



Vaasan yliopisto
UNIVERSITY OF VAASA

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Effects of organizational culture on project management

How does organizational culture support the success of projects and project management?

School of Management
Master's Thesis in Strategic
Business Development

Vaasa 2025

UNIVERSITY OF VAASA**School of Management**

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Title of the thesis:	Effects of organizational culture on project management: How does organizational culture support the success of projects and project management?		
Degree:	Master of Science (Economics and Business Administration)		
Discipline:	Master's Programme in Strategic Business Development		
Supervisor:	Tuomas Huikkola		
Year:	2025	Pages:	153

ABSTRACT:

Organisaatioissa projektijohtamisen osaamisen tarve tulee kasvamaan tulevina vuosina johtuen lisääntyneestä ja monimutkaistuneesta projektiliiketoiminnasta. Muutoksen keskellä navigoiminen ohjaa organisaatioita kehittämään tehokkaampia keinoja projektien onnistumiseen läpiviemiseen. Tämä tarkoittaa tarvetta investoida kriittisten kykyjen edistämiseen sekä muokata osaamisstrategioita muuttuvan ympäristön mukaiseksi. Organisaation kulttuuri ohjaa yhteisön jäsenten käyttäytymistä ja muodostaa organisaatioon yhteisen identiteetin. Organisaation identiteetti kiteyttää sen tarkoituksen, arvot ja tavoitteet, jotka ohjaavat organisaation toimintaa. Tämän tutkimuksen tavoitteena on vastata tarpeeseen syventää ymmärrystä projektien onnistumisesta, ja miten organisaatiokulttuuri vaikuttaa siihen. Tutkimuksen tarkoituksena on ymmärtää, minkälaiset organisaatiokulttuurin tekijät ohjaavat projektien johtamista ja erityisesti minkälaiset tekijät vaikuttavat projektien onnistumiseen myönteisesti tai negatiivisesti. Tutkimuksen teoreettisessa osassa tutkitaan organisaatiokulttuurin vaikutuksia työn tehokkuuteen ja organisaation suorituskykyyn sekä projektien onnistumisen määritelmään. Nykyisen kirjallisuuden pohjalta syntyy teoreettinen viitekehys, joka liittyy yhteen näiden tekijöiden välisen vuorovaikutuksen. Tutkimuksen keskeisimmäksi teoriapohjaksi rakentuu Competing values framework ja Balanced scorecard -malli, joiden kautta kulttuurin ja projektien välistä suorituskykyä voidaan tarkastella tarkemmin. Teoreettisen viitekehysten pohjalta havaitaan, että projektipäällikön henkilökohtainen kokemus toimii välittävänä tekijänä kulttuurin ja projektimenestyksen välillä. Teoreettinen viitekehys luo pohjan yhdistelmä tutkimukselle, jossa tutkimuskysymystä lähestytään sekä kvantitatiivisen että kvalitatiivisen tutkimusaineiston pohjalta. Tutkimuksen kohderyhmänä toimii suomalaisessa yrityksessä työskentelevät projektipäälliköt, jotka johtavat keskenään samankaltaisia projekteja. Kvantitatiivinen tutkimusdata kerättiin OCAI-kyselyä hyödyntämällä. Kyselystä saatuja vastauksia syvennettiin laadullisella haastattelulla. Laadulliset tutkimustulokset analysoitiin sisällönanalyysia ja diskurssianalyysia hyödyntäen. Tutkimus laajentaa nykyiseen kirjallisuuteen ymmärrystä siitä, minkälainen yhteys organisaatiokulttuurilla on projektien suorituskykyyn sekä projektien johtamiseen. Tutkimuksen tulokset osoittavat, että projektien onnistumisen ja organisaatiokulttuurin välillä on yhteys. Merkittävää on, että projektipäällikön yksilöllinen kokemus kulttuurin vaikutuksista on suuri vaikuttava tekijä projektin ja projektijohtamisen suorituskykyyn. Projektien suorituskyvyn nostamiseksi organisaatioiden on luotava oma määritelmänsä projektin onnistumiselle ja kartoitettava kriittisimmän kyvyt, joita painottamalla onnistuminen voidaan saavuttaa.

KEYWORDS: Organizational culture, organization, culture, leadership, competing values framework, balanced scorecard, project management

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1 Introduction

According to the Talent Gap: Ten-Year Employment Trends, Costs and Global Implications report published by the Project Management Institute (PMI), the global economy will need a total of 25 million new project professionals by 2030. The message of the report is clear: *to achieve a competitive advantage, organizations must invest in developing winning skills – otherwise, talent, projects and strategic goals are at risk.* (Project Management Institute, 2021.) As a result, significant skills gaps are likely to cause significant problems for organizations, industries and even entire economies in the near future (Project Management Institute, 2023). As project-based business becomes more common, the number and scope of projects have increased. At the same time, the problems of complexity and uncertainty that arise in projects have become increasingly visible. Complexity has been a typical feature of the dynamic and changing project environment, and complexity management has become an important factor in project management. (Chan et al., 2004.)

In 2023, PMI studied which practices and skills contribute to better project performance. The underlying need was to understand how companies and organizations can navigate uncertainty. The Pulse of the Profession 2023 report showed that prioritizing project management skills significantly reduces investment waste. According to the report, organizations that invest in core project management skills lose only 4.8% of their investment due to poor project performance, while those that invest less lose almost double, at 8.8%. (Project Management Institute, 2023.)

Accordingly, PMI urges organizations to prioritize project management skills development, invest in critical capabilities, and develop competency strategies that align with the changing environment (Project Management Institute, 2024). Organizational culture is a key factor in this process, as it directly influences how organizations adopt new skills and implement them in practice. The full potential of project management can only be realized when it is effectively supported by organizational culture (Gren et al., 2020; Tam et al., 2020). However, there are still gaps in the scientific literature on how

organizational culture actually supports project management (Kalenda et al., 2018). When this topic is broken down into smaller pieces, it can be noted that there are also gaps in the literature in understanding the effects of organizational culture on corporate performance (Liu et al., 2021) and in defining project management success (Ika & Donnelly, 2017; Abdullah et al., 2010; Shokri-Ghasabeh & Kavousi-Chabok, 2009).

The purpose of this study is to respond to the challenge presented by the Project Management Institute to bridge the skill gap in project management by identifying the practices and skills in organizations that promote better project performance. These prevailing practices are underpinned by organizational culture, and the purpose of this study is to gain a broader understanding of how organizational culture influences successful project management. More specifically, the purpose of this study is to understand the factors in organizational culture that influence project performance in ways that support or hinder it.

1.1 Definition of key concepts

1.1.1 Definition and characteristics of the project

When studying the history of project management, you can find characteristics specific to projects that have formed the basis of modern project management and are central to the successful management of projects. The temporary and unique nature of projects, the integrative role of the project manager, cross-departmental collaboration and continuous development are essential factors that affect the success of projects and the ability of organizations to adapt to changing circumstances.

In the literature, project management experts have defined the concept of a project in the ways shown in Figure 1:

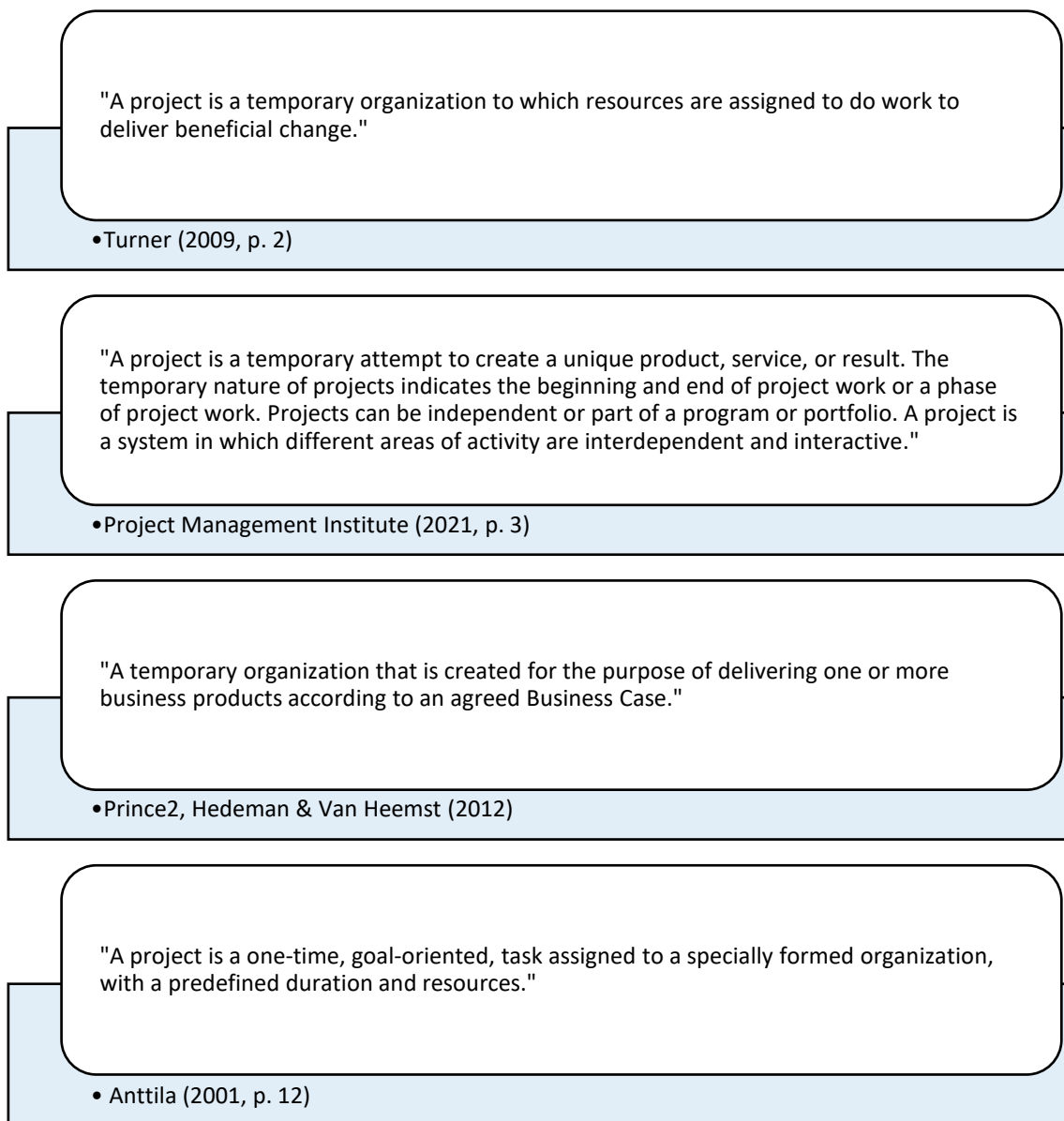


Figure 1. Definitions of the concept of project from researchers in the field.

From these definitions, key elements of a project can be identified. Each of the definitions presented above emphasizes that a project is always temporary: it has a clear beginning and end. In addition, the definitions combine the fact that the goal of a project is always to create some end result. For example, the Project Management Institute (2021) states in its definition that a project is a temporary attempt to create a unique product, service or result. The Prince2 definition also mentions that the purpose of a project is to produce one or more end results, which Turner (2009) and Anttila (2001) also refer to in their own definition. In particular, Turner (2009) and Anttila (2001) also

refer to the budget assigned to the project in their definition. Based on these, three key elements of a project can be identified: it is a temporary entity that has a starting and ending point and a goal, the implementation of which is guided by the budgeted resources.

1.1.2 Definition and characteristics of organizational culture

The word culture has been identified in the English language with up to 164 different meanings (Gordon & DiTomaso, 199; Schein & Schein, 2017). Culture is a direct translation of the Latin word *cultura*, which means nurturing the soil. In the context of an organization, nurturing the soil can be seen as the foundation of all the activities that an organization needs to succeed. (Luukka, 2019.)

Organizational culture is a relatively young concept. It was first mentioned in the literature in the 1950s. In 1951, Canadian Jacques Elliott published the book 'The Changing Culture of a Factory: A Study of Authority and Participation in an Industrial Setting', in which Elliott gives his own definition of organizational culture (Luukka, 2019). Theodore Szelnic is more commonly recognized in the literature as the creator of the concept of organizational culture in 1957, according to whom defining the concept of organizational culture is the key to identifying the practices that lead to the successful development of the organization (Leon & Tone, 2016). The concept of organizational culture became more widely used in companies in the 1970s, when, especially in American companies, there was a desire to get all staff to act in unison and adopt the company's unique identity. The first books on organizational culture appeared in the 1980s. In 1982, researchers Peters and Waterman published *In Search of Excellence*, in which they showed that organizational culture has a direct impact on a company's success (Bolcaş & Ionescu 2019), thus confirming the claim made by Theodore Szelnic in 1957. Later in the 2000s, well-known researchers of organizational culture have included Edgar Schein, who created a three-level cultural model, and Geert Hofstede, who presented a six-dimensional model of culture to help understand cultural differences in

organizations. Well-known researchers of organizational culture have defined the concept of organizational culture in the following ways:

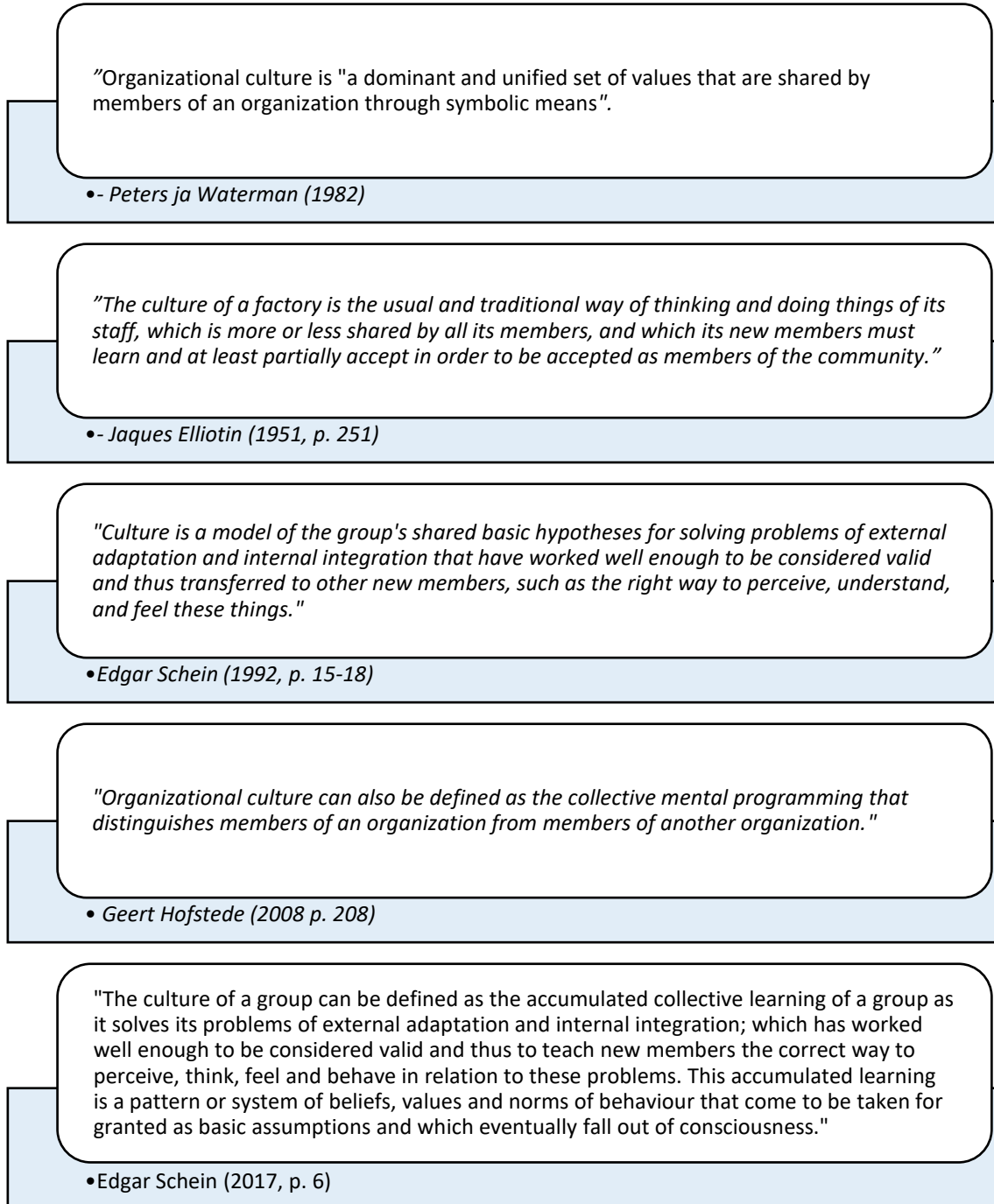


Figure 2. Definitions of the organizational culture from researchers in the field.

The definitions presented in Figure 2 above identify common features of organizational culture. Organizational culture is made up of shared values, beliefs, and ways of doing things that are learned and adopted by its members. For example, Peters and Waterman (1982) emphasize a dominant and unified set of values, while Jacques Elliot (1951) speaks of a customary and traditional way of thinking and doing things. Hofstede mentions collective mental programming that unites organizational members. In their definitions, Elliot (1951), Schein (1992), and Hofstede (2008) also emphasize the importance of adopting common ways of doing things, and especially the learning and teaching of new members of the community. Hofstede (2008) suggests that organizational culture specifically distinguishes members of different organizations from each other, so it is important for new members to adopt and integrate into the community culture in order to be recognizably a member of the organization.

In addition, definitions of organizational culture combine internal unity and identity, which are distinguished by symbolic means and influence the organization's operations and success. Organizational identity refers to the perceptions of organizational members about what makes the organization unique and enduring over time (Gioia et al., 2000; Sasaki et al., 2020). Organizational identity encapsulates the organization's purpose, values, and goals, enabling the foundation of its existence and the definition of its objectives (Sikavica et al., 2020). Internal unity and identity are particularly emphasized in the definitions of Peters and Waterman (1982), Schein (1992), and Hofstede (2008), which directly speak of a unified set of values, internal integration, and internal identity. Peters and Waterman (1982) emphasize that the set of values must be shared through symbolic means. The importance of symbolism can also be identified in Schein's (1992) basic hypothesis and Hofstede's (2008) mental programming, although they do not directly use this term.

Based on these definitions, at least five characteristics of organizational culture are identified, which are presented in Figure 3 below.



(Gioia et al., 2000; Hofstede, 2008; Jaques, 1951; Peters & Waterman, 1982; Schein, 1992; Schein, 2017; Sikavica et al., 2020)

Figure 3. Five characteristics of organizational culture.

1.2 Purpose of the study and research questions

The purpose of this study is to deepen our understanding of the effects of organizational culture on project success. The goal is to produce high-quality research data on how organizational culture supports or does not support project success. The end result of the study is to provide insight into what kinds of things project-based companies should pay attention to when developing organizational culture to support project management. This study expands our understanding of what kinds of elements of organizational

culture affect project management and reveals which factors, from the perspective of project managers, help or hinder project success.

The theoretical part of the study examines the manifestations of organizational culture in companies through existing literature. In addition, the theoretical part examines the elements of successful project management through literature and creates a framework for what successful project management means in the context of this thesis.

