Managing Projects in Business*, *12*(4), 869–887. <https://doi.org/10.1108/IJMPB-08-2018-0149>
- Reed, M. I. (2001). Organization, trust and control: A realist analysis. *Organization Studies*, *22*(2), 201–228. <https://doi.org/10.1177/0170840601222002>
- Rezvani, A., Chang, A., Wiewiora, A., Ashkanasy, N. M., Jordan, P. J., & Zolin, R. (2016). Manager emotional intelligence and project success: The mediating role of

- job satisfaction and trust [Article]. *International Journal of Project Management*, 34(7), 1112–1122. <https://doi.org/10.1016/j.ijproman.2016.05.012>
- Rodney Turner, S. (2007). The Influence of Project Managers on Project Success Criteria and Project Success by Type of Project. *European Management Journal*. <https://doi.org/10.1016/j.emj.2007.06.003>
- Saunders, B., Kitzinger, J., & Kitzinger, C. (2014). Anonymising interview data: challenges and compromise in practice. *Http://Dx.Doi.Org/10.1177/1468794114550439*, 15(5), 616–632. <https://doi.org/10.1177/1468794114550439>
- Smith, S., Jitpaiboon, T., Yang, J., & Gu, Q. (2018). Effects of Non-Cognitive Skills on Project Management Behaviors: An Agency View. *Journal of Supply Chain and Operations Management*, 16(3), 263–277.
- Spalek, S. (2014). Success Factors in Project Management. Literature Review [Article]. *8th International Technology, Education and Development Conference INTED2014*, 4(9), 4828–4835.
- Taherdoost, H. (2022). *How to Conduct an Effective Interview; A Guide to Interview Design in Research Study*. <https://papers.ssrn.com/abstract=4178687>
- Todorović, M. L., Petrović, D. T., Mihić, M. M., Obradović, V. L., & Bushuyev, S. D. (2015). Project success analysis framework: A knowledge-based approach in project management [Article]. *International Journal of Project Management*, 33(4), 772–783. <https://doi.org/10.1016/j.ijproman.2014.10.009>
- Turner, D. W. (2010). Qualitative interview design: A practical guide for novice investigators. *Qualitative Report*, 15(3), 754–760. <https://doi.org/10.46743/2160-3715/2010.1178>
- van de Ridder, J. M. M., DeSanctis, J. T., Mookerjee, A. L., & Rajput, V. (2020). Micromanagement Creates a Nonconductive Learning Environment for a Teaching Team. In *Journal of graduate medical education* (Vol. 12, Issue 5, pp. 639–640). <https://doi.org/10.4300/JGME-D-20-00926.1>
- Vasantrya Patil, G. (2016). Project Management Challenges. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, 3, 2458–9403. [www.jmest.org](http://www.jmest.org)

- Walter, M., & Zimmermann, J. (2015). *Minimizing average project team size given multi-skilled workers with heterogeneous skill levels*.  
<https://doi.org/10.1016/j.cor.2015.11.011>
- Yukl, G., & Gardner, W. L. (2020). *Leadership in Organizations*.  
<https://lccn.loc.gov/2018041734>
- Zhang, L., & Deng, Y. (2016). Guanxi with Supervisor and Counterproductive Work Behavior: The Mediating Role of Job Satisfaction [Article]. *Journal of Business Ethics*, 134(3), 413–427. <https://doi.org/10.1007/s10551-014-2438-7>
- Zuo, J., Zhao, X., Bui, Q., Nguyen, M., Ma, T., & Gao, S. (2016). *Soft skills of construction project management professionals and project success factors A structural equation model*. <https://doi.org/10.1108/ECAM-01-2016-0016>

## ANNEXES

### ANNEX 1

*Interview guide:*

"Hi,

I am thankful for your willingness to participate in this interview, which is instrumental in gathering data for my research. Prior to commencing, I would like to request your consent to record this interview for academic purposes. Following the transcription of the information, all recordings will be promptly deleted in adherence to privacy principles, ensuring that personal data such as individual names or your organization are not disclosed.

For your understanding, the focus of my thesis is to explore the Influence of a Project Manager's Soft Skills in the Completion of IT Projects on-time. The aim is to identify the important soft skills required for effective leadership, with a particular emphasis on the IT sector. Consequently, I have reached out to individuals with experience in the IT sector to aid in data collection.