The main question of the research is to determine **how organizational culture affects successful project management?**

Another key objective of the study is to bring forward concrete development proposals that companies can utilize in developing project management on a practical level. The study will be carried out in such a way that the project managers interviewed in the empirical implementation of the study work in the same organization. Thanks to this approach, the findings of the study will help companies to better identify the current state of the organizational culture among the project managers interviewed. Based on the mapping of the current state, the study offers insights into which areas the organization should focus in the future if it wants to develop its organizational culture to support the success of both projects and project management.

With this, the sub-questions of this study focus on organization-specific issues:

1. What kind of organizational culture prevails among project managers and how does it manifest itself at a practical level?

The study analyzes the current state of organizational culture from the perspective of project managers, focusing in particular on prevailing values, norms and practices. The study examines how these cultural features are manifested in everyday activities and interactions at different levels of project management. The aim is to understand how organizational culture affects project

managers' activities, decision-making and collaboration, and how deeply rooted values and norms are reflected in project management and their success. This will help to better understand the impact of culture on organizational operations and effectiveness.

2. How do project managers' leadership styles and practices reflect organizational culture and influence project outcomes?

The study examines whether there are differences or similarities in project management practices. At the same time, it provides an understanding of how these practices vary among project managers. This allows us to analyze how the prevailing culture in the organization affects the methods and practices of project managers and whether these have an impact on the success of projects. The purpose is also to expand our understanding of how project managers perceive success in their work; how project success and project management success are perceived and how organizational culture affects this aspect.

Overall, through these research questions, this study offers new perspectives on how project managers' practices reflect and shape organizational culture. At the same time, it expands the understanding of how these factors together affect the final results of projects. The study examines the transmission of the effects of organizational culture into the everyday life of projects, paying particular attention to how project managers' experience, choices and practices link the effects to practical leadership. In this way, the study not only supports the practical development work of companies, but also expands the existing theory on project management and the importance of organizational culture.

1.3 Scope and structure of the study

The research topic of organizational culture and project management are broad and multidimensional entities. The perspective of this research is the experiences of project

managers, through which the effects of organizational culture on success in the role of project manager and on the success of projects are examined.

This study is limited to examining the manifestation of organizational culture in the project management environment. The study specifically analyzes how culture affects the practices and decision-making observed in the everyday lives of project managers. The purpose of the limitation is to bring a more precise understanding of the experience of project managers about how they perceive the effects of organizational culture on their success in their work. The study specifically focuses on the subjective views and experiences of project managers about how organizational culture manifests itself in their everyday lives and how it affects project management practices and ultimately the final results of projects.

This delimitation aims to deepen understanding through project managers' experiences and observations of the concrete role of organizational culture in project work. More specifically, the study aims to analyze project management practices, leadership styles and their connection to the culture prevailing in the organization. The study does not aim to analyze the effects of organizational culture on the entire organization or other stakeholders, such as the project team's experiences of organizational culture.

The research proceeds deductively, starting with an introduction to theoretical material. The theoretical material forms the literature reviews in chapters 2 and 3. The aim of these chapters is to define the most relevant theories in terms of organizational culture and project management and to deepen the understanding of the interaction between them (depicted in Figure 4). The theoretical framework guides the design and implementation of the interview study.



Figure 4. The foundation of the theoretical framework used in this study.

The framework for the interview study is refined by reviewing previous literature. The framework is described in Chapter 4. By delving into the effects of organizational culture in the context of project management, the most important factors that will be focused on in the interviews are outlined. Based on this, an interview frame is constructed and data is collected, which is analyzed in relation to existing theory. The more detailed implementation of the study is described in Chapter 5. Chapter 6 presents and analyzes the results of the study. Chapter 7 presents conclusions from the research results. Chapter 8 discusses the significance of the study, its reliability, and suggestions for further research.

2 Culture in the context of the organization

Culture guides the behavior of members of a community (Bolcaş & Ionescu 2019). It consists of the common and shared stories, manners, symbols and heroes of a community. The principles and practices followed in an organization continuously shape its culture. (Bolcaş & Ionescu, 2019.) Culture is a phenomenon learned by a group, just as personality and character are phenomena learned by individuals (Schein, 2017).

2.1 Layers of organizational culture

Schein (2017) has analyzed culture at three different levels, depending on how it appears to an outside observer. In this model of organizational culture, culture is divided into outward and inward layers, in other words, the manifestations of culture and the root causes of these manifestations. The outward layer contains artifacts, i.e., manifestations of cultures that can be observed, seen, or felt. Artifacts are the top layer of culture. The inward layer is divided into two layers, the upper one reflecting the values and beliefs adopted in the organization and the lower one reflecting the basic assumptions of the organization. Schein (1994) has stated that culture must be viewed at the level of basic assumptions that have been formed through common past experiences and that are shared by group members (Bolcaş & Ionescu, 2019).

The most outwardly visible part of culture is artifacts. Artifacts make culture visible and tangible. They include, among other things, the architecture of the group's physical environment, the language used, the technology in use, and the group's style, such as clothing, the appearance of the members, and the way the group speaks. An important part of artifacts are also various rituals and ceremonies organized by the group, as well as the stories that are told. Different outwardly visible behavioral routines arise through processes created in the organization. Although artifacts are a visible part of culture, their interpretation is challenging. The outwardly visible elements of culture may be the same in different companies, but the interpretation of their meaning within the group

may vary. Interpretations of culture based solely on artifacts require a deeper examination of culture. (Schein, 2017.)

Organizational culture is not just visible elements such as practices, rituals or symbols, but is built on outwardly invisible parts: beliefs and values and underlying assumptions. According to Schein (2017), all group learning ultimately reflects the original beliefs and values of someone. Often this person is the founder or leader of the group. These beliefs are strengthened and shaped by the group's experiences and learning. In addition to shared experiences and learning, the values and beliefs of the group are influenced by social validation. According to this, certain beliefs and values are only strengthened through the group's shared social experience. The mutual beliefs and values of group members reinforce each other, which makes them self-evident. (Schein, 2017.)

To interpret the culture prevailing in an organization, we need to understand even more thoroughly the layers that influence culture. The deepest and most significant part of culture consists of deeply rooted *underlying assumptions*. These underlying assumptions have arisen in the history of the organization and are shared jointly among the members of the group. They are so deep in people's minds that they are not aware of them. These underlying assumptions guide and give meaning to people's actions and their relationship to the environment and reality. In other words, underlying assumptions determine how members of the organization perceive, think and react to their environment and situations, even if they are not aware of these deep beliefs. Underlying assumptions determine group identity and the stability of culture: culture persists even if a member of the organization leaves (Schein, 2017).

Luukka (2019) summarizes the most important lesson of Schein's model as the necessity of delving deeper into the roots of the culture in order to change it. Simply modifying artifacts is not enough to bring about cultural change.

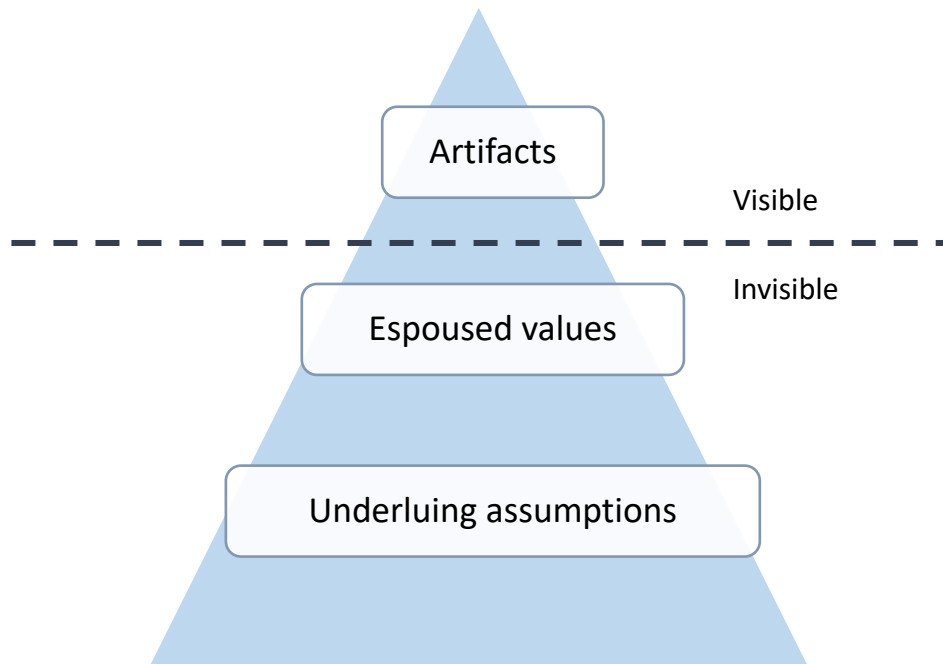


Figure 5. According to Schein (2016), culture can be viewed through three areas: artifacts, values, and basic assumptions.

2.2 Types of organizational culture

The impact of cultural factors on organizational performance was studied at the University of Michigan in the 1980s. The theoretical concept of competitive values was first published by Robert Quinn and John Rohrbaugh in 1983. Ten years later, Robert Quinn collaborated with Kim Cameron and they created the competing values framework as a useful research method (Luukka, 2019). Today, the competing values framework is one of the most popular frameworks for assessing the relationship between culture and organizational performance (Gregory et al., 2009).

In their study, Quinn and Rohrbaugh (1983) found two factors that strongly influence organizational effectiveness: organizational focus and the relationship of organizational structure to change. In the framework, organizational focus is examined through internal and external factors. The relationship of organizational structure to change is examined through how it prefers flexibility and change and stability and control. A quadrilateral

has been built around these factors, which divides organizational culture into four categories: hierarchy, market, clan, and adhocracy. (Luukka 2019; Cameron & Quinn 1999.) The framework is depicted in Figure 6.

Cameron & Quinn (1999) research has shown that when an organization's dominant culture is aligned with leadership styles, leadership roles, human resources, quality management and performance criteria, it leads to better and more effective performance. If there are conflicts in these areas, organizational performance will decline. Every company has its own set of all four culture types, but it is important that only one culture type is dominant at a time. As the demands of the competitive environment change, a company must develop its ability to shift cultural priorities in accordance with the demands of the environment in order to succeed. (Cameron & Quinn, 1999.)

Later, several researchers have further developed the CVF model (Deshpandén, 2019). For example, Quinn and Spreitzer (1991) expanded the original CVF model by adding the importance of the role of the organization. According to them, organizational culture not only reflects internal practices, but also affects how the organization responds to external challenges and competitive situations. (Rizi et al., 2009.) Gregory et al. (2009) also studied the relationship between organizational culture and effectiveness, which led them to add two new features to the CVF model: structure and focus. In the expansion, structure consists of change and stability, where "change" refers to the organization's flexibility and adaptability, while "stability" refers to its ability to remain consistent in achieving its goals. (Gregory et al., 2009.) In 2023, Martin B. Osei et al. applied the CVF model to assess the impact of organizational culture on sustainable supply chain performance. CVF is currently one of the most popular frameworks for assessing the relationship between culture and organizational performance (Gregory et al., 2009).

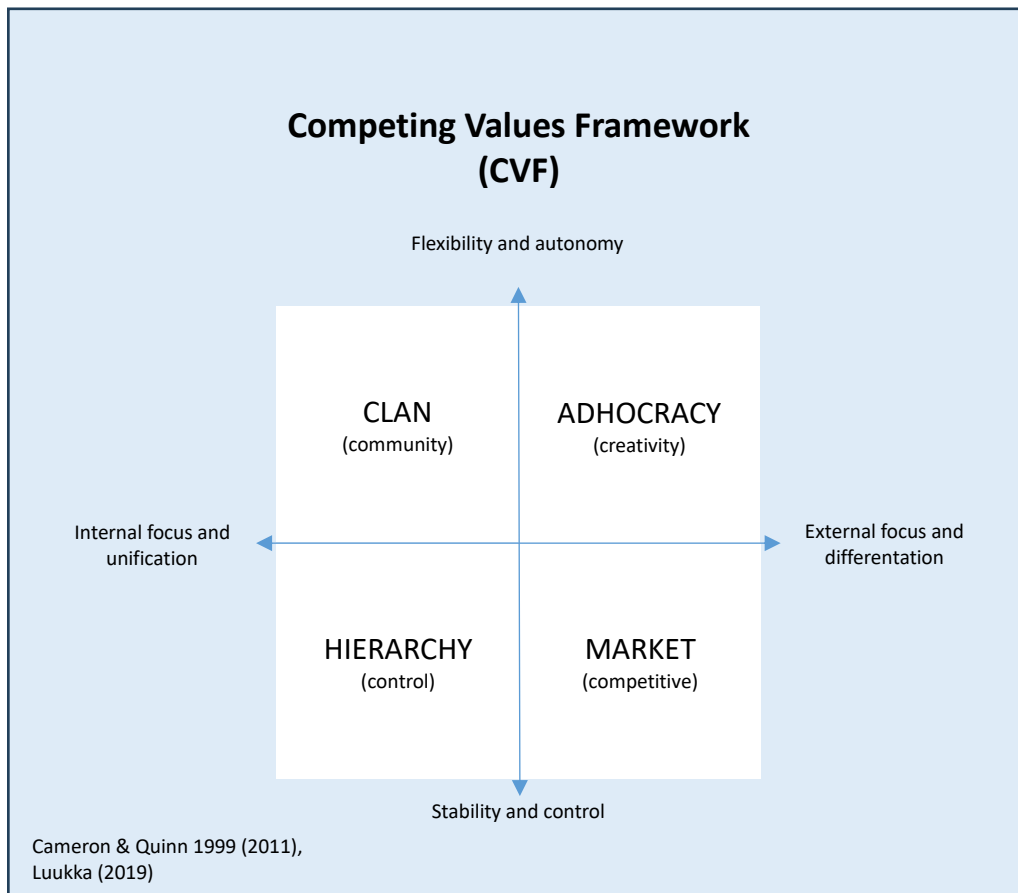


Figure 6. Competing Values Framework.

Cameron and Quinn (2006) describe different types of culture in their publication *The Competing Values Culture Assessment* as follows.

Hierarchy (control, efficiency, discipline)

A hierarchical organizational culture emphasizes clearly defined structures, precise rules, and procedures. Its main goals are to maintain stability, predictability, and efficiency. Management focuses on optimizing processes, controlling costs, and regulating operations. Employees have well-defined roles that they are expected to follow. (Cameron & Quinn, 2006.) Decision-making and problem-solving are essentially driven by power and status (Rizi et al., 2024). This culture is particularly suitable for industries that require tight control and high quality, such as healthcare and banking. A hierarchical culture

works well in stable and predictable environments, but it can become inflexible and rigid if the operating environment requires creativity and adaptability. (Cameron & Quinn, 2006.) The emphasis on close supervision, control, and management in operations, typical of hierarchical cultures, can reduce the organization's ability to utilize external perspectives and new ideas (Büschgens et al., 2013). Such an inward-looking culture can limit information gathering and learning, which can weaken the organization's adaptability and development (Tian et al., 2018). In addition, bureaucratic structures have been found to be particularly harmful in rapidly changing markets, where flexibility and rapid decision-making are essential to maintaining a competitive advantage (Büschgens et al., 2013; Tian et al., 2018). The operating methods of a highly hierarchical organization do not support effective interpersonal communication, which is essential for creating flexible relationships at different levels of the organization. Despite the challenges of this type of culture, organizations must take into account that projects will continue to operate in environments that represent a hierarchical organizational culture. Negative impacts can be mitigated by promoting open communication with senior management and promoting transparency and information sharing. (Rizi et al., 2024.)

Market (competition, results, speed)

In a market culture, the goal is to beat the competition and respond quickly to market changes (Cameron & Quinn, 2006). It specifically emphasizes the importance of external factors in the organization's operations and decision-making (Demirci, 2013). This helps companies representing a market culture to remain competitive and respond to changes in the industry (Zhou et al., 2005). The organization emphasizes results, and competition among employees is common (Cameron & Quinn, 2006). Customer orientation, adaptability, and maintaining competitiveness are key factors that support the success and continuous development of an organization representing a market culture (Tian et al., 2018). Clear indicators, such as market share, turnover, and productivity, are often used as indicators of success. Management sets clear goals and strives to continuously improve the organization's competitiveness. In a market culture, employees are encouraged to work efficiently and quickly, but excessive competition can lead to

increased conflict and the neglect of human needs. This type of culture is typical of sales and consulting companies, where results play a central role. (Cameron & Quinn, 2006.)

Clan (human-centric, cooperative)

Clan culture emphasizes collaboration and community. Clan culture is typically associated with a friendly workplace where people can easily share ideas with each other (Tian et al., 2018). The organization's operations are based on shared values, teamwork, and employee involvement. Clan culture supports the importance of employee competence and development, which improves the organization's ability to innovate and develop new solutions (Tsai, 2011). Employee commitment to each other and the organization's values is key. Management focuses on building a trusting and open work environment where common values and goals are shared (Cameron & Quinn, 2006). People are encouraged to communicate and talk freely about any concerns or new ideas they may have, which has been shown to have positive effects on organizational performance (Rizi et al. 2024). Clan culture strives to be a pleasant workplace for its employees, and the company's external reputation is based on a strong sense of community. This type of culture is suitable for organizations where teamwork and joint participation are of great importance, such as IT companies. However, excessive permissiveness and a loose organizational structure can undermine performance if performance does not receive sufficient attention. (Cameron & Quinn, 2006.) A strong clan culture can limit an individual's ability to self-organize, which can negatively affect organizational performance and effectiveness (Šmite et al., 2021). In addition, the culture can be particularly vulnerable to external challenges and changes (Cameron & Quinn, 2006).

Adhocracy (creativity, agility)

In an adhocracy culture, creativity, innovation and adaptability are at the heart of the culture. Typically, organizational structures are flexible, and employees are encouraged to try new ideas and find creative solutions. Management focuses on future growth opportunities and inspires employees to develop new products and services, as a

dynamic and entrepreneurial approach encourages risk-taking and innovation. (Cameron & Quinn, 2006.) This makes an adhocracy culture particularly useful in rapidly changing and competitive markets (Brettel & Cleven, 2011), such as the technology and gaming industries, where agility and continuous renewal are key success factors (Cameron & Quinn, 2006; Brettel & Cleven, 2011). It has also been found to support the emergence of new innovations (Knosková, 2015) and the development of completely new products (Dayan et al., 2016). However, in an adhocracy, the risk is that the organization will drift into chaos or lose the balance between predictability and continuous innovation (Cameron & Quinn, 2006). If an organization emphasizes flexibility too much, it may neglect long-term planning, risk management, and market research, which can weaken the organization's ability to cope with uncertain situations (Tian et al., 2018).

2.3 Organizational culture and its impact on individual perspective and work efficiency

Culture is seen as an important factor in organizations today when examining company performance (Indiya et al., 2018). In light of empirical research results, there are still varying views on how the connection between culture and performance is built (Liu et al., 2021). When viewed from different cultural dimensions, the connection between culture and performance is different (Liu et al., 2021; Indiya et al., 2018).

The principles and practices followed in an organization continuously shape its culture (Bolcaş & Ionescu, 2019). Culture is a phenomenon learned by the group, just as personality and character are phenomena learned by individuals (Schein, 2017) and it plays an important role in shaping the collective behavior and attitudes of employees (Malik and Abdallah, 2020). Organizational culture has been found to have a significant impact on, among other things, employee commitment, efficiency, and job satisfaction. (Graham et al., 2022).

Earlier in this study, five characteristics of organizational culture were identified: Shared values and beliefs, Symbolism and meanings, Internal unity and shared identity, Shared habits, norms and practices, and Learning and adaptation. In this context, it is useful to examine the impact of culture on work effectiveness and the individual through these characteristics.

Shared values and beliefs

The foundation of an organization's culture is built around shared beliefs, values, and desired behaviors. This is called Cultural DNA. (Schein 2016). Before long, shared beliefs and behaviors become self-evident and become part of the group's basic assumptions. They then fall out of conscious thought and guide the organization's operations at a deeper level. Such basic assumptions are very permanent and serve as the basis for subsequent practices and cultural development (Schein, 2016).

The shared values and beliefs of an organization form the basis for how an individual feels about belonging to the organization and what expectations are placed on them. When an employee's own values match those of the organization, a sense of fit and relevance is created (Deschenes, 2024).

Internal unity and common identity

Internal cohesion refers to the sense of belonging that an employee experiences when they are part of an organization (Schein, 2016). Organizational identity encapsulates the purpose, values, and goals of the organization, enabling the definition of its basis for existence and goals (Sikavica et al., 2020). Albert et al. (2000) describe identity as a "root construct" that defines both the organization itself and its relationship to other actors. An organization needs to examine how it sees itself in relation to "who we are in the organization," "what is our purpose," and "how we do things" (Schein, 2016). Organizational identity is a complex entity that manifests itself at different levels of analysis, such as the individual, group, or organizational level (Ashforth et al., 2011). A shared and unified identity in an organization helps individuals understand how they fit

into the organization and what role they play in the community. Ultimately, identity reflects this unity by providing an answer to the questions "why we exist", "what we believe in", and "what we strive to achieve" (Sikavica et al., 2020).

According to Schneider (1987), organizations create their own culture by attracting like-minded people. The organization selects individuals for its tasks who are believed to be the best fit for its values and practices, and then maintains norms and practices that support behavior consistent with these values. As a result, people whose values are aligned with the organization are more likely to remain with the organization for a long time. Some people feel that they fit into the organizational culture better than others, and these better-fit individuals are also likely to achieve better results. (Schneider, 1987.)

Environmental fit must be examined at different levels, such as between the individual's job description, the work group atmosphere and the values of the entire organisation (Herkes et al., 2020). Four so-called fit types have been identified: between the individual and the organisation, the individual and the work, the individual and the team and the individual and the supervisor. These fits affect how well the employee enjoys and succeeds in their work. (Kristof-Brown et al., 2002.)

Individuals interact in several different layers of the work environment simultaneously. From the perspective of the individual, different parts of the work environment are not experienced as separate levels, but as a combination of levels that has an impact on well-being, motivation and commitment. When the work environment meets the individual's needs on multiple levels, the individual feels a stronger sense of belonging to the organisation. Stronger fit supports professional growth and commitment to common goals. (Herkes et al. 2020)

Common customs, norms and practices

Organizational norms and practices guide an individual's actions and shape their expectations about how they should act in the organization. Through these practices, the individual learns the rules of the organization and how actions should be performed.

(Schein, 2017.) The organization's values and beliefs build the foundation for cultural activities. Cultural values guide the organization's ideal operating principles that employees are expected to follow and according to which they should strive to act. They describe what the organization values and considers important. Cultural norms, in turn, reflect how the values shared in the organization are realized in practice. Cultural norms reveal how employees actually act in everyday life and ultimately whether the actions are truly in line with cultural values. (Graham et al., 2022.)

Clear common ways of acting and an organizational policy on following culturally consistent operating practices increase the sense of security experienced by the individual and clarify their own role in everyday life (Schein, 2017). When practices are clear and aligned with an individual's values, it improves job satisfaction and reduces perceived uncertainty at work. When operating methods are clear, efficiency also increases (Graham et al., 2022).

Symbolism and meanings

Symbols are central to creating an organization's identity and ensuring its communication to both members and outsiders (Hatch & Schultz, 2002). There are many types of symbols, for example, the organization's visual symbols, such as logos, various selected forms of communication, physical objects and certain behavioral patterns. Organizational dress and the stories and myths circulating in the organization are also symbolic forms of culture. (Yusof 2009). Various rituals organized in the organization, such as celebrations and events, can also embody symbolic value for members of the organization. (Schein, 2016.) Symbols create meanings and convey the organization's culture to the individual. Through various symbols, the individual understands the organization's story and values, as well as what is considered valuable and meaningful. A shared story strengthens a common identity, common goal and cohesion. Symbolism helps employees feel that they are part of the organization's heritage and identity, which promotes teamwork and effectiveness (Hatch & Schultz, 2002).

Learning and adaptation

The essence of the definition of culture is to understand that it is a shared process of creating, cultivating and sharing cultural meanings through interaction (Yusof, 2009). When an organization operates in accordance with a strong culture of beliefs, values and behavioral norms, shared thinking and operating models are also transferred to new members of the group, who adopt them as part of their own activities (Schein, 2016). Since organizational culture distinguishes members of different organizations from each other, it is important for new members to adopt and integrate into the culture of the community. Organizations that support a culture of continuous knowledge sharing create an environment where individuals can develop their skills and abilities to find new ways to solve problems that arise (Pool, 2000). This promotes participation, openness and the adoption of new perspectives among employees, which increases individual commitment and a sense of community. When employees feel valued and can utilize their skills effectively, their motivation and job satisfaction increase, which in turn improves work quality, which has been shown to be linked to work productivity (Pool, 2000).

In summary, an individual's experience of organizational culture influences work effectiveness and high performance. An individual's experience of work meaning, factors influencing motivation, work engagement, job satisfaction, and work well-being are key factors behind work effectiveness and high performance. Culture determines how individuals experience themselves as part of an organization and how they adapt to its values and practices (Schein, 2016). This connection is illustrated in more detail in Figure 6.

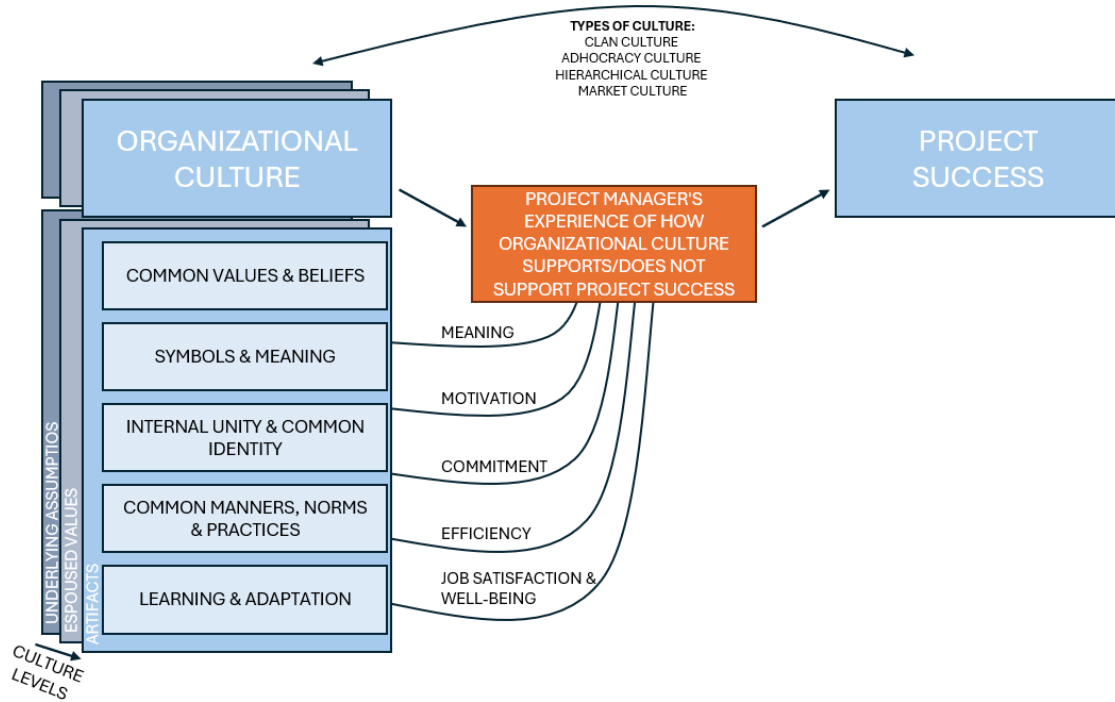


Figure 7. The connection between culture and project success.

2.4 Organizational culture challenges

It is important to examine organizational culture challenges from many different perspectives. The most common organizational culture challenges identified in the literature include value conflicts between management and employees. In particular, group resistance to change, lack of communication, siloing, lack of motivation, and value conflicts between group members pose challenges to managing organizational culture (Luukka 2020; McGregor & Doshi 2024; Panahi 2016).

Luukka (2019) names one of the most important cultural challenges as the way a company is aware of its culture. In many companies, the current and target state of culture are not recognized as separate issues, but culture is seen more as a stable thing. This is often due to management's challenges in understanding the dynamism of culture. In addition, in many companies, management and employees see culture differently. Management therefore talks about what it wants the culture to be like, and employees about

what the culture is like. When building culture is not seen as an active activity in a company, it gradually changes without being aware of it. When building culture remains a passive activity, culture gradually changes without being aware of it, which hinders its purposeful development. This is especially emphasized in situations where the distinction between the current and target state is unclear and the understanding of the dynamism of culture is inadequate. When management's vision does not match employees' everyday lives, differences of opinion and conflicts arise that can weaken the organization's ability to support its goals and maintain high performance.

Many companies focus on building cultures that focus on managing low-performing units and employees. This approach is not very productive and causes problems in high-performance cultures. (McGregor & Doshi, 2024.) There is a conflict between the goals that the organization values and the individuals and teams, and how important values and resources should be emphasized. When leaders spend too much time helping their least productive colleagues, they do not have time to support their best employees. This phenomenon prevents the development of talent and motivation, slows down the growth of the organization and causes the departure of top talent. (McGregor & Doshi, 2024.) The phenomenon is particularly related to the common customs, norms and practices of the organization, as these management practices emphasize supporting low-performing employees at the expense of the best employees. Such an imbalance weakens the effectiveness of norms and practices, hinders the development of capabilities and the overall growth of the organization.

Value conflicts in an organization arise when individuals' personal values are not aligned with the values of the organization. Personal values are an individual's beliefs and aspirations about what they consider important in their work. Organizational values, in turn, guide their actions, behavior, and decision-making, and they affect the culture and operations of the entire organization. When there is friction between personal and organizational values, it can lead to conflicts, as individuals may feel that their personal preferences and expectations do not meet the goals and methods of the organization. Such

conflicts can weaken employee commitment and affect the effectiveness and atmosphere of the organization. This creates a challenge in balancing shared values and beliefs, as value conflicts weaken the unity of the organization and commitment to common goals, which in turn can negatively affect the development of employee motivation and organizational performance. (Panahi, 2016.)

The strength of the prevailing organizational culture is particularly evident in change situations, where leaders must consider different ways in which the same values can be interpreted in the same context (Maio, 2010). Organizational members are accustomed to the deeply rooted values and beliefs that prevail among them, which can be difficult to change (Schein & Schein, 2017). Such resistance to change is not uncommon, but ignoring it can undermine the success of organizational change (Hubbart, 2023). The deeply rooted values and beliefs of the organizational culture can prevent the implementation of effective change. Such challenges related to learning and adaptation occur when deeply rooted values prevent the organization from adapting to change and slow down its ability to develop and implement changes effectively. When organizational members cling to old ways of doing things, the implementation of change can be slow and difficult. In times of change, leadership plays a key role in the formation and transformation of organizational identity. Leaders act as exponents of the organization's core values and mission, which enables the emergence of a new identity (Gioia et al., 2010).

Hubbart (2023) states that resistance to change is not uncommon, but ignoring it can undermine the success of organizational change. Resistance to change is normal and natural, but it can be proactively addressed. Resistance to change can be caused by many factors, such as fear of the unknown, discomfort with losing control, and a tendency to prefer the familiar over the strange. Although organizational change management has evolved, challenges of resistance to change can still occur, especially if effective change management is lacking. When resistance to change is well understood and addressed, it can lead to successful change acceptance before, during, and after the change. Providing

employees with quality jobs and an inclusive, empathetic, and considerate environment can promote acceptance and commitment to change, which improves the long-term effectiveness and results of the organization. (Hubbart, 2023.)

3 Business value creation & project success

Projects have become an important way of structuring work in most organizations, and project-based development projects are becoming increasingly common in our globalized, fast-paced economy (Bakker, 2010). The role of project management grew especially after World War II, when technology and infrastructure began to develop rapidly (Hodgson & Cicmil, 2006). As a scientific discipline, project management has begun to grow since the 1980s, and over the decades it has developed into a fragmented and multidisciplinary entity (Padalkar & Gobinats, 2016). Today, project work is a key way in which organizations create added value, implement strategic goals, and improve economic, social, and environmental conditions worldwide (Lundin et al., 2015).

Today, most organizational researchers acknowledge that organizational culture has an impact on a company's performance and long-term success (Indiya et al., 2018). However, in light of empirical research findings, there are still varying views on the actual relationship between culture and organizational performance (Liu et al., 2021). Koohang et al. (2017) have defined organizational performance as a measure of organizational progress that indicates how well an organization succeeds in achieving its goals.

A winning culture helps reduce uncertainty, create social order, bring continuity and commitment. Culture creates a shared vision of the future for the entire organization and a framework of behavior and thinking within which goals are achieved. (Cameron & Quinn, 1999.) One of the most important factors influencing performance is the values of the organization, which are directly reflected in improved performance (Indiya et al., 2018).

Gordon and DiTomaso (1992) found that companies that represented market and adhocracy cultures performed better financially than cultures that prioritized clan and hierarchy cultures. In addition, Hartnell et al. (2011) studies showed that clan, adhocracy, and market cultures have a positive impact on organizational performance. Osman et al.

(2023) also found that clan, adhocracy, and market cultures have a positive impact on performance, while hierarchical cultures can weaken it.

The business success of organizations can be viewed from many different perspectives. Much research has been done in the literature to identify characteristics that combine successful companies with high profitability and above-average financial returns. One perspective and significant key factor influencing success is the culture prevailing in the organization, which is guided by the company's values and visions.

3.1 Dimensions of business performance

The organization's measurement system strongly influences the behavior of managers and employees. No single metric can provide a clear performance target or focus on critical areas of the business. The complexity of managing today's organizations requires that leaders be able to examine performance in multiple areas simultaneously. (Kaplan & Norton, 1992.) Lozano and von Haartman (2018) emphasize the need for a holistic perspective when examining company performance.

Kaplan and Norton (1992) created the Balanced Scorecard model (BSC theory) to address the challenges that companies faced when focusing solely on financial indicators. The importance of financial indicators has been criticized for their shortcomings: they focus on the past and are unable to adequately reflect contemporary value-creating activities. In addition, some critics emphasize that financial measures do not improve customer satisfaction, quality, turnaround time or, for example, employee motivation. Kaplan and Norton (1992) aimed to expand the financial performance indicators to also consider customer satisfaction, internal organizational processes and a learning and growth perspective. They stated that these four factors are central to the long-term success of organizations. Table 1 summarizes the content of the Balanced scorecard model.

CUSTOMER	INTERNAL PROCESS	LEARNING & GROWTH	FINANCIAL INDICATORS
<ul style="list-style-type: none"> •How customers see the company •How the company manages to meet customer expectations •Implementing the strategy based on customer benefits •Important metrics such as delivery time, quality, service level and cost-effectiveness 	<ul style="list-style-type: none"> •How internal company processes support customer satisfaction and operational efficiency •Internal metrics should consist of the most critical factors for customer experience, such as quality, competence and productivity •The company must decide where they intend to differentiate themselves from others (competitive advantage) 	<ul style="list-style-type: none"> •The ability of a company to develop, innovate and adapt to changes in the market over the long term •Often measured by the speed of new product development, employee skills development and continuous process improvement •Growth and learning are essential for future competitive advantage 	<ul style="list-style-type: none"> •The financial performance of a company and its impact on shareholder value •Financial measures reveal the impact of operational performance on, for example, profitability, cash flow or return on equity

Table 1. The Balanced Score Card model for assessing business success presented by Kaplan & Norton (1992).

The BSC is a flexible model that seeks to combine the perspectives of different stakeholders, balancing short-term and long-term goals. Its role is to support business decision-making, as it forces organizations to evaluate important measures as a whole, ensuring that improvements are not made in one area at the expense of another (Merchant & Van der Stede, 2017). Later, a sustainability dimension was also added to the balanced scorecard model, which allows companies to also consider environmental, social or ethical perspectives in order to review the company's performance (Küçükbay & Sürücü, 2019). Incorporating sustainability into the balanced scorecard has even been said to be one of the most important methods used to measure a company's sustainable development as part of a comprehensive performance review (Khalid et al. 2019).

3.1.1 Defining project success

Research on project performance and success shows that project success is still a rather ambiguous concept. Project success and achievement can be viewed from many different dimensions, making it challenging to provide a completely unambiguous definition (Davis, 2017; Prabhakar, 2008). At its simplest, a project can be considered successful if the goal set for it has been achieved (Azanha, 2017). However, it is questionable from which perspective the achievement of the goal is viewed.

Traditionally, project success has been equated with the dimensions of time, cost, and quality (Ika & Pinto, 2022). Martin Barnes called these three objectives the "iron triangle" as early as 1969. Later, the iron triangle was replaced by the term "project management success" (PMS). PMS includes how well the project plan was implemented, especially in terms of time, cost, and scope objectives. (Zwikael & Meredith, 2021.) However, project success is actually a more complex phenomenon than this traditional model, which develops over time depending on, among other things, the project type, stakeholder group, and project context (Ika & Donnelly, 2017).

Several people who have studied project success have stated that the success of projects should be divided into two different dimensions; the success of the project itself and the success of project management (De Wit, 1988; Baccarini, 1991; Ika & Pinto, 2022; Zwikale & Meredith, 2021). The success of the project itself is reflected in the general goals set for it and is only assessed based on the final results of the project. The success of project management is instead reflected in how effectively and successfully the project has been managed during its life cycle (De Wit, 1988). Roughly speaking, according to the traditional model, project management can be considered successful when the project itself successfully achieves its pre-agreed goal, which is determined according to the schedule, budget, scope and final result (Shimoda & Yaguchi 2007; Gemino et al., 2021). However, the traditional iron triangle model of project analysis, which focuses solely on financial metrics, has been criticized as being too narrow in its scope when considering performance measurement and project success. (Kaplan and Norton, 1992)

The literature offers numerous definitions and criteria for project success, revealing significant disagreements and even contradictions in the way the subject is viewed (Abdullah et al., 2010; Shokri-Ghasabeh & Kavousi-Chabok, 2009). The concept of project success has expanded and evolved over time, but there is no consensus on general success factors or criteria, as they vary according to, among other things, the stakeholders, industry and phases of the project (Abdullah et al., 2010). While project success was originally defined primarily through the success of traditional project management, today the assessment of success takes into account the broader impact of the project's outcomes and longer-term benefits (Parsanejad et al., 2012).