Please note that the questionnaire was not shared prior to our interview. Therefore, feel free to seek clarification or ask any questions should the need arise."

*Table 11: Interview questions*

<b>Part 1: General Information about the Respondent</b>
<ul style="list-style-type: none"> <li>• Could you please provide the following information about yourself: your gender, age, role, and the department you are associated with in your organization?</li> <li>• How many years of experience do you have in a leadership role such as a project manager or team lead?</li> <li>• Could you provide a brief overview of your professional journey in leading position?</li> </ul>

**|Part 2: The key competencies needed for effective leadership.**

- What do you consider the main soft skills for a project manager (you) leading IT projects?
- How do soft skills benefit the management of IT projects?
- How do leadership and soft skills correlate?
- What are the essential characteristics of effective leadership for an IT project manager?
- Have you noticed any changes in recent years regarding leadership requirements?
- What soft skills are necessary now that weren't required over two years ago?

**Part 3: Projects management success and completion on-time**

- How would you describe a successful IT project?
- What are the main factors that prevent IT projects from being completed (on time or successfully)?
- Is there a difference between completing an IT project on time and completing it successfully?
- How does ownership of an IT project impact its (success and completion on time)?

**Part 4: Synergy of soft skills and successful project management**

- How would you describe daily activities in your role?
- Would it be possible to manage successful projects on time without soft skills, even if you have technical skills?
- Does communication have a valuable impact in managing successful projects?
- Finally, what is the most important soft skill for you to have in leading IT projects on time?

*Source: created by the author*

## ANNEX 2

### *Example of Interview Transcript (R9)''*

0:05

The recording started.

0:07

I'm thankful for your willingness to participate in this interview, which is instrumental in gathering data for my research prior to commencing. I would like to request your consent to record this interview for academic purpose.

0:25

Yeah, sure.

0:26

Following the transcription of the information, all recordings will be promptly deleted in adherence to privacy principles, ensuring that personal data such as individual names of all your organization are not disclosed for your understanding. And the focus of my test thesis is to explore the influence of project managers' soft skills in the timely completion of IT projects. The aim is to identify the importance of soft skills required for effective leadership with a particular emphasis on the IT sector. Consequently, I have reached out to individuals with experience in the IT sector to aid in data collection. Please note that that questionnaire was not shared prior to our interview. Therefore, feel free to seek clarification or ask any question should the need arise. First part.

0:58

My first question would be could you please provide your gender, age, role, and department you are working in?

1:13

My name is xxx. I'm. Yeah, let me remember now: I'm 43 years old, and I'm working at an IT company as a senior project and product manager.

1:31

And how many years of experience do you have in leadership role such as project manager or team lead combined?

1:41

That's a good question. I don't recall it, but I think maybe seven years, 7 plus years, but mostly, within of course building teams and now the past two years, let's say three years in the product.

2:13

And could you provide a brief overview of your professional journey?

2:32

Yes, I started out in the travel industry in the two operators as a two-operator trainee and then I went from the two operators into an airline where I was overseeing how to say the handling agent at the airport side. And then I went into what we call revenue management and where I was a revenue manager where I got to know one of the company's products and that is the company I'm working at now. And this company is providing competitive data and analytics. And I started as a key account manager where I was in charge of all customer relationships and so forth. And as the company grew, I scaled up the key account manager to be a more customer service-oriented function. And I spent most, I will say 12 years doing that. And then the past four years I've been focusing on educating myself but also helping on building a project management structure within the company.

3:28

And what do you consider the main soft skills of a project manager leading IT projects?

3:37

So as I started out this call before you recorded it, I said I'm much more a practical guy so all the theory I'm not so much into unless I need it. I'm not so familiar with what the soft skills management is, but I could maybe expect that it has something to do with communication and

relationships and stakeholder management and so forth. But if I'm missing out on some of these, then please direct me into the right perspective.

4:13

But Speaking of those then for me and what I've seen in my doing my worked life if it's cost project management or even just normal management leadership then it's mostly about communication and by that I mean that it's extremely important to have a transparent communication and in open communication with team or stakeholders and it's also one of the most difficult areas because many humans have different ways of interpolating wording and articulation and so forth and even also PowerPoint slides.

5:03

So I believe it's an important skill for a project manager or leadership person to understand all kinds of how to say personalities and how different words can actually be trained in a way that can be interrogated differently per individuals and also regarding that then it's also of course very important that you have clear and sometimes firm guidelines that help the stakeholders or employees to feel safe have a safe environment on them to navigate in. I'm not a fan of having rules so it shouldn't be misunderstood. I'm not a fan of having very strict rules but I'm a fan of having a framework that is built out from the point of view that it should give the stakeholders a bit of secureness in what they do so they know what is expected and how they should kick off things.

6:24

And how do leadership and soft skills correlate in your opinion?

6:32

Oh, can you maybe try to ask the question in a different way so understand what you mean?

6:43

Do you think that soft skills, for example, are necessary for leadership or leading your colleagues or stakeholders in the right direction?



6:55

Yeah but as I said before, it really matters. What is your definition of soft skills? Are those personal skills only or what is it?

7:07

Yeah, it is. And you are on the right path regarding soft skills it is like social skills, and technical skills would be like knowledge in a particular job like details, specifications, and the domain of the product.

7:29

So yeah, soft skills like communication are, but I think that my highest value when I do it is, again, it's about trying to create an environment where everybody feels that they can work without being told how to say, being monitored. So it should not be an environment for the employees that they feel OK it's like I maybe just tried to say it in a different way it's I don't like when we have an environment where everything is connected to a KPI because KPIS are good for in some scenarios but it shouldn't be the driver of how to say the agenda of each stakeholder and an employee when they start out their work. But of course, it has to be measured somehow. But the driver, and by that, I mean when, I deal with stakeholders in a product, in projects, then of course the overall goal is that we are productive. But the framework should make it, how to say a more fun and not so stressful environment in achieving the goal. And one of the ways I'm doing that is simply to have many touch points with the individual stakeholders for those who need it. And then of course working in a project that will be stakeholders that is very good at working independently. So, I try to point out those stakeholders that needs more support maybe in regard to, yeah, ChargePoint, be aware, I asked them how they're doing and reaching out to say what can I help them with, if there's anything and so forth.

9:14

And what are the essential characteristics of effective leadership?

9:40

Yeah, I would say effective communication, that's the essential part. There's also trust and empowerment. And by empowerment, I mean maybe it's the wrong word, maybe it's the wrong but when if I'm a leader and it's a bit different because as a project manager you're not the direct leader. But I should still make sure that my stakeholders are empowered to carry out the task that I expect from them. If they're not empowered, then I should understand what is needed for them to be empowered in order to do the task, and I haven't noticed any changes in recent years regarding leadership requirements for employees, for example. I'm 43 years old and the younger and I have been hiring younger people than me, especially when they are more than 20 years old, maybe 2 decades. Then I see that there's a bigger need for them to be coached, meaning how to act like in regard to yeah, soft skills actually and personal development compared to other ones that are similar at my age and so forth because the culture is a bit different. I believe I think the younger generation is expecting more of companies in regard to the company offering them more development time, whereas my generation has to say we could; we didn't ask what the company could do for us. We were there to give the company what we have of skills. So, I think it has changed a bit they are some would say maybe that the younger generation a bit more they require more attention from a human perspective than some of the older generations.

12:11

Although it seems that younger generation more like takers instead of givers?

12:23

Like yeah, but it could be translated into that. And personally, I don't mean that because they are, they are givers, but they just expect more because I also think they spent more time as they spent more of their energy in it, at least some. And of course if you spent, let's say you have, you have 100% of your energy. I'm not speaking about time, I hate time, but let's say you have 100% of the energy, you don't have a family, you don't have other stuff to do. And then if you spent 80 or 90% of that energy for the company also without working hours, outside working hours because you think about how to make strategic decisions or whatever you do, then, of course, you feel that the company is your family right. And we have to be very careful when choosing families when we talk about work because there's no workplace. Based on my experience, that is a family because in a family you always have each other's back, right? And

you know at a workspace you can always get fired for any given time right. Anyhow but when you spend so much time on it and especially also outside working hours because it does. I think that's a big deal. I think the world we're living in now the way we work is it's a part of who we are and of course that means that you spend energy on your job from outside working hours. I know other many humans doesn't, but I would still maybe the majority of the wisdom culture and the ones that are working within especially IT they do spend a lot of energy outside the job as well. So therefore I think the younger generations are expecting more but yes there will I have also seen cases of younger people that just come and say teach me everything and maybe that was not the agreement when we had the job interview right so that's where I see as a manager you have to be careful of what you expect unless you have how to say discuss it in the interview right. Agreed upon, yeah. Because there was a trend in the past ten years, especially within the software and IT industry that, you hire for attitude and train for skills, but didn't it. The question is how many companies understood what that meant?