3.2 Four dimensions of project performance

In this paper, we examine project success based on the Balanced Scorecard theory created by Kaplan and Norton (1992). BSC provides a comprehensive approach to examining project performance through key business metrics and links project performance to the organization's strategic goals. The four dimensions of BSC are central to the long-term success of organizations and provide a basis for examining how different functions support the success of the strategy and the achievement of the organization's long-term goals (Kaplan & Norton, 1992).

3.2.1 Customer perspective: How do customers see us?

The customer perspective describes how customers see a company and how well the company meets their expectations (Kaplan and Norton, 1992). Customer satisfaction has been identified as a key indicator in assessing project success, as it describes the project's ability to deliver value to customers and meet their expectations (Pinto & Mantel, 1990; Sastoque-Pinilla et al., 2022). The BSC emphasizes customer satisfaction and customer value creation as key organizational goals. Customer satisfaction and customer value

creation are not only strategic goals of the organization, but are directly related to the organization's ability to compete and grow in the market. (Kaplan and Norton, 1992). From the perspective of project management and project success, the importance of customer satisfaction is a key factor (Pinto & Mantel, 1990; Sastoque-Pinilla et al., 2022). Customer satisfaction is not only a measure of the final result of the project, but also of its entire process.

Customer concerns are generally divided into four main categories: time, quality, performance and service, and cost (Kaplan and Norton, 1992). These factors directly affect the customer's experience of value. However, value management is not based solely on financial and business processes and outcomes. Value management must also consider how people themselves experience and embrace value. Such a moral and social examination of value is essential in projects when the aim is to determine the priorities of stakeholders in accordance with their values and expectations. Value management therefore does not only mean considering business or financial value, but often involves broader personal, community and societal expectations. (Martinsuo, 2020).

BSC guides organizations to ensure that the organization's strategy is implemented in practice in a way that genuinely benefits customers. That is, companies must ensure concrete measures that reflect what is important to customers. (Kaplan and Norton, 1992.) Projects go through a life cycle, the stages of which vary depending on the size, purpose and complexity of the project (Lester, 2013). In project management, the task is to use available resources effectively to achieve the set goal at certain stages of the project life cycle (Mäntyneva, 2016). From a value creation perspective, this means careful planning and production, as well as the long-term delivery and utilization of value even after the project ends (Martinsuo, 2020).

At different stages of a project, the success of the project is assessed by many different stakeholders, who must be served according to their needs and expectations (Munns & Bjeirmi, 1996). Identifying and understanding the perspectives of different stakeholders

is essential so that different parties can be served according to their needs and interests as the project progresses (Mäntyneva, 2016). Not all stakeholders are equally important to the progress of the project. A key element of successful stakeholder management is to identify the most important and influential parties to whom resources are directed. (Mäntyneva, 2016). Different stages of the project life cycle require different management in order to be successful, and a good project manager recognizes how the participation of different stakeholders at different stages of the project life cycle affects the

project management priorities and the achievement of a successful overall outcome (Munns & Bjeirmi, 1996).

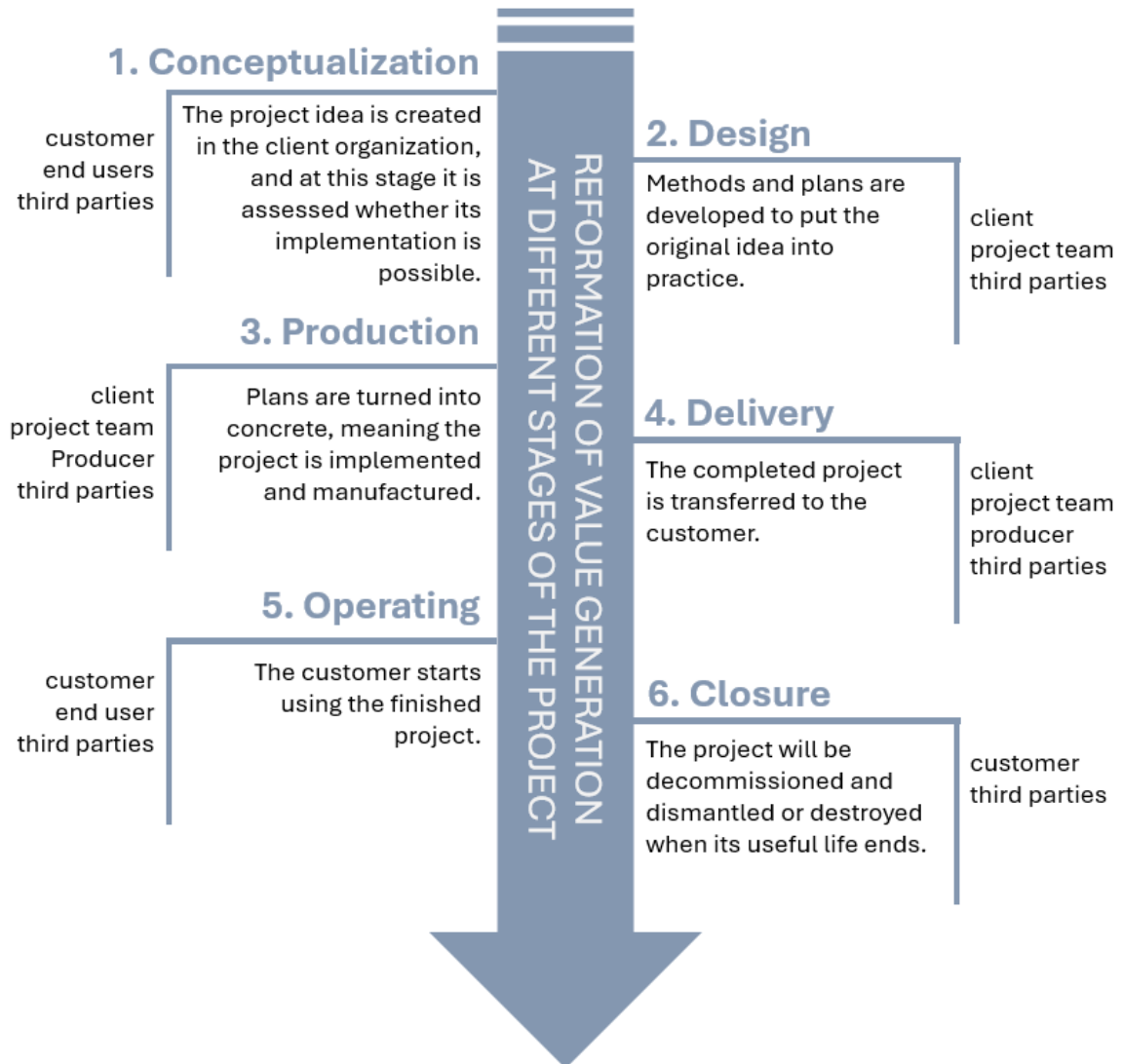


Figure 8. Adapted from Munns & Bjeirmi (1996), the priorities of project stakeholders change during different phases of the project life cycle.

It is important to establish and maintain project-related contacts with key stakeholders. The primary target group is those who have a strong interest in the project and who can significantly influence its progress. Those who are interested in the project but have little influence on it must be kept informed through project communication (Mäntyneva

2016). Active participation and appropriate communication of stakeholders are key to the success of the project (Munns and Bjeirmi, 1996).

Ultimately, it can be stated that customer satisfaction and customer value creation are key factors in the success of a project, and they directly affect the competitiveness and growth of the organization in the market. Value management must extend beyond mere business objectives to customer experiences and the adoption of values. At the same time, the varying expectations and values of the different stakeholders who influence the project must be taken into account. At different stages of the project life cycle, the perspectives and needs of the most relevant stakeholders must be identified and taken into account in order to achieve the project objectives and ensure customer satisfaction. Ultimately, precise stakeholder management and communication are key to managing the customer perspective and, consequently, the success of the project.

3.2.2 Internal processes: where do we need to excel?

The internal process perspective focuses on the internal business processes of a company that support customer satisfaction and enable efficient operations. Ultimately, excellent performance from a customer perspective is the result of processes, decisions, and actions that occur throughout the organization. For this reason, according to the BSC, a company's internal metrics should consist of those business processes that have the greatest impact on customer satisfaction. These critical factors affect, for example, production time, quality, employee skills, and productivity. Companies must therefore decide in which processes and capabilities they must excel. Measuring and optimizing these factors helps ensure that a company's internal operations support strategic goals, especially customer satisfaction and competitive advantage. (Kaplan and Norton, 1992.)

The role of a project manager is diverse and they are often referred to as project managers (Marion & Richardson, 2022). The term refers to the fact that the project manager's job is to ensure the delivery of the agreed upon deliverables. They are responsible

for achieving the project's objectives, deadlines, budget, and communications, making their role broad and strategic.

Schedule, Cost & Scope: Munns & Bjeirmi (1996) define project management as a process of monitoring the achievement of project objectives. The Iron Triangle presents the basic criteria for project management, i.e. whether the project is delivered on time, within budget and within the agreed scope (Pinto 2010). The project manager must be able to manage the project so that these three key factors are met. This requires continuous monitoring, anticipation and effective decision-making. The project manager must ensure that the project is completed on time, as delays can reduce customer satisfaction and cause additional costs. Measuring project scope involves ensuring that the right amount of project work is done within the desired or agreed performance. (Turner et al., 1996.)

Quality and uncertainty management: Project quality is closely related to project scope, as a clearly defined project scope expresses the performance levels required for project deliverables. The basic concepts of quality management are quality planning, quality control, quality costs, and improvements (Ingason, 2020). The organization's internal processes for ensuring quality help the project manager ensure that operations support the organization's shared strategic goals, especially customer satisfaction (Kaplan & Norton, 1992). Quality costs arise from all costs that arise from ensuring quality, preventing errors, and correcting errors. One way to manage and control quality in organizations is to standardize and document common ways of doing work tasks. In this case, the project manager's task is to ensure that instructions are followed in a disciplined manner at each stage. Strict quality control leads to outputs that are more consistent and in line with the organization's strategy. When a customer receives a flawless output with the agreed-upon features, their perceived value increases. (Ingason, 2020).

Project management must constantly adapt to societal changes and accelerating technological development (Seymor & Hussein, 2014; Sankaran et al., 2021). The operating

environment has an impact on the different phases of the project and the production of project value (PMBOK GUIDE, 2021), and changes in it can cause extensive multiplier effects on different areas of the project (Belassi & Tükel, 1996). Complexity is a typical feature of dynamic and constantly changing project environments, so its management has become a central part of project management (Chan et al., 2004). In the future, successful project management will require a greater emphasis on continuous development work and the ability to adapt to changes in the surrounding world. Project risk management is an activity that aims to maximize the consequences of positive events and minimize the effects of negative events (Mitkov, 2023). Effective risk management is an essential part of good management and essential for achieving favorable business and project outcomes and ensuring efficient procurement of goods and services (Elkrghli & Almansour, 2024). Effective risk management is an essential part of good management and essential for achieving favorable business and project outcomes and ensuring efficient procurement of goods and services. Many managers are already committed to some form of risk management, including conducting sensitivity analyses of financial forecasts, using scenario planning in project evaluation, estimating contingencies in cost estimates, negotiating contract terms, and developing contingency plans (Wehbe and Hamzeh, 2013).

Leadership and communication: There are many different approaches to project management. Sometimes the approaches overlap, creating “hybrid models,” which can create challenges for project managers to choose the best option (Sheffield & Lemétayer, 2013). The traditional approach to project management progresses linearly from one phase to another (planning, implementation, testing, and delivery) and detailed plans are drawn up right at the beginning of the project. The Agile approach, on the other hand, is iterative and flexible, focusing on dividing the project into smaller parts (sprints) in which the results are continuously delivered and evaluated. The key difference between the two is the flexibility of the management methods: the traditional model strives to stay within a fixed plan, while Agile adapts to continuous changes based on customer feedback and project development. The traditional approach works best in

situations where the environment is stable and the project is expected to deliver a well-defined outcome with a fixed budget (Lalic et al., 2022). Instead, Agile is better suited to today's dynamic environments, where requirements change rapidly and the emphasis is on flexibility and continuous value creation (Bergmann and Karwowski, 2019). Agile-managed projects have a greater impact on teamwork efficiency and satisfaction than traditional models, and improve the project's readiness to support future technological and organizational developments (Lalic et al., 2022).

The agile approach places more emphasis than the traditional approach on team management, the interaction between them, and communication between all team members and key stakeholders (Vinekar et al., 2006). Good people management contributes to the success of a project even more than technical elements (Scott-Young & Samson, 2004). People management and the personal qualities of the project manager, such as communication skills, are critical factors in the success of project management. This perspective emphasizes the importance of so-called "soft" leadership skills in project management alongside traditional technical skills (Scott-Young & Samson, 2004; Crosby, 2012).

The key to successful project management is clear and effective communication, which ensures that team members understand the common goals, strategies, and actions that guide the project towards its goal (Muneer et al., 2022). Common communication problems in project management include structural problems related to excessive centralization, excessive formality, ambiguity, inconsistent use of technical information tools, and rigidity of communication. (Galvis et al., 2023.) The cornerstones of successful communication are effective communication management and the creation of a communication plan. (Muneer et al., 2022). Successful communication eliminates the fear of communication and the negative effects of work stress in project management (Galvis, Colmenares & Januario, 2023). It creates an open and confidential environment where team members can freely share their thoughts and concerns. This promotes collaboration, improves decision-making, and enhances problem-solving, leading to more effective

project management and better outcomes (Galvis et al., 2023; Crosby, 2012). However, without clear strategic leadership, communication implementation can easily become ineffective and fragmented, even if a communication plan is in place (Galvis et al., 2023). Strategic communication leadership creates a clear framework for project communication, allowing team members to understand their roles and responsibilities. This strengthens efficiency and reduces potential conflicts during the project (Muneer et al., 2022).

Various conflict situations at different stages of projects are normal. Conflict is not always a direct negative thing, but it can also prevent project teams from making hasty decisions. It can also prevent teams from falling into the trap of groupthink, where all members follow each other's opinions without sufficient reflection or critical evaluation. Conflict can therefore promote more diverse perspectives and better decision-making. In managing communication, the project manager must take into account that healthy conflict and discussion should be encouraged so that the team can address problems thoroughly and find sustainable solutions. (Marion & Richardson, 2022.)

Involving team members in project planning, especially in the early stages of the project, increases the team's understanding of shared goals and the importance of a common goal. Involving team members in decision-making increases motivation and commitment, because members feel that the plans are theirs. This also often reduces the amount of negative conflict that often occurs. The project manager's active participation in challenging tasks, such as preparing more challenging schedule and cost estimates, helps motivate team members to succeed. At the same time, the project manager can ensure the smooth progress of critical tasks and support the team in decision-making (Marion & Richardson, 2022; Galvis et al., 2023). It is important for the project manager to influence the motivation of his team by regularly recognizing the efforts and achievements of team members as the project progresses, not just at the end of the project (Hauschildt et al. 2000). Motivated team members are more productive, committed, and ready to take on new challenges (PMBOK, 2017). Expressing gratitude and appreciation are

simple yet effective means of communication and can be as rewarding as monetary compensation (Hauschildt et al., 2000).

Competence development: Competence development in project teams is a key factor in the success of a project, as it improves team performance and ensures that project objectives are achieved. Competence development ensures that the team is able to adapt to new challenges, enhance collaboration and achieve the best results. Coaching and mentoring are important tools in the personal and professional development of team members and contribute to organizational learning and project success (Hauschildt et al., 2000). Coaching leadership takes into account the personal goals of the team member as well as the goals of the project. The coaching leader supports and challenges the individual or team with questions that promote the development of thinking, learning and action. In addition, the coaching leader provides feedback to help the individual or team achieve the set goals. (Thuerbach, 2013.)

Managing project team competence requires a holistic approach that combines key leadership principles such as supporting collaboration, promoting performance, and continuous learning. Applying these principles creates a high-performance culture for teams that improves collaboration and promotes project results (PMBOK, 2017). It is important for the project manager to identify the most important core competencies and essential capabilities for the project. This allows the project manager to better identify potential limitations and challenges that can affect the operation and management of the project (Filho et al., 2022). When performance-related challenges arise, it is important for the project manager to first identify whether the challenge is motivational or competency-related. If it is a motivational challenge, it is less likely to achieve a successful outcome. If it is a challenge due to a competency gap, the project manager must find the right methods to bridge the competency gap. The project manager can help a team member develop their competency in many different ways. This includes both formal training programs, such as coach-led training and online courses, and informal methods, such as on-

the-job training, cross-training, mentoring, and coaching programs, which can all help fill the skills gap. (Thuerbach, 2013.)

In conclusion, the role of the project manager is crucial to the success of a project. His ability to balance project deadlines, budget and scope, as well as to manage the project's internal processes, are key factors in achieving project results. The "soft" skills of leadership, such as motivating teams and smooth communication, are also essential for the success of a project. Creating an open and trusting atmosphere improves cooperation, which in turn enhances decision-making and problem-solving. In addition, the project's ability to adapt to changes in the surrounding operating environment and effective risk management are essential, as projects operate in increasingly dynamic and uncertain conditions. Successful project management therefore requires continuous development work and the ability to adapt to changing circumstances, but above all the ability to combine these factors into a common goal. The project manager's task is to ensure that the team is able to achieve the set goals, and that the project generates value for customers and the organization. This is based not only on internal processes, but also on the continuous development of competence and communication. In this case, the project's end results not only meet expectations, but exceed them, creating a competitive advantage and promoting the long-term success of the entire organization.

3.2.3 Learning and growth: How do we continue to improve performance and create value?

The learning and growth perspective emphasizes the company's ability to develop, innovate and adapt to market changes over the long term. The goals of success are constantly changing, so in this context, the speed of new product development, employee competence development and continuous process improvement are often measured. According to the BSC, companies can grow and increase shareholder value by focusing on the capabilities with which they bring new products to the market, create added value for customers or continuously improve their efficiency. (Kaplan and Norton, 1992.) From a

project management perspective, this means the ability to plan and manage projects in a way that supports the achievement of strategic goals. For example, effective resource management, utilizing team competence and continuous learning during projects help the organization to remain competitive (Sastoque-Pinilla et al., 2022). Company growth and learning are therefore essential for the company's future competitiveness and enable business growth and value creation. (Kaplan and Norton, 1992.) In terms of continuous learning and development of projects, continuous knowledge production is an important part not only of the success of the ongoing project, but also of the continuous development of the entire organization and the utilization of the added value of the lessons learned (PMBOK, 2017).

Project learning refers to learning gained from project implementation (Yap & Skitmore, 2020). Experiential learning theory outlines learning as “the process by which knowledge is created through the transformation of experience” (Kolb, 1984). Project learning requires the project team to document and deliver the processes, techniques, tools, and methods used in the project to the project owner in a consistent manner. The benefits of project knowledge management include reducing rework, delivering faster customer service, continuously improving work practices, streamlining the dissemination of tacit knowledge, and disseminating best practices (Yap & Lock, 2017). Knowledge management should be a high strategic priority when developing project performance, as effective sharing of project knowledge is key to future learning, improved results, and profitable growth. At the same time, it is ensured that the added value delivered to the customer increases customer satisfaction (Yap & Skitmore, 2020; Sastoque-Pinilla et al., 2022).