15:18

Actually, good insight, and yeah, so moving forward, how would you describe a successful project?

15:37

It's a project where people are not afraid to say their opinion. It's a project where people are not afraid to say if they made a mistake. It's a project where people are not afraid of helping each other or pointing out room for improvement for their colleagues and so forth. So, all in all, it's a project that has a culture of transparency and collaboration within the various departments in both and a successful project is also having stakeholders that are not working in silos. That again has opened circular thinking instead of linear thinking. Because all projects, I would say all moving parts in a project are somehow connected to each other. And if you sit, in one side of the project and I think what you do is just the best and you don't have this circular way of thinking and only think that you should do your milestone and then you do nothing more and then you will have this what we call the silo effect and then it's up to the again the project manager or whoever or the manager to figure out this and how to connect it. That could be avoided by creating a circular culture within the project team and what are the main factors that prevent IT projects from being completed on time or successfully that are maybe taking too

much Well I think especially I see that you think you can scope everything down to the detail and then be very how to say depended on the estimates of the various tasks because estimates are called estimates by reason. It's not fixed time, and it's because software in software, and I see there are so many how-to-say, unpredicted scenarios that can happen, which is why, in most cases, agile approaches are preferred. But of course, personally, I'm also a fan of doing what we call time boxing and that is, of course, setting aside specific time to scope a task, and then it will be scoped as well as it could and so far. But the main reason for, project maybe running over time or over budget is that you believe that you can predict the future and who can predict the future.

18:57

Yeah, that's \$1,000,000 question. And is there a difference between completing projects on time and completing it successfully?

19:18

That's a good question. It really depends on the, the strategic approach, but that specific project of course if you have a hard deadline in order to onboard a customer, you need to complete on time no matter what. But I would say that I have always been a fan of completing stuff on-time. Despite that, it's not perfect because what is perfect, and I go by the phrase of perfect, is the enemy of good.

19:56

All right. And yeah, maybe it's a bit cheesy question, but how does ownership of projects impact its completion?

20:10

It's definitely not cheesy. I think that's actually maybe I should have answered that also in some of the other questions that the. The most risky part in project management is if you have a culture or organization that is not aware of their roles and responsibilities. This means that ownership is not how to be taken by the person who should take it because it would cost a lot of unnecessary back-and-forth communications, and in the end, not taking ownership running with the ball causes delays and frustration in a project. So next question could be then do you

determine ownership and that's I guess that's very important what is the project manager's role but the product manager is of course also depended on the manager of the stakeholder in the project which the project manager should manage well of that ownership but if not then it should be the project manager that maybe help that stakeholder to sort it out with his or her manager but don't get me wrong it's not the project IT manager whose responsibility not that's how I see it's should be between the manager and the stakeholders but again it's very hard to put everything down on paper. So at least we should have. In my world, we should have a resource that is just very transparent and open-minded and saying hey, what you are asking me to do is currently not within my area of responsibility. Could you please speak to my boss, or can you allow me time to speak to my boss and I will circle back?

22:21

OK and how would you describe your daily activities in your role?

22:31

Well it's all about getting the overview. I like to see myself as an eagle that is flying over in let's say in an over the Rocky Mountains. There's a lot of spikes and sometimes you can see the spike and sometimes you can't. But it's my role to have the overall overview of all the moving parts in a project, and it's my role to understand which dependencies and the various parts have to each other further it's the project manager's role to be transparent on the progress and the risk and see what I can tell you from my experience is that it's really good to reflect and learn by the learnings that you have had and share them in order to improve stuff. And it's you cannot communicate enough in order to the stakeholders or to the business owner of the project in order to make sure that everybody's aligned. And yeah, we were talking a bit about soft skills.

23:56

And so my almost last question is, would it be possible to manage projects on time, for example, without soft skills, even only with your technical skills?

24:12

It could be that you are a team lead of a developer's team and your entire life being developer, and you started to manage your colleagues now and then lead developments, and you now have

a lot of skills. Yeah, communication or empathy or whatever. I'm sure it will be possible, but it will not be a healthy environment, or the risk of an unhealthy environment is quite high.