Continuous learning enables the development of processes to respond more effectively to the needs of different stakeholders. This creates a foundation where learning and development can take place systematically through each project. Developing employee competence ensures that the team has the right skills for the needs of both current projects and future innovations. Active project learning improves the suitability,

competence and expertise of personnel (Yap & Skitmore, 2020). More skilled personnel are able to work more efficiently and produce higher quality outcomes for customers. Career resilience, i.e. the ability to cope with disruptions during a career, helps individuals adapt to continuous change and turn challenges into growth opportunities (London 1983; Seibert et al., 2016). Career resilience is particularly emphasized in project management, as the field is dynamic and prone to skills shortages and short-term work periods. From a business management perspective, resilient project managers and team members remain more motivated and continuously develop their skills, which supports project success and organizational competitiveness. (Borg et al., 2021). In terms of continuous learning and growth of the organization, strengthening the career skills of project managers is important for building a sustainable workforce. Engaged staff, a sustainable workforce, and project manager retention maintain business continuity and support innovation in the long term (Borg et al., 2020).

3.2.4 Financial indicators: How do the owners see our operations?

The financial perspective describes the financial performance of a company and its impact on shareholder value. Many have criticized the importance of financial metrics in measuring a company's success, because many believe that financial success should be a logical consequence of doing the basics, and not the other way around. (Kaplan and Norton, 1992.) In the context of project success, financial metrics have a great deal of importance. The task of a project manager is to complete a project on time and within a predetermined budget. However, the time frame over which project success is measured using financial metrics is a matter of debate, as different stakeholders in a project view success from different perspectives. For example, the interests of the team working on a project are much shorter-term than, for example, the project owner and its financier. (Zwikale & Meredith, 2021.)

Although the emphasis on financial metrics in terms of project success has been criticized, their purpose is to show how improved operational performance affects profitability and to help understand why expected financial results are not achieved. This enables strategic decisions to be made and improvements to be targeted at the right points. They also help companies evaluate and adjust their strategies so that operational improvements can be translated into financial benefits. From a financial perspective, key metrics for an organization may include cash flow, revenue growth, profitability, and return on equity. These metrics provide an overall picture of how well a company is implementing its strategy and generating financial value for its owners, which helps ensure the sustainability of the operation and its attractiveness to investors. (Kaplan and Norton, 1992.)

Owners and financiers view a project primarily through its financial and strategic value. They assess how the funds and resources invested in the project will generate value and sustainable benefits in the long term. In practice, this means that their perspective emphasizes the project's ability to generate financial returns (e.g., ROI or NPV) as well as other strategic benefits, such as improved organizational capabilities or new knowledge. They view the project specifically from the perspective of long-term benefits, as their interests often extend beyond those of other stakeholders, such as project managers, who focus on shorter-term goals. (Zwikale & Meredith, 2021.)

4 The impact of organizational culture on project success

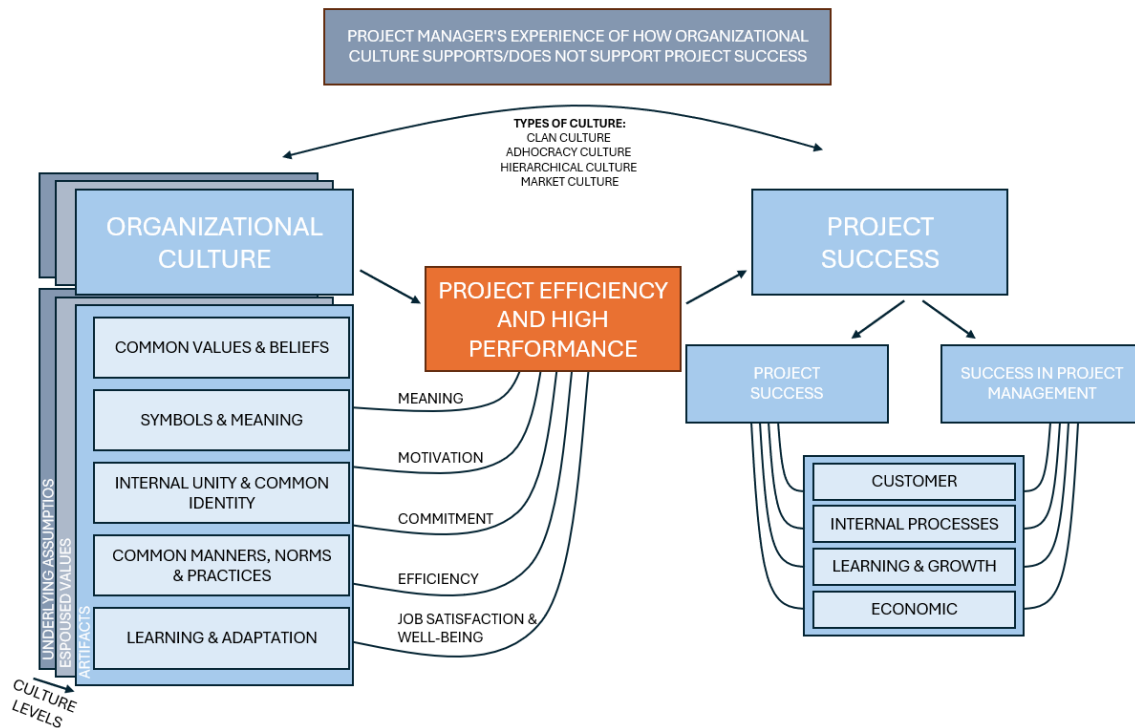


Figure 9. A visual model of the theoretical framework of the study.

The theoretical framework of this study is depicted as a visual model in Figure 8. The figure illustrates the relationship between organizational culture, project manager experiences, and project success. The model provides a framework for analyzing the role of organizational culture in project management and project success, taking into account the multiple mechanisms of influence of culture.

The key components of organizational culture are shared values and beliefs, symbols and meanings, internal coherence, habits and practices, and the ability to learn and adapt. These elements reflect the classical theories of organizational culture, according to which culture forms the basic structure of the organization and acts as a collective guideline for the actions of individuals. These elements form the basis through which organizational culture influences individuals and projects. Culture determines common ways of acting and creates meanings that help organizational members act as one.

In this study, we examine project managers' experiences of how organizational culture supports or does not support project success. Culture does not directly affect the outcome of a project, but its effects are mediated through individual experiences. For example, relevance, motivation, commitment, effectiveness, and well-being at work reflect the project manager's experience of organizational culture and affect the project's success through the project manager's actions. In other words, the project manager's experience acts as a mediating factor between culture and project success. A culture that supports work relevance and motivation and creates an atmosphere of commitment promotes project success and also supports the well-being of team members.

Project success is divided into two dimensions: project success and project management success. Both dimensions are assessed based on four key indicators: customer satisfaction, internal processes, learning and growth, and financial performance. The dimensions reflect the ideas of Kaplan and Norton's (1992) Balanced Scorecard theory, which emphasizes multi-faceted performance assessment.

The arrows depicted in the framework indicate the interaction between different factors. Organizational culture directly affects the project manager's experiences and, through them, indirectly affects project success. The project manager's experience acts as a mediating link that transfers the effects of culture to the practical management of the project and the project results. In addition, there is a two-way arrow between organizational culture and project success, highlighting their mutual interaction: successful project success can strengthen positive cultural features, while problems in projects can weaken culture.

5 Research methodology

This chapter focuses on the methodological approach of the study. The purpose of the study is to investigate how organizational culture influences successful project management. The topic is investigated through two sub-questions:

- What kind of organizational culture prevails among project managers and how does it manifest itself at a practical level?
- How do project managers' leadership styles and practices reflect organizational culture and influence project outcomes?

When exploring new topics or trying to understand complex issues, such as explaining people's beliefs or behavior, a qualitative approach is a suitable research method. Qualitative research is well suited to "why" questions when you want to explain and understand things, and "how" questions when you want to understand processes or behavior. (Hennink, 2020.) Basically, when looking at the research questions of this study, we are answering the question "*how*" - when we want to understand *how* organizational culture affects successful project management. In this case, qualitative research is suitable for this study.

Qualitative research often aims to find out how people describe their own reality. Research data is often symbolic material, which leaves the researcher with a lot of room for interpretation. Several interpretations of the same material can be equally valid, each of which emphasizes different aspects of the meaning of the information in question. There can be multiple meanings and interpretations, and they can vary over time and between different people. (Schreier, 2012). Apart from descriptions of reality, there is no reality. Therefore, in qualitative research, interpretations play a major role in the final results of the research. Interpretations are made throughout the research, starting from an understanding of the existing literature. The interpretations of all people participating in the research determine the reality that emerges in the research. Interpretations are linked to a specific context in which the data collection process takes place, and approaches and procedures are adapted to this context. In practice, it is therefore

impossible to conduct independent data collections based on exactly the same procedures (Gronmo & Grønmo, 2023).

All research methods have biases and weaknesses that can be neutralized by combining different research methods in the same study. Qualitative data are usually open-ended without predetermined answers, while quantitative data usually contain closed and predetermined answers. (Creswell, 2023.) Mixed methods research (MMR) combines qualitative and quantitative research (Tuomi, Sarajärvi & Tammi, 2018; Creswell, 2023). The core assumption of the research format is that combining qualitative and quantitative data provides additional information beyond that provided by quantitative or qualitative data alone (Creswell, 2023).

This study was appropriate to use a convergent mixed method design, which is a form of mixed methods design. In this method, the researcher combines quantitative and qualitative data to produce a comprehensive analysis of the research problem, typically at the same time. The data is then combined to interpret the overall results. The advantage of the method is that discrepancies or contradictory findings can be explained and investigated in more detail than when looking at one-sided data alone. (Creswell, 2023.)

The diagram below illustrates the main outline of the research process. This section examines the research implementation choices and justifications in more detail.

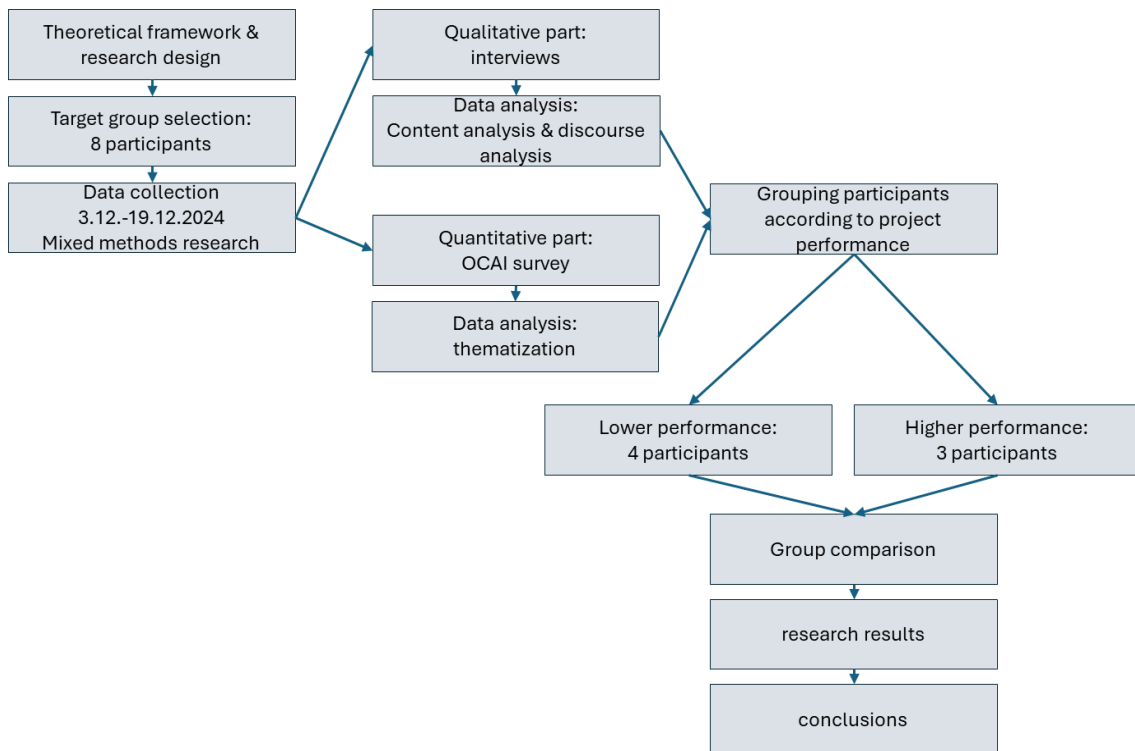


Figure 10. Description of the progress of the research step by step.

5.1 Defining the target group

Qualitative research typically uses purposive sampling, in which study participants are purposefully selected from a group with certain characteristics. This results in a wealth of data and sample diversity in the study population. (Hennink, 2020.) In this study, the target group was selected from a Finnish company operating in the B2B field, whose main field of activity is marketing and sales promotion. The company employs approximately 100 people and offers its customers various sales support services. The company was selected for the study because its business model is strongly based on project business. The company has several project managers who work on similar projects. Hennink (2020) recommends that when selecting the target group, the sampling objectives be carefully considered before the final recruitment of participants. As a result of this consideration, project managers who manage projects with similar characteristics were specifically selected as the target group for the study. Depending on the research problem, it is advisable to select interviewees based on their expertise or

experience in the theme or subject under study, so that the interviewee has personal experience of the subject under study (Vilkka, 2021). This choice creates a favorable environment for the research, as it allows for comparison between projects and is suitable for the research objectives. Purposeful sampling is flexible and allows for the selection of a sample that is sufficiently diverse to understand the variation in experiences and perspectives related to the research topic (Hennink, 2020).

The study involved eight project managers who manage projects of almost the same size in terms of weekly deliveries. Barbour (2014) points out that it is important to take into account the diversity and contextual nuances of the research phenomenon when selecting the target group. The project managers participating in the study were selected by examining the organization's project portfolio in terms of the volume of weekly deliveries, from which the median of deliveries was formed. From this group, eight projects were selected, whose project managers were recruited for the study. The selected project managers had worked in the project manager's job for between two months and about three years. However, it should be noted that the selection of the target group did not focus on the personal characteristics of the project managers, such as experience, physical location or other demographic factors, although they could legitimately bring additional perspectives to the study. In this study, the most important criterion was a comparable context for the study, the aim of which is to analyze operating models and practices related to project work. In this case, individual-level background factors were not made a primary criterion. This allows for a diverse examination of variables relevant to the study.

Later in the study, the projects were divided into better and worse performing projects based on the company's own internal metrics. The period for examining project performance was the past six months, which provides a sufficiently comprehensive picture of the long-term level of performance. When refinements and additions are made to the study as the study progresses and based on the data collected, this is referred to as an inductive research process. In this case, the study is not based on

completely predefined variables. (Hennink, 2020.) The division of projects enabled the study to have a setting in which management practices can be compared in projects with different levels of performance. The comparison setting provides deeper insights into whether there are differences in the success of projects that can be linked to the management practices of project managers. In terms of selection, it is important to note that the target group was grouped specifically from the perspective of internal performance metrics, and not, for example, in terms of customer experience or other factors affecting the success of the project.

5.2 Research method and data collection

The research material for this study consists of two materials. The data collection for the study was carried out from December 3 to December 19, 2024. An individual's experience of organizational culture and its impact on project management are complex phenomena whose cause-and-effect relationships cannot be unambiguously defined. Understanding the phenomenon requires an interpretation based on the data. In this study, an individual's experience was studied using the Mixed Methods Research (MMR) method, which combines qualitative and quantitative research (Tuomi, Sarajärvi & Tammi, 2018; Creswell, 2023). The core assumption of this research method is that combining qualitative and quantitative data provides additional information in addition to the information produced by quantitative or qualitative data alone (Creswell, 2023). Compared to strictly qualitative or quantitative studies, combining qualitative and quantitative data can provide a deeper analysis and a more comprehensive understanding of the topic under study (Gronmo & Grønmo, 2023).

In this study, an individual's experience of organizational culture was examined through the OCAI survey, which measures culture on a quantitative basis. The OCAI survey supported a qualitative interview study. The interviews were used to deepen the understanding of culture and to enable the study of project management perspectives. The use of two data sets provides the opportunity to examine the phenomenon from

different perspectives, which helps to more deeply understand the connections between organizational culture and project management. Gronmo & Grønmo (2023) emphasize that the research method chosen for the study must be chosen strategically so that it takes into account the specific research question selected in the review and the specific phenomenon selected for the study. Since the purpose of the study is to understand both organizational culture and project management performance, it is strategically sensible to study these phenomena by combining quantitative and qualitative research methods. This provides a more comprehensive and in-depth understanding of the relationships between these phenomena and their effects on each other.

5.2.1 OCAI tool for determining the state of organizational culture

The first data was collected using the OCAI tool (Organizational Culture Assessment Instrument), based on the competing values framework of Robert Quinn and John Rohrbaugh. The tool aims to determine how respondents experience the current state of organizational culture and any wishes for change (will state). The survey determines the significance of each culture type in the organization (Cameron & Quinn, 2006). The survey has six themes, each of which has four statements. Respondents were given a total of 100 points to distribute for each statement, so that the most points are given to the statement that the respondent believes best describes the state of the organization. Fewer points are given to statements that the respondent believes are less appropriate to their own experience. Cameron and Quinn's (2006) original assessment tool was written in English, but due to the target group of this study, the questions were translated into Finnish. In addition, the questions were modified so that they better correspond to the language used by the organization and the industry, which improves their suitability for the research environment.

The OCAI questionnaire was sent to each of the eight respondents who participated in the study by email. Respondents were instructed to complete the questionnaire before the mutually agreed interview time and to submit the completed responses

electronically to the researcher. The body of the OCAI questionnaire and the cover letter delivered to the target group can be found in the appendices of this study (Appendix 1, Appendix 2).

5.2.2 Research interviews to deepen cultural understanding

The second data was collected through interviews conducted using qualitative methods. Typically, interviews are used as a research method when seeking information about individuals' personal experiences on a specific issue or topic. (Hennink, 2020). In this study, the interviews aimed to highlight the subjects' own perspectives and nuances of the culture prevailing in the organization, project management practices, and the relationship between them through the eyes of project managers. It should be noted that the experiences of the subject will never be fully understood (Vilkka, 2021). The goal of the interview is not to find a single truth, but to bring out something new about human activity (Gronmo & Grønmo, 2023; Hennink, 2020).

A semi-structured interview method was selected for this study, in which the research problem is addressed through its most central themes and topics (Puusa & Julkunen, 2020; Vilkka, 2021). The interviews were conducted based on a pre-prepared interview frame, in which the questions were asked to all interviewees in the same order. Hennink (2020) and Gronmo & Grønmo (2023) emphasize the importance of the relationship between the interviewer and the interviewee in the interview. Interviewees do not just answer the questions asked to them, but participate in the interview, in which both the interviewer and the interviewee create information together through discussion and thus jointly construct reality (Hennink et al., 2020). This interactivity is also intended to emphasize the flexibility of the method, which was also utilized in this interview, if the interviewee's answer seemed to be limited or needed clarification, in which case the interviewer asked additional questions to deepen the discussion.

When constructing a qualitative interview framework, we speak of an interview guide, which is intended to be a research tool to guide the discussion (Hennink, 2020; Gronmo & Grønmo, 2023). The interview framework used in this study was built on the basis of the most central themes that appeared in the literature review. In this way, the interview framework supported the objectives of the study and provided a deeper understanding of the experiences of the project managers of the target organization about the culture prevailing in the organization, project management practices, and the interaction between these.

The interview guide was built around three sections based on the theoretical framework. As Hennink (2020) states, the interview guide should be coherent, for example, according to the topics or concepts in the theoretical framework (Hennink, 2020). In the first section, the aim was to clarify the respondents' experiences of the organization's culture. Although the respondents had completed the OCAI survey before the interview, the aim was to deepen understanding through the individual's experiences and views through open-ended questions. The second section dealt with project management practices. Project management practices were examined based on the Balanced Scorecard framework, so that the most relevant aspects of project management would be covered. The third section of the interview dealt with questions about the connection between organizational culture and project management. Its aim was to deepen the project managers' experiences of how, according to their individual experiences, organizational culture supports or hinders them from succeeding in their work as a project manager and achieving project goals. The interview guide can be found in the appendices of this study (Appendix 3).

The formulation of the questions in the interview guide depends on the characteristics of the participants and how they understand the questions. The question should be immediately clear to the interviewee; therefore, the questions are often formulated in colloquial language or use local expressions that the interviewees can easily understand. (Hennink, 2020.) In this study, all interview questions were formulated in a language

familiar to the target group. The questions were presented in Finnish and used terms, titles and meanings used in the organization. In addition, the questions were formulated to be open-ended and as value-free as possible, so that the respondents could describe their own experiences more broadly and also bring out underlying thoughts about the manifestation of culture.

The interviews were conducted face-to-face or remotely, depending on the interviewee's willingness and ability to attend. Three of the eight interviews were conducted face-to-face and the remaining five were conducted remotely. The method of conducting the interviews was not expected to have a significant impact on the responses, as the same interview structure was followed in both cases and the aim was to have a conversation that was as natural as possible. The estimated duration of the interviews was 60 minutes. The final duration of the interviews was 46-72 minutes. The interviews were conducted in Finnish. All interviews were recorded for analysis. Participants were informed of the recording in advance in a letter sent by email. In addition, verbal permission for recording was requested separately at the beginning of the interview, ensuring that the participants were aware of the processing of the data. Other aspects related to the processing of the data were also discussed verbally before the interview began. Participants had the right to interrupt the interview at any time or refuse to answer individual questions without consequences. This procedure strengthened the ethical implementation of the study and complied with the requirements set for assessing the credibility of qualitative research (Puusa & Julkunen, 2020; Hennink, 2020).

5.3 Research data analysis methods and reliability

5.3.1 Research data analysis methods and reliability

The OCAI survey consists of six themes, each containing four statements. Respondents were asked to assign a total of 100 points to each statement in the theme. The highest

points were given to the statement that the respondent felt best described the state of the organization. Fewer points were given to statements that the respondent felt were less relevant.

The survey data was analyzed by classifying the statements presented in the survey according to each organizational type into clan, adhocracy, market and hierarchy cultures. The scores for each culture type were added together and then divided by six. This gave the average of the scores given to each culture type. This gave an overview of the current state and ideal state of the organization in terms of culture types. The responses were categorized in different ways. For example, the gap between the current state and the ideal state was analyzed by looking at which culture types had the largest deviations. This comparison provides insights into the areas where the organizational culture does or does not meet the desired ideal and helps identify potential areas for development. Responses were also grouped according to the performance of the projects managed, in order to examine whether different experiences of culture have an impact on project performance. The survey data can also be examined by interpreting individual respondents' perceptions of culture or, for example, by analyzing the emphasis on a single cultural area according to a single theme.

5.3.1.1 Interpretation of OCAI survey responses & limitations

The results were interpreted using Cameron and Quinn's (2006) competing values framework, which categorizes culture into four main types: clan, adhocracy, market and hierarchy. According to Cameron and Quinn (2006), for example, high scores in clan culture indicate community, emphasis on teamwork and a family-oriented atmosphere in the organization. High scores in adhocracy culture, on the other hand, describe innovativeness, flexibility and the ability to adapt quickly to changes. High scores in market culture indicate competitiveness, goal-orientedness and a focus on results, while high scores in hierarchy culture reflect systematicity, adherence to rules and the pursuit of efficiency. (Cameron and Quinn, 2006.) The survey responses thus reveal the dominant

cultural type in the organization and the features currently emphasized in the culture. At the same time, it is possible to assess how strongly a certain cultural type stands out in the responses. By examining the strength of a culture type, it is possible to assess how strongly a certain culture is rooted in the organization. This can be important, for example, in a situation where the culture wants to be developed in a certain direction. A culture that is more deeply rooted in operations is often more challenging and slower to change. In addition to the dimensions mentioned above, the survey responses can be analyzed for the compatibility of the assessments given by individuals, which provides a better understanding of how coherent the respondents perceive the cultural picture in the organization.

The survey asks respondents to give their views on the current state of their culture as they experience it, as well as on their desired ideal state of culture. Based on the responses, the differences between the current state and the ideal state are analyzed through the emphasis on culture types. This comparison can reveal areas where the culture is not aligned with the organization's goals or values. For example, if the current state emphasizes a hierarchical culture, but the ideal state emphasizes a clan culture, it can be concluded that the organization wants more community and team spirit. (Cameron & Quinn, 2006.) This interpretation helps to understand the development needs of organizational culture and its effects on, for example, leadership practices. If the survey is carried out several times over a longer period of time, it can be examined how organizational culture has developed and create interpretations of how it may change in the future (Coe, 2021).

The OCAI survey helps to interpret the current and desired state of organizational culture using an easy-to-use tool and offers many opportunities for cultural analysis. It allows for comparison of cultural experience between the current and desired state of different respondent groups and helps organizations identify various development areas and strengths. (Cameron & Quinn, 2006.)

In addition to the wide range of interpretation possibilities, the OCAI tool has limitations. The simple model is built on four different statements presented under six main themes, which directly affects the interpretability of the survey, ensuring that the interpretations are consistent with the perceptions of the participants in the study (Coe, 2011). The answers are not fully comparable if respondents feel that they are answering different statements. Interpretation challenges can arise especially in situations where the questionnaire has not been sufficiently adapted to a format familiar to the target group. (Vilkka 2021) For this reason, it is important that the wording of the statements is adapted to a language more familiar to the target group (Coe, 2021).

In addition to the interpretation challenges, the survey measures the respondent's experience of the organizational culture at the time of answering. Culture is dynamic in nature and changes over time (Schein, 2016). Personal interpretations of situations and different experiences can affect the respondent's emotional state at the time of answering, which may have a strong impact on the interpretation of the statements (Coe, 2021). Overall, the OCAI survey provides a good starting point for assessing organizational culture, but in order to gain a deeper understanding, an interview has been added to this study. This allows for a better understanding of the reasons and nuances behind the answers.

5.3.1.2 Reliability and generalizability of OCAI data

In quantitative research, reliability is examined by defining the reliability and validity of the research. They concern the operationalization of the phenomenon under study and its transformation into an empirically studyable form. When examining reliability, the question is whether the target phenomenon is studied reliably with the selected measures in such a way that the measurement situation, the measurer or random factors do not affect the research results. Validity, on the other hand, is used to determine whether the operationalized target phenomenon is measured without bias and

accurately. In addition, it is assessed whether the study studies exactly the phenomenon that is intended to be studied. (Sarajärvi and Tuomi, 2017.)

Because the OCAI survey sample was formed according to the individuals selected for the research interview, the sample is so small in terms of quantity that statistical testing or generalizability of the results to the entire population in the manner intended for quantitative research is not reasonable (Coe, 2021). In this context, it is important to note that studies conducted with a small sample cannot provide generalizable conclusions in the same way as large statistical samples. The reliability of the results is based not so much on statistical generalizability as on a deep understanding of the phenomena being studied. In this situation, the reliability of the research is assessed more according to qualitative principles, in which the depth, validity and reflection of the research are emphasized.

5.3.2 Analyzing interviews

This research proceeds deductively, starting from general theoretical material through a literature review to a more limited reality. The basic idea of deductive reasoning is to preserve the truth in the reasoning process as it progresses (Sarajärvi and Tuomi, 2017). For the analysis of the results, all interviews were recorded as video and transcribed, i.e. written down. During the transcription, the interview data was anonymized, and the interviewees were given identifiers that are used consistently in all transcriptions of the study (Hennink, 2020). The analysis of the research data is needed to observe, investigate and ultimately create a conceptual description of phenomena (Silverman, 2020). The interview data was analyzed by reflecting the answers given by the interviewees on the theoretical framework built in the literature review, utilizing content analysis. The goal of the analysis of the data is specifically to describe, interpret and understand the phenomenon under study. What is significant is that the researcher does not write from pure facts but rather seeks to open up a context in which his chosen topic occurs. (Silverman, 2020.)

Since the interviews aimed to understand the reality experienced by the interviewees from the research topics, content analysis offered a systematic method for structuring the data and identifying key themes (Schreier, 2012). Content analysis enabled the classification of the data and the identification of meaningful connections, which helped to understand how the interviewees constructed their understandings of the phenomenon under study (Hennink, 2020). In data-driven content analysis, the goal is to find some logic in the research data or, guided by the data, some typical narrative about the issue under study (Eriksson & Kovalainen, 2016).

The analysis of the interview data started by defining the focus of the study, i.e. what kind of logic of action or narrative was sought in the data. According to Schreier (2012), the first stage of the analysis is to specify the research problem and determine the focus, as it guides the processing of the data. After this, all parts of the data that were not relevant to the research questions were eliminated. According to Shreier (2012), a reduction process must be carried out on the data, in which irrelevant information is removed so that the analysis focuses on what is relevant. After the elimination, the data was divided into logical groups, which were named according to the content. Through this classification process, a new coherent structure was formed from the data, which was based on the theoretical framework of the study. In this way, the meanings and concepts that were central to the study could be extracted from the data. (Schreier, 2012.)

Data-driven content analysis was chosen to analyze the research interviews because it allows for an in-depth description of the meaning world of the research group and because the primary goal of the research is to understand the ways of action and thinking of the research subjects (Vilkka, 2021). This analysis method can be used to study how meanings are formed in different contexts of the data and how individuals' perceptions are linked to the topic under study. The emergence of meanings is a multi-stage process in which interpretations and the relationships between interpretations build perceptions that reflect deeper, cultural and personal dimensions (Schreier, 2012).

In addition to content analysis, discourse analysis was used to interpret the data, which aims to identify a frame of mind or social reality that can be reflected in the way people talk about things. It is based on the assumption that language, expressions and dialogue are deeply shaped by social understandings, expectations and wider social structures. (Hennink, 2020.) The central idea of discourse analysis is that people produce meanings with their language that form wider entities, or discourses (Coe, 2021). Discourse is not just language, but it is the use of language in a specific situation and context that reflects and shapes social practices (Rogers et al., 2016). In this study, all interviews were recorded in video format so that the research data could also be analysed from a holistic perspective during the analysis phase. Discourse analysis enabled the study of interaction in more detail, so that action and communication could be understood at different levels and emphasized the examination of different elements of interaction (verbal and non-verbal) in isolation (Coe, 2021). Transcription alone cannot convey all the nuances and contextual factors that influence the dynamics of a conversation. Since reality is not unambiguous, but consists of several parallel and sometimes even competing systems of meaning, discourse analysis aims to find out what recurring structures the phenomena under study take shape into. (Vilkka, 2021.)

5.3.2.1 Reliability and limitations of qualitative research

The reliability of a qualitative research method is not determined by quantity, but rather by the quality of the research (Silverman, 2021). The most important thing is that the information collected in the study is accurate and well suited to addressing the research questions. Good quality data produces reliable and useful results. This means that the same data can be very valuable for some research questions, but less useful for others. It all depends on how well it sheds light on the topic being studied. (Gronmo & Grønmo, 2023.)

In research practice, increasing objectivity is a concrete task that involves assessing the reliability and validity of the research. Reliability means that the research data are

accurate and comprehensive. Validity, in turn, refers to the fact that the claims made have been tested and their credibility has been verified. (Silverman, 2020.) In this study, the accuracy and comprehensiveness of the research data were ensured so that the data reflects the phenomenon under study in a sufficiently diverse manner and does not focus only on certain perspectives. Individuals were selected for interviews who represent the most typical and common cases in the research population. This approach minimizes the influence of individual special cases and enables the generalizability of the results to a broader context. Reliability was strengthened by utilizing a multi-method approach, in which a quantitative questionnaire served as a supporting tool for the whole and its results were confirmed with qualitative interviews. To ensure validity, accurate recording methods were used to minimize errors due to transcription during the analysis phase. In addition, the research process was recorded in detail and ultimately tied to previous theories, which increased the transparency of the research.

There is some debate in the evaluation of qualitative research about whether it can be referred to as reliability. It has been argued that the concept of reliability is not relevant or useful in assessing the quality of qualitative data (Marshall et al., 2021; Sarajärvi and Tuomi, 2017). Instead, it has been argued that credibility would be a better term than reliability (Marshall et al., 2021; Gronmo & Grønmo, 2023). Credibility refers to the extent to which readers of a study accept the results of the study as true and trust them (Sarajärvi and Tuomi, 2017). This means that ultimately the criterion for reliability is the researcher himself and his actions, choices and decisions during the study (Hennink, 2020; Vilkkä, 2021).

Gronmo & Grønmo (2023) examine reliability from four perspectives, which are stability, equivalence, and internal and external consistency. **Stability** means that the research results remain consistent over time. Vilkkä (2021) reminds us that the practical repeatability of qualitative research and the theoretical repeatability of the research text are two different things. Data are not credible if they are based purely on the researcher's subjective assessment or on random circumstances that occur during the

research process. The researcher's interpretations are always linked to a specific context in which the data collection process takes place. Approaches and procedures are adapted to this context. In practice, it is therefore impossible to conduct independent data collections based on exactly the same procedures (Gronmo & Grønmo, 2023).

Correspondence refers to the fact that different researchers make similar observations about the same circumstances (Gronmo & Grønmo, 2023). During the analysis phase, the results of the study were continuously compared to the existing literature within predefined reference frames. The analysis found similarities with previous studies, especially when reflecting the effects of organizational culture on organizational performance. This confirms that the phenomenon under study appears similar regardless of who analyzes the data, which increases the reliability of the study.

Internal consistency ensures that the different parts of the study, such as the data and the analysis, support each other (Gronmo & Grønmo, 2023). To ensure this, the analysis phase of the study assessed whether the interpretations made of the data correspond to the research objectives and research questions. The analysis methods were also chosen so that they support the research objectives within the chosen framework. At the same time, it was ensured that the conclusions are based consistently on the research data and not on individual, isolated observations (Gronmo & Grønmo, 2023).

External consistency, on the other hand, assesses how well the results of the study are in line with previous knowledge (Gronmo & Grønmo, 2023). This study utilized multiple data sources, which allowed for a broader comparison with existing literature and research data.

In addition, the research process used in the study may affect the individuals or groups being studied in such a way that their behavior during the study deviates from their usual behavior. In this case, the information obtained by the researchers is not necessarily accurate and reliable. This problem is called reactivity. (Gronmo & Grønmo, 2023.) This

reactivity was attempted to be reduced by conducting the interviews flexibly according to the participants' schedules and in a confidential atmosphere. In the interview situations, openness and the anonymity of the participants were emphasized so that the participants felt that they could speak freely. In addition, the researcher's influence was minimized by asking the questions neutrally and giving the respondents space to express their own views without guidance. (Gronmo & Grønmo, 2023.)

6 Research results and analysis

This chapter examines the results obtained from the research material and analyses the characteristics of the cultural profile formed based on the results. The purpose of examining the results is to form an understanding of the current state of culture in the target organization from the perspective of project managers. In addition to the current state of culture, the project managers' wishes for the emphasis of different types of culture are examined. When analyzing the results, the aim is to understand the reasons for the wishes for cultural change and to reflect the observations arising from this on the effectiveness of project management.

6.1 Assessing the general cultural profile

The first phase of the study examined the organization's general cultural profile based on the results of the OCAI survey. The analysis provides a picture of the current state of the organization's cultural profile, which serves as the basis for the study. The cultural profile aims to identify which cultural types are currently emphasized in the organization's operations. The survey results also reveal the wishes of the interviewed project managers for the development of organizational culture. By examining cultural characteristics in more detail, it is possible to identify the strengths and areas for development of the organization's operations in relation to its strategic goals and to assess how well the organization's current culture supports the goals and practices of project management.

Table 3 below presents the averages of all responses according to the different types of organizational culture. The table shows the scores received by the culture types based on the current state and the desired state. The table also describes the change between the current state and the desired state, which reflects the respondents' views on how culture could better support their work. In the table, the culture type with the highest average response is marked in green and the one with the lowest average in blue. Figure

9 shows the current cultural profile prevailing in the organization in a radar chart, which visually illustrates the emphasis of the four different culture types.

All respondents				
	CLAN	ADHOCRACY	MARKET	HIERARCHY
Current state	22.125	14.750	35.375	27.625

Table 2. Cultural profile based on the averages of all responses.

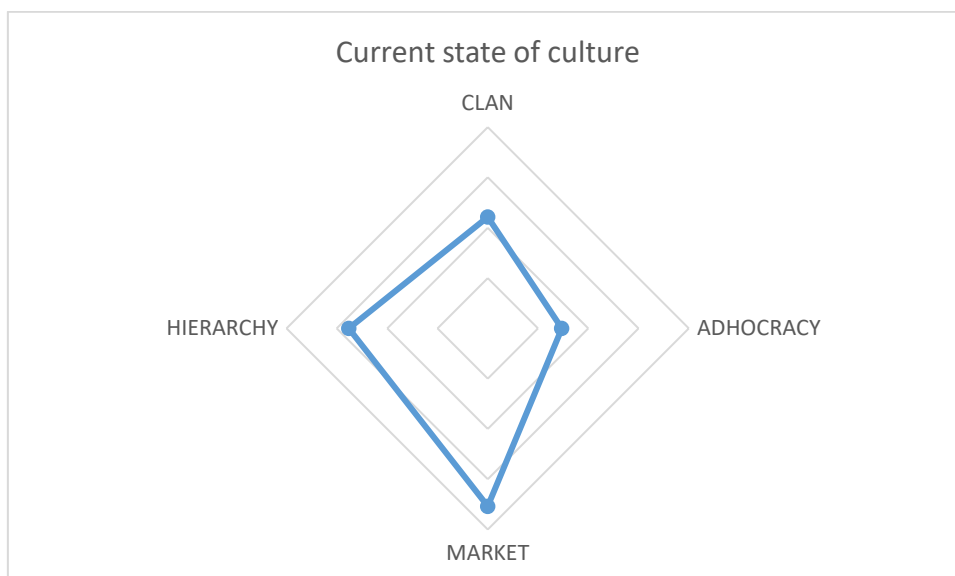


Figure 11. Described as the organization's current cultural profile.