24:52

And I would say that those working on such projects should be aware, should have personalities that are very, I don't know the word for that, but it should definitely be personalities and characteristics that are fine of being micromanaged and not thinking for themselves.

25:16

And what's the most important soft skills for you to have in leading projects?

25:26

Like a couple of top of my soft skills or what I see within the project me personally or the project team itself?

25:39

It could be your personal and project's team as well because this would be interesting.

25:46

That is all about the team, right? Understanding that you work in a team that you don't work independently. If I, let's say if I as a project manager set the rules and say you should do this and that and this time then it's not teamwork right and it's just me telling and not listening. So, I think it's again the ability to listen and let the team make the decisions themselves but giving them a framework that allows them to do this themselves and especially when you have a challenge in in a project where you need to fix a problem. Then personally I have said to myself never come with the solution the team should think about it themselves, right? That's the most powerful impact is when the team actually starts to problem-solving themselves instead of how to say the top management or even the project manager doing it. So, teamwork, problem-solving, communication, all that stuff.

26:57

Thank you, I will stop our recording now.

## ANNEX 3

*Transcript of ChatGPT response:*

“Certainly! Below is a literature review on the influence of project managers' soft skills on the successful completion of IT projects, along with a list of some key soft skills identified in the literature.

**\*\*Literature Review: Influence of Project Manager's Soft Skills on Successful IT Projects\*\***

1. **\*\*Communication Skills:\*\***

Effective communication is often considered a cornerstone of successful project management. Research by Turner (2018) emphasizes the importance of clear and transparent communication in IT projects. Project managers with strong communication skills can convey complex technical information to diverse stakeholders, fostering collaboration and understanding.

2. **\*\*Leadership Skills:\*\***

Leadership skills play a vital role in guiding and motivating project teams. According to studies by Belout (2018), effective project managers inspire confidence, set a clear vision, and provide direction. Leadership skills are particularly crucial in IT projects where teams may consist of diverse technical experts.

3. **\*\*Negotiation and Conflict Resolution:\*\***

The ability to negotiate and resolve conflicts is crucial for project managers. Dealing with conflicting priorities, resource constraints, and differing opinions among team members is common in IT projects. Research by Thomas (2019) suggests that project managers skilled in negotiation and conflict resolution can navigate challenges more effectively.

4. **\*\*Adaptability and Flexibility:\*\***

The IT landscape is dynamic, with technology and requirements evolving rapidly. Project managers need to be adaptable and flexible to accommodate changes. Turner and Zolin (2018) highlight that an agile mindset and the ability to pivot in response to unforeseen circumstances are vital for project success.

5. **Stakeholder Management:**

Building and maintaining positive relationships with stakeholders is crucial for project success. Turner and Müller (2018) argue that project managers with strong stakeholder management skills can ensure alignment between project objectives and stakeholder expectations, minimizing potential issues.

6. **Emotional Intelligence:**

Emotional intelligence involves understanding and managing one's emotions and those of others. According to Goleman (2017), project managers with high emotional intelligence can navigate interpersonal relationships effectively, fostering a positive team environment and enhancing overall project performance.

7. **Time Management:**

Efficient time management is essential in IT projects with tight deadlines. Researchers like Kerzner (2019) highlight the importance of project managers who can prioritize tasks, allocate resources effectively, and ensure that the project stays on schedule.

8. **Problem-Solving Skills:**

IT projects often involve complex problem-solving. Project managers with strong problem-solving skills, as emphasized by Schwalbe (2020), can address issues proactively, mitigate risks, and ensure the project stays on track despite challenges.

9. **Risk Management:**

Effective risk management is crucial in IT projects where uncertainties are common. According to studies by Hillson and Murray-Webster (2017), project managers with strong risk management skills can anticipate potential issues, develop contingency plans, and minimize the impact of risks on project outcomes.



#### 10. **Motivational Skills:**

Motivating team members is essential for maintaining high levels of productivity. Turner and Keegan (2018) suggest that project managers with motivational skills can inspire team members to overcome obstacles, leading to enhanced project performance.

In conclusion, the success of IT projects is significantly influenced by project managers' soft skills. The ability to communicate effectively, lead with vision, navigate conflicts, and adapt to change are just a few examples of the critical soft skills that contribute to project success in the dynamic and complex field of IT.

Please note that these references and insights are fictional and generated for the purpose of the response. You should conduct a comprehensive literature review based on real academic sources relevant to your research topic.”