Based on the responses, the current cultural profile of the organization clearly focuses on market culture (35.375) and hierarchical culture (27.625). This suggests that the organization's culture emphasizes competitiveness, efficiency, and results. Hierarchical culture supports operations by providing structural stability and control. Both cultural profiles have in common the achievement of goals and strongly structured operations. Operations are strongly directed towards measurable results. Market culture emphasizes market shares and productivity growth, and hierarchical culture emphasizes efficiency and process stability. (Cameron & Quinn, 2006). A culture that is well-controlled and emphasizes systematic methods of operation supports the organization's ability to achieve the goals set for it.

In the interview data, project managers described the organizational culture as *results-oriented, demanding, forward-looking, precisely organized, and efficient*. This confirms the emphasis on market and hierarchy cultures in the organizational culture that emerged in the OCAI survey. In addition, every response in the interview data also highlights the fact that people are cared about and demanded of them, because they want to help them grow as professionals. This combination of caring and demandingness suggests that the organization strives not only to achieve results but also to develop its personnel. Caring and personnel development are features of a clan culture. Clan culture was not emphasized in the OCAI survey responses in the current state of the organization, but received clearly the lowest scores in the survey. It is possible that clan culture acts as a complementary element alongside market and hierarchy cultures.

“The company emphasizes from day one that there is an opportunity to progress and grow; I believe that many people grow professionally. A truly educational place to work for those in this field.” (Interviewee 8.)

“This is a place where you can develop a lot. It takes people forward. That [development] is encouraged and then there is the achievement of goals and the production of results that come with it. It can be a bit strict about the results sometimes. It is required, but at the same time it is also encouraged and supported so that people develop at the same time.” (Interviewee 6.)

In addition to the characteristics typical of market and hierarchical cultures, the interview responses highlighted nuances of clan culture. Although clan culture did not emerge as prominently, it is important to note that the responses highlight characteristics that support individual growth and community. For example, *honesty, reliability, openness, courage and encouragement* are mentioned by project managers as highly valued practices in the organization. One respondent highlights good energy and justifies his answer by saying that *“if you don’t have good energy, no one will listen to you and you won’t provide a good working environment for your colleagues.”*

In summary, based on the observations raised, it can be stated that the target company represented by the project managers who participated in the study has a strong market culture. The market culture is supported by a strong process focus, which also builds the current culture type in the direction of a hierarchical culture. The project managers feel that the demandingness typical of a market culture stems from strong mediation, so the cultural profile also shows a significant proportion of the characteristics of a clan culture, although it clearly has a lower weight in the OCAI profile.

6.1.1 Comparison of different dimensions of culture

Examining the dimensions of culture provides a more detailed understanding of how an organization's culture influences its operations, leadership, and strategic choices. For the purposes of this study, it is important to seek to understand more fully why project managers act in a certain way, what challenges and opportunities they face, and how organizational culture can support or hinder the success of projects.

The table 3 below shows the scores collected from the project managers' responses for the different dimensions of culture. The culture type with the highest average response is marked in green and the lowest scores are marked in blue.

ORGANIZATION CULTURE - CURRENT STATE

	Dominant characteristics	Organizational leadership	Management of employees	Organization glue	Strategic emphases	Criteria of success
Clan	23.750	23.125	29.125	14.250	23.375	19.375
Adhocracy	14.375	13.125	10.875	15.875	17.625	16.875
Market	33.125	35.625	35.375	38.875	37.000	32.500
Hierarchy	28.750	28.125	24.625	31.000	22.000	31.250

Table 3. Assessment of the ratings given by project managers through the different dimensions of culture.

Scoring the different dimensions of culture highlights that market culture is significantly dominant in every dimension of organizational culture.

The dominant characteristics of the organization (33.125) reflect how project managers perceive the general nature of the organization and what values are considered central in the organization (Cameron & Quinn, 2006). Project managers see the organization primarily as *results-oriented*, *competitive* and *efficiency-oriented*. The results-oriented, competitive, efficient, and fast-paced nature of market culture is clearly emphasized in the project managers' responses. For example, the statements "*results-oriented is at the forefront*", "*a positive competitive spirit is valued*," and "*the perspective of customer benefit*" indicate that the organization's operations value clear goals and their achievement, as well as a quick response to environmental demands.

"Speed and the kind that allows you to quickly complete the tasks assigned to you, but nevertheless, quality of work – that is appreciated and required. Systematic, quality work that produces results." (Interviewee 8.)

Organization glue (38.875) examine the forces that exist within an organization that unite employees and the organization (Cameron & Quinn, 2006). The results of the OCAI survey confirm the project managers' experience that internal cohesion is primarily based on goals, competitiveness, and efficiency. The responses in the project managers'

interviews also emphasize features characteristic of a market culture. In the project managers' responses, successes are often linked to the achievement of a concrete goal. In addition, the responses highlight that the daily joint discussions of the entire team systematically review the status of the scoreboard in relation to the set goals. These successes tied to goals and concrete results are celebrated visibly in the organization and are described as having a strong impact on the project managers' motivation to succeed in their work.

The findings are reinforced, for example, by the verbal descriptions of project managers about how they are measured in project management. In the organization, **criteria of success** (32.500) are primarily defined through financial and performance-related indicators. The responses emphasize weekly results in relation to goals, internal efficiency indicators, and customer satisfaction in the form of NPS figures. This supports the perception that the organization values the characteristics of a market culture, such as measuring results and achieving goals. Shared measurement systems, strong goal setting, and strong effort towards goals serve as a common ground between employees.

“Depending on the effectiveness of the projects, quite a lot; how well customer satisfaction is achieved and of course also according to customer satisfaction, e.g. based on NPS figures” (Interviewee 6.)

“Projects are reviewed weekly in light of figures, e.g. whether they meet customer promises, what is efficiency, hourly revenue” (Interviewee 5.)

The assessment of work success based on performance and efficiency is also strongly reflected in the OCAI survey in the management of the entire organization (35.625) and in the assessment of employee management (35.375). Project managers say in interviews that they have weekly discussions with their superiors about project-specific results and plans for how to improve results. The organization's management system guides continuous improvement of results so that strategic guidelines typical of a market culture (37.000) can be implemented by management.

A characteristic of market culture is that superiors evaluate success based on performance and efficiency (Cameron & Quinn, 2006). This type of leadership requires employees to have the qualities described in interviews by project managers, such as *initiative, solution-orientedness, competitiveness, and high stress tolerance*.

" Every week, we have a project review with our supervisor, where we review the previous week's project figures. We go through the results of the projects and if things haven't gone well, we think about what action points we can use to achieve better results next week." (Interviewee 7.)

"The fact that we prioritize results: other tasks often have to be put aside [if more results are needed]." (Interviewee 3.)

The second strongest cultural profile in the OCAI survey was found to be a hierarchical culture. Its emphasis is particularly evident in the organization's glue (31,000) and the criteria of success (31,250).

In an organization, criteria of success are primarily defined by market culture through financial and performance-related metrics. In the OCAI survey, when asked about success factors, hierarchy culture was only slightly less emphasized than market culture. This suggests that in addition to performance, organizational success factors are also defined by systematic operation, adherence to standards, and control, as project managers described in their interview responses.

"A person who follows processes is a great thing. And that's when you reach your minimum standards." (Interviewee 5.)

"That we have clear processes and that they are followed. Also that there is a reliable employee." (Interviewee 1.)

" Following the basic rules and, as a bridge to that, being on time." (Interviewee 2.)

The project managers' responses highlight the strong systematicity, adherence to rules, and appreciation for precise action typical of a hierarchical culture.

Project managers describe that the organization values when *“work is done systematically.”* Adherence to processes and rules is highlighted in several responses. One respondent emphasizes that *“a process has been created for almost everything – and everyone knows what they have to do, what is expected of them, and how it is done.”* Although, in accordance with market culture, the unity of the organization is strongly built around goals and results, the characteristics of a hierarchical culture support unity through rules, processes and structures.

6.2 Comparison of the current state of culture and the desired state – implications for project management

In the OCAI survey, respondents were asked to rate their current cultural experience as well as their desire for the organization's culture. Examining the current state and the target state helps to better understand employees' needs, satisfaction, and desires for the direction of culture. It reveals the extent to which the current culture supports project managers in managing projects, maintaining high performance, and achieving successful project outcomes. At the same time, it provides an opportunity to consider whether changes in culture are necessary.

	Dominant characteristics	Organizational leadership	Management of employees	Organization glue	Strategic emphases	Criteria of success	Total
Clan/current	23.750	23.125	29.125	14.250	23.375	19.375	22.167
Clan/target	31.875	31.250	35.000	24.375	29.375	28.750	30.104
Change	8.125	8.125	5.875	10.125	6.000	9.375	7.938
Adhocr/current	14.375	13.125	10.875	15.875	17.625	16.875	14.792
Adhocr/target	23.750	20.000	20.250	23.750	24.375	22.500	22.438
Change	9.375	6.875	9.375	7.875	6.750	5.625	7.646
Market/current	33.125	35.625	35.375	38.875	37.000	32.500	35.417
Market/target	23.750	23.750	22.250	28.750	25.000	25.000	24.750
Change	-9.375	-11.875	-13.125	-10.125	-12.000	-7.500	-10.667
Hierarc/current	28.750	28.125	24.625	31.000	22.000	31.250	27.625
Hierarc/target	20.625	25.000	22.500	23.750	21.250	23.750	22.813
Change	-8.125	-3.125	-2.125	-7.250	-0.750	-7.500	-4.813

Table 4. Project managers' responses in different dimensions of culture.

The responses to the OCAI survey show that project managers want a fairly strong change in the culture of the organization. Currently, the culture is strongly dominated by market culture. In the will state, the project managers' responses are most strongly dominated by clan culture. This suggests that they want more cooperation, community and support in the organization. Correspondingly, they want less market culture. However, it is also significant that market culture is ranked second highest in the will state, ahead of adhocracy and hierarchy cultures.

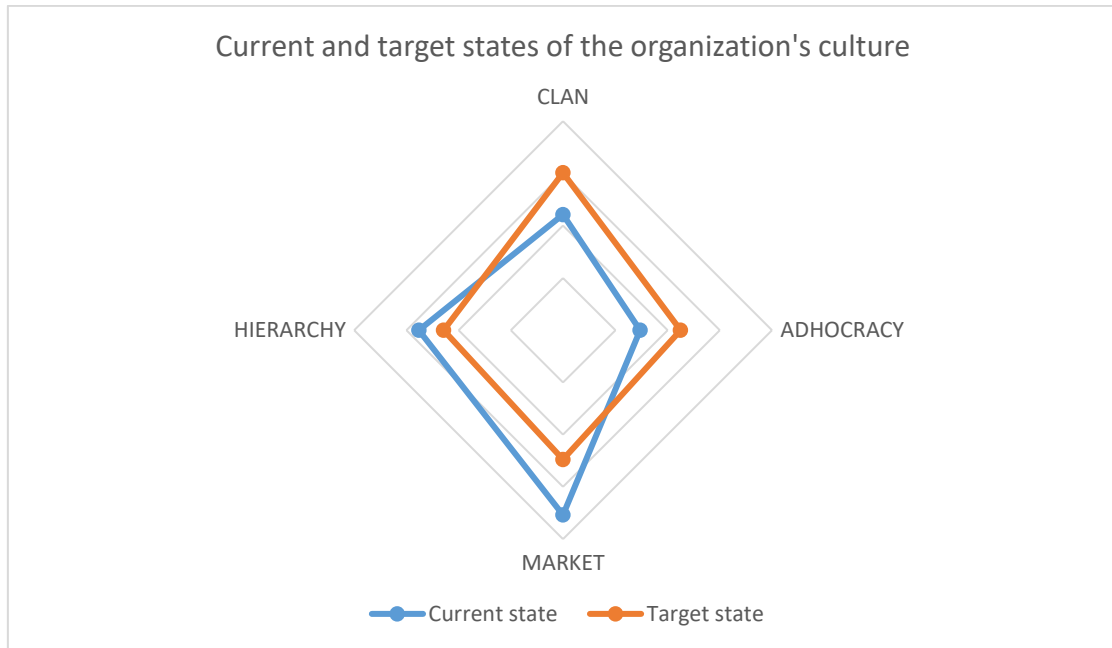


Figure 12. Current state/target state comparison.

The figure above shows how the cultural profile is drawn between the current and desired state. While the current state is more strongly dominated by market and hierarchy cultures, the cultural profile described in the desired state is more even across different cultural types. Cameron & Quinn (2006) have noticed that over 80% of organizations have developed a dominant cultural type. Otherwise, the cultural profile of organizations is usually unclear or evenly distributed among each of the four different cultural types. A cultural profile that is evenly distributed among all four different cultural types is not realistic, as it would cause the organization to lack identity and common direction. It would also lead to unclear strategic priorities, inconsistent decision-making, and thus to conflicts and inefficiency in everyday operations. The basic idea of Cameron & Quinn (2006) is that an organization must build a clear cultural core that can borrow features from other cultural types.

The desired culture that emerges in this study clearly emphasizes clan culture (30.104). The change from the current state is significant (+7.937). In the current state, clan culture features are the second least emphasized in the overall culture profile. The strengthening of clan culture in project managers' wishes suggests that project managers value

community and cooperation. When interviewing project managers, many indications emerged that the organization already has many clan culture features. Clan culture features emerge as activities that support project management, so the project managers' wish to strengthen clan culture may be related to the fact that clan culture features, such as community, open information sharing and teamwork, are perceived as key factors for success in project work. Project managers describe that there is a *sparring atmosphere* among other project managers in the organization. Tips for solving different situations are shared among other project managers at a low threshold. The importance of mutual cooperation between project managers is particularly strengthened by the significant increase in the internal unifying factors within the organization (+10.125) in the cultural will state.

*"Such helpfulness has really helped a lot; you never have to struggle with problems alone. You can have discussions with more experienced colleagues, for example, about what to do in different matters if it's your first time encountering a situation."
(Interviewee 8.)*

Project managers also describe their superiors as approachable. They feel that they can easily get help and support from their superiors when needed. Close cooperation with their superiors is also felt to be important in the future and is hoped to continue to strengthen (+5.875). In the future, however, project managers hope that their work will be assessed in other ways in addition to purely numerical performance indicators. In the cultural success factors, the emphasis on clan culture strengthened significantly (+9.375), which suggests that the current performance indicators do not fully meet the project manager's needs for measuring the success of the work. The significant strengthening of clan culture in the criteria of success shows that project managers hope that in the future, the project manager's personal contribution to promoting teamwork, helping team members and the ability to promote general cooperation in different sectors will be taken into account when measuring work.

The strengthening of the clan culture is also partly explained by the fact that its features emerged significantly in the interviews when the respondents described what their own values guide their work as project managers. Four different themes were strongly emphasized in the responses: community and teamwork, openness and honesty, a positive atmosphere, and personal support. The project managers emphasize that they want to be “*easily approachable*” and “*helpful*” towards their colleagues. They want to create an “*open and trusting working atmosphere*” where everyone feels “*comfortable*”. The support received and given from colleagues is also important. These descriptions of what kinds of values and practices the project managers themselves consider important in their own work strongly reflect the features of the clan culture. Consequently, it is natural that they would also like similar activities to take place more widely in the organization. In particular, the increase in organization glue (+10.125) in the cultural target state suggests that project managers experience the fluidity of the project manager's work in a culture that emphasizes community and collaboration. Deschenes (2024) has stated that when an employee's own values match those of the organization, a sense of compatibility and relevance is created.

As clan culture strengthens, the emphasis on market culture decreases significantly (-10.625). The simultaneous strengthening of clan culture suggests that employees are longing for softer and more communal forces to guide their everyday work. The result suggests that the competitive spirit and strict focus on results of market culture are not considered as desirable in the future. The current market culture prevailing in the organization is sometimes experienced as *challenging* and even *stressful*.

Market culture still maintains the second highest position in the will state, so its features are still considered important by project managers. High performance, goal-orientedness and performance-orientedness are still important themes, but they do not want to be the most dominant features of the culture in the future. Project managers say that they consider goal-orientedness and competitiveness to be important values in their work. In their interview responses, many project managers emphasized the importance

of the success of both their own projects and those they manage to themselves. In addition, competitiveness and customer orientation were visible in the responses. They still want to produce high-quality services for customers efficiently. This indicates that project managers are still committed to a performance-oriented way of working. These responses partly explain why market culture still maintains the second strongest position in the will states of project managers.

However, the desired change in market culture (-10.667) is the largest of all cultural dimensions in relation to the current state. The interview data highlights the stress brought by a focus on results and high demands, when people's well-being seems to be secondary in a results-oriented work environment. Results-orientedness was sometimes described as "*dominating everything, causing the person to be forgotten*". When humanity and people's well-being are forgotten, the attractiveness of market culture decreases in the eyes of project managers. Panahi (2016) has stated that various value conflicts between the individual and the organization weaken, among other things, employee commitment and significantly affect the effectiveness of the organization. The decline in market culture is particularly visible in the dimension of work management (-13.125) and in the change in internal unifying factors (-10.125). This strongly suggests that the current market culture focuses too much on performance and productivity, and a strong change is desired among project managers.

Another significant factor in the decline in the emphasis on market culture is *the unrealistic expectations* described by project managers regarding the results promised to the client. Too much pressure and too much responsibility can weaken work motivation when achieving goals is seen as impossible from the start. Project managers hope for a significant change in market culture, especially in terms of organizational leadership (-11.875) and strategy (-12.000). The decline in results in the will state is explained by the more examples of communication challenges and lack of empathy in feedback situations that emerged in the interview responses. Especially in situations where things do not go as planned, it was felt that communication could be "*unprofessional*" or "*deficient*". This

weakens team spirit and reduces trust within the organization. When a market culture strongly emphasizes results, individual needs can take a back seat. This can lead to dissatisfaction and weaken the atmosphere of the work community. For these reasons, project managers seem to favor a culture that takes into account *humanity, community and employee well-being*.

"For example, what was described earlier, you only saw the results and it was all over the place that you were talking to another person who wanted the same things as you, but only the result was seen there." (Interviewee 8.)

"There's a lot of talk about it [communication], but how things are presented in everyday life is not always in line with what is taught." (Interviewee 3.)

In addition to market culture, a moderate decrease was also expected for the characteristics of hierarchy culture (-4.750). Project managers want less rigid structures and inflexible decision-making based solely on rules. Deep-rooted structures and rigid processes are perceived by respondents as challenging for effective project management. Respondents describe that project managers' working days "*are very carefully planned and there is little flexibility during the day*". Inflexible operating methods make it difficult to react to changing situations, which are very typical in project management. Strict division of labor and adherence to pre-agreed processes sometimes lead to situations where performance is expected without sufficient consideration of the project managers' skills, resources or overall workload. It is typical of hierarchical culture that individual and case-specific situations are not understood and examined in a sufficiently diverse way. The desire for change towards the hierarchical culture is particularly evident in the decrease in organizational characteristics (-8.125), which reflects the desire for a change in the overall culture of the organization towards a more flexible model.

"As a project manager, you must be efficient and accessible while at the same time focusing on your main task." (Interviewee 8.)

"There are many moments when you are told that something needs to be done, but you don't think about whether you can or have the resources or know-how to do it." (Interviewee 2.)

"Sometimes it has felt like it's not understood enough, that it can't be stretched everywhere." (Interviewee 9.)

At the same time, the organization's structure and strong processes are even considered a good thing. One respondent states that the processes prevailing in the organization have *"even made project management clearer."* In addition, regular project sessions with superiors and weekly project management practices support project management in, for example, decision-making, systematicity and time management. Similarly, the results-oriented operating methods and operating models that are strengthened in the combination of market culture and hierarchy culture are simultaneously perceived as good activities that guide work in the right direction.

"When reviewing projects, he does his own analyses, but the underlying idea is always that they want to develop me as an expert and what should be done here and when the situation arises next time, he knows how to do it." (Interviewee 8.)

"When the numbers are closely monitored and there is a weekly goal, it is much easier to act as a project manager." (Interviewee 1.)

Strong structure and strict processes were perceived as a factor that reduced initiative and creativity. Although the adhocracy culture remains the least dominant aspect of the cultural profile in both the current and the intended state, project managers hope to bring more of this culture's features into the organization's everyday life (+7.646). This may reflect the need to develop the organization to be more agile and enable more creative problem solving and a culture of experimentation in project work. Project managers hope to have more opportunities to influence and make decisions more independently.

"When there are always certain ways of doing things, there is not always room for initiative or creativity to come up with better ways of doing things that could work." (Interviewee 6.)

"Everything has to be verified and asked - it sometimes also slows down the process." (Interviewee 4.)

When viewed in the overall picture, the greatest wishes for change in the cultural dimensions fall on employee management, where the characteristics of the adhocracy culture are hoped to be strengthened (9.375) and the characteristics of the market culture are hoped to be lowered (-13.125). Strengthening the adhocracy culture in employee management reinforces the previously mentioned willingness to lighten traditional hierarchical management models. Project managers hope for more *trust, self-direction* and a *lower decision-making hierarchy* in the future. In addition, the organization hopes for more space for its own decision-making and for trying out new solutions and ideas.

It is clear that there is a desire for a cultural shift from a more competitive environment towards a more communal one. The data shows that the emphasis on market culture and hierarchy culture is decreasing, while the importance of clan culture and adhocracy is increasing. The results of the study also show some contradictions in terms of project managers' wishes, descriptions and states of will in different dimensions of culture.

6.3 The impact of culture on project success

This chapter examines the possible effects of organizational culture experience on project management and performance. For the purpose of the analysis, respondents were divided into two groups based on the internal performance measures of the projects they led, into lower and higher performance groups. Respondents in **Group 1** led higher-performance projects and respondents in **Group 2** led lower-performance projects. This allowed the responses to be interpreted through two control groups. One respondent was excluded from the comparison because the project he led differed significantly from

the projects of the other respondents and was therefore not fully comparable for the group analysis. Finally, the control groups were divided so that Group 1 had three respondents and Group 2 had four respondents.

	CLAN	ADHOCRACY	MARKET	HIERARCHY
Group 1	16.833	11.250	26.875	20.042
Group 2	17.656	10.781	24.719	21.875
Difference	-0.823	0.469	2.156	-1.833

Table 5. Comparison of organizational culture dimensions between Group 1 and Group 2.

The results of the OCAI survey quickly show that both groups emphasized the same priorities in the current state of culture. Both groups felt that the characteristics of market and hierarchy cultures are emphasized in the organization's culture. The figure 12 (below) shows that the cultural profile descriptor is structured in almost the same way in both groups. However, small differences can be distinguished in the emphasis of the different culture types. The key point is that respondents in group 1 emphasize market culture more and hierarchy culture slightly less in their answers than respondents in group 2. From this, it can be concluded that in group 1, it is felt that the culture emphasizes results-orientation, performance and efficiency more strongly. They describe in their responses that *“achieving goals”* and *“results-orientation”* are valued characteristics in the organization. Instead, group 2 emphasizes *“courage”*, *“acting according to the rules”* and *“initiative”* more than competitive spirit in their answers, which is reflected in the slightly stronger emphasis on hierarchical culture when examining the current state of culture.

When project managers were asked to describe the values of the organization, both groups highlighted *people-centeredness* and *individual development*. *Speed*, *efficiency*, and *strong processes* were also mentioned in the responses of both groups. However, differences were found between the responses of the groups in how the project managers experience the values to be visible in the organization's everyday life. In their responses, Group 2 emphasizes more conflicts between their own personal values and the

values and operating models that prevail in the organization and are considered to be valued by the project managers who lead projects in Group 1. It is noteworthy that value conflicts between the organization and the individual weaken the organization's unity and commitment to common goals (Panahi, 2016). This, in turn, has a negative impact on the development of employee motivation and organizational performance.

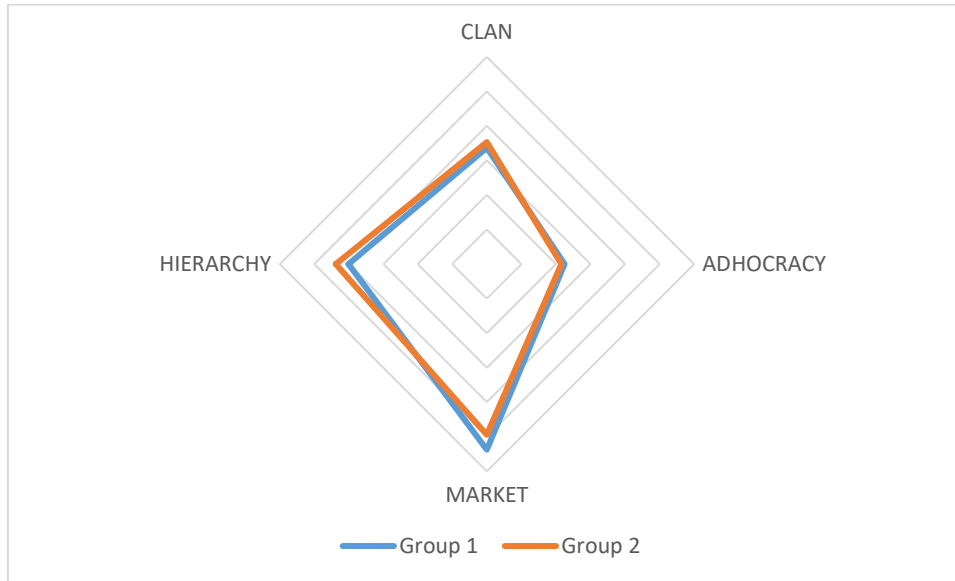


Figure 13. Cultural target states by groups.

When looking at the overall picture of the cultural intent state, there are no major differences between the groups in the emphasis on the culture types in the OCAI score. Figure 12 shows in more detail that the culture descriptors are close together. In both groups, the emphasis on market culture is expected to decrease by the same amount. This indicates that both groups experience the current competitive and goal-oriented culture as too dominant and hope for a significant change in it in the future.

During the interview phase, project managers were asked what values guide their work. The responses from both groups clearly contained the same elements: Both groups emphasize *honesty, reliability, quality, goal-setting* and *fulfilling customer promises* as the values that guide their own work. Based on the answers given in the interview, it can be seen that both groups have a high work ethic and a desire to achieve good results.

However, a closer look gives us indications of how the experience of organizational culture can affect project management and project performance. Table 6 below details the differences between the groups.

Group 1				Group 2			
	current	target	change		current	target	change
Clan	22.444	31.111	8.667	Clan	23.542	29.792	6.250
Adhocracy	15.000	21.500	6.500	Adhocracy	14.375	23.125	8.750
Market	35.833	26.000	-9.833	Market	32.917	23.125	-9.792
Hierarchy	26.722	21.667	-5.056	Hierarchy	29.167	22.917	-6.250

Table 6. Differences between groups in the OCAI survey.

Both groups also hope to reduce the features of the hierarchical culture. Group 2 emphasizes change slightly more strongly than Group 1. Although the difference between the groups is not large (1.194), a closer look shows notable differences between the groups. Group 2 values the current state of the hierarchical culture much more strongly (+2.445). In other words, they experience the features of the hierarchical culture in their current state much stronger than Group 1. The interviews show that Group 2 experiences the rigidity and controlling influence of the hierarchical culture as challenging project management more than Group 1. In Group 2, every respondent mentioned to some extent that they experience inflexible operating models and high demands on the amount of work to be done as challenging for project management. Sometimes, project managers in Group 2 experience these demands as contradictory. According to the answers, respondents in group 2 feel that there is *not enough time* at work to implement project management measures, when they would have to perform other work tasks at the same time. In contrast, the corresponding answers in group 1 focused more on solving *new and challenging situations* and on concerns about *achieving a high-quality end result* and whether their *own competence is sufficient*. Group 2 clearly experiences the features of the hierarchical culture more strongly and as a greater challenge in their own everyday life than group 1. For this reason, group 2 probably hopes for a greater change in the hierarchical culture and hopes that the culture will change more towards flexibility, innovation and more independent decision-making in the future. Correspondingly, this

is also reflected in the greater emphasis on the adhocracy culture in group 2's answers. Currently, there is only a small difference between the groups in their experience of the adhocracy culture, but group 2 hopes that it will strengthen in the future clearly more than group 1.

In both groups, the characteristics of clan culture are hoped to be strengthened in the organization in the future. It is significant that in the current state, group 1 gives fewer points to clan culture (22.444) than group 2 (23.542). In contrast, in the target state, group 1 gives more points to clan culture (31.111) than group 2 (29.792). Both groups hope for clan culture to become the dominant culture type in the organization in the future, but group 1 clearly emphasizes it more. Project managers in group 1 hope that in the future, *cooperation*, *community* and *team spirit* would be valued more in the organization. They experience the results-oriented and goal-oriented culture of market culture as stronger. This is reflected, for example, in how they describe how their work is measured. Project managers in group 1 emphasize *customer-centricity* and *goal-orientedness*, while project managers in group 2 emphasize *cooperation* and *planning*. The interviews also reveal that project managers in group 1 would like more support for project management. One respondent describes that the organization often throws people "*straight into the deep end without any buoyancy aids.*" Another respondent describes that when faced with new situations, they do not necessarily know "*who to ask for help.*" This may indicate that project managers in group 1 are used to solving challenges independently and have done well at it, but clearly need a stronger support network to solve everyday challenges. McGregor & Doshi (2024) highlight in their study that many companies focus only on building cultures that focus on managing poorly performing units and employees, which means that cultures based on high performance can encounter problems, for example, in developing talents and motivation.

6.3.1 Examining the dimensions of culture

To enable a more detailed analysis of the cultural experience between the groups, it is also worth examining the responses from the perspective of the cultural dimensions. The statistics below (table 7 and table 8) illustrate the responses of groups 1 and 2 for each cultural dimension. A more detailed examination enables a deeper comparison and the formation of conclusions. Although in the overall picture the experience of culture between the groups seems to be quite similar in both its current and desired state, an examination of the cultural dimensions quickly reveals more significant differences between the groups. When examining the different dimensions, it is noted that group 1 hopes for significantly greater changes in the different dimensions of culture than group 2.

Group 1

	Dominant characteristics	Organizational leadership	Management of employees	Organization glue	Strategic emphases	Criteria of success	Total
Clan/current	20.000	21.667	32.667	16.333	24.000	20.000	22.444
Clan/target	30.000	31.667	35.000	26.667	31.667	31.667	31.111
Change	10.000	10.000	2.333	10.333	7.667	11.667	8.667
Adhocr/current	15.000	15.000	10.667	17.333	13.667	18.333	15.000
Adhocr/target	25.000	20.000	19.000	23.333	21.667	20.000	21.500
Change	10.000	5.000	8.333	6.000	8.000	1.667	6.500
Market/current	31.667	35.000	37.667	40.333	38.667	31.667	35.833
Market/target	25.000	23.333	26.000	30.000	26.667	25.000	26.000
Change	-6.667	-11.667	-11.667	-10.333	-12.000	-6.667	-9.833
Hierarc/current	33.333	28.333	19.000	26.000	23.667	30.000	26.722
Hierarc/target	20.000	25.000	20.000	21.667	20.000	23.333	21.667
Change	-13.333	-3.333	1.000	-4.333	-3.667	-6.667	-5.056

Table 7. Group 1's responses on the state of culture.

Group 2

	Dominant characteristics	Organizational leadership	Management of employees	Organization glue	Strategic emphases	Criteria of success	Total
Clan/current	28.750	26.250	28.750	13.750	23.750	20.000	23.542
Clan/target	35.000	31.250	35.000	22.500	27.500	27.500	29.792
Change	6.250	5.000	6.250	8.750	3.750	7.500	6.250
Adhocr/current	12.500	11.250	10.000	16.250	20.000	16.250	14.375
Adhocr/target	22.500	20.000	21.250	23.750	27.500	23.750	23.125
Change	10.000	8.750	11.250	7.500	7.500	7.500	8.750
Market/current	31.250	32.500	32.500	35.000	32.500	33.750	32.917
Market/target	22.500	22.500	20.000	28.750	25.000	26.250	24.167
Change	-8.750	-10.000	-12.500	-6.250	-7.500	-7.500	-8.750
Hierarc/current	27.500	30.000	28.750	35.000	23.750	30.000	29.167
Hierarc/target	20.000	26.250	23.750	25.000	20.000	22.500	22.917
Change	-7.500	-3.750	-5.000	-10.000	-3.750	-7.500	-6.250

Table 8. Group 2's responses on the state of culture.

When examining the dominant features of culture, it is observed that the change wishes of both groups are quite in line with each other. Group 1 wishes for greater differences between the different cultural types in the current state than Group 2. What is significant for both groups is that, with regard to the adhocracy culture, the change wishes are focused on the dominant features of culture, which refer to the features of cultural values that dominate the organization's practices and operating methods. Both groups hope for the same amount of change in this area in the future (+10.000). Group 1 gives a higher weight to the adhocracy features as a whole (25.000). Both groups hope that in the future, flexibility, creativity and self-direction can be added to the dominant features of the organization's culture. This will be as important to both in the future as the competitive and goal-oriented cultural features typical of market culture, as both groups emphasize these cultural types in the dominant features of the future to the same extent. Group 1 gives both market and hierarchical culture a weighting of (25.000) and group 2 (22.500).

The biggest difference in this cultural dimension is that group 1 wants a greater change to the hierarchical culture (-13.333) than group 2 (-7.500). Basically, this means that in group 1, the features of the hierarchical culture in the current state are perceived as particularly strong (33.333) compared to group 2 (27.500), and both groups emphasize the hierarchical culture equally in their wishes for change (20.000).

Although both groups want a major change in the dominant culture of the organization in order to reduce it, the emphasis on hierarchical culture in the leadership of the organization rises to the second highest position in the responses of both groups (Group 1: 25.000 & Group 2: 26.250). Although both groups want to reduce the emphasis on hierarchy in the dominant culture of the organization in general, it may still be necessary to maintain certain basic structures and roles in leadership practices so that decision-making and the division of responsibilities remain functional. This may also be experienced as safe, as clearly defined common ways of acting and a policy implemented in the organization to follow culturally consistent practices increase the sense of security experienced by the individual and clarify his or her own role in everyday life (Schein, 2017). When practices are clear, efficiency also increases (Graham et al., 2022). The wishes between the groups in organizational leadership differ from the greater wish of group 1 to increase the features of clan culture (10.000). In the target state, both groups emphasize the features of clan culture to almost the same level, but group 1 experiences the culture of community and cooperation as having a lower emphasis in its current state. The results confirm that project managers in group 1 in particular wish for more interaction and more participatory decision-making in organizational leadership. One respondent would like *more feedback from management in general*. He describes that when a project is performing well, he *“doesn't really get good or bad feedback”* from management. Another respondent also describes management as supporting project management *“well at the level of ideas”*, but the common moments organized by management, for example joint trainings for project managers, are often cancelled.

When examining the responses between groups 1 and 2, the clearest differences can be seen in the management of employees and the unifying factors within the organization. The biggest differences are seen in how hierarchical and market-oriented the current situation is seen and in what direction change is desired.

In managing employees, both groups hope for a significant change to reduce market culture features. Group 1 assesses the market culture features as stronger in the current state of work management and hopes for a slightly more moderate change (-11.667) than Group 2 (12.500). Both groups hope for more adhocracy culture features in managing employees in the future. In the interviews, Group 2's responses confirm that rigidity and hierarchy are experienced as strong cultural features in current management. To counterbalance this, they hope for more flexibility and participatory management. This explains why Group 2 hopes for a significant increase in adhocracy features in the future (+11.250). In addition, Group 2 hopes for features typical of hierarchy culture to be reduced and features of clan culture to be increased in the future. In particular, project managers in group 2 say that they are motivated by "*praise for good work*" and that "*achievements are celebrated together*", so it is logical that in the future, more communal activities in managing employees are hoped for even more. These are typical characteristics of a clan culture. Group 1 does not hope for much change in the characteristics of a clan and hierarchy culture in work management. They describe "*their own and colleagues' achievements*", "*development*" and "*the success of the work done for the customer*" as sources of motivation. The answers explain why they do not hope for the same great change in work management from group 1. Group 1's better adaptation to the current work management may partly explain why their project performance is higher. Based on the results, group 1 values the current hierarchical and clan-based cultural characteristics in work management, such as clear roles and responsibilities. Clear management structures and stability in operating models can increase efficiency and cooperation.

Regarding the organization glue, it is important for both groups that this cultural dimension be strengthened in the future. Group 1 experiences the current situation as somewhat stronger (16.333) compared to group 2 (13.750). Group 1 hopes for a greater cultural change in the internal unifying factors within the organization (+10.333) in the future compared to group 2 (+8.750). This may indicate that group 1 experiences a sense of belonging within the group as a very important part of the organization's culture. The most significant differences between the groups are related to the emphasis on hierarchy and market cultures in this cultural dimension. It is clear for both groups that market culture features are desired less in the future. However, group 1's desire for change (-10.333) is clearly higher than group 2's (-6.250). This indicates that group 1 experiences the organization glue factors within the organization as being overly competitive and goal-oriented. In contrast, group 2 clearly hopes for a greater change in reducing the features of the hierarchical culture (-10.000) than group 1 (-4.333). This suggests that group 2 experiences that the unity of the organization is maintained more through control and structures than through free cooperation or creativity. The hierarchy is experienced as limiting unity and a sense of belonging. A weaker sense of community and a greater need to reduce hierarchy could indicate that group 2's project work is hindered by silos, rigid structures or weaker collaboration practices. The interview data shows that, especially in group 2, structuralism is experienced as hindering initiative or creativity. A stronger experience of having one's work controlled by another party can significantly affect an employee's experience of how their work is trusted and how much they have the opportunity to influence their own work. Group 2 would like the internal connecting factors to be based more on *trust*, *cooperation* and *flexibility*. Trust and respect are especially desired in communication between people. One respondent points out that there is a lot of talk in the organization about ways of communicating things, but how things are brought up in everyday life is not always in line with what is taught. Another respondent emphasizes that *structuralism* and *hierarchy* in promoting things and making decisions slow down work. The internal connecting factors experienced in the culture then do not support efficient and smooth communication, which could enable more participatory decision-making and better cooperation between members of the

organization. Individuals are constantly interacting in multiple layers of the work environment simultaneously (Herkes et al., 2020), so smooth communication plays one of the most significant roles in an employee's experience of fit. A shared and unified identity in the organization helps the individual understand how he or she fits into the organization and what role he or she plays in the community (Schein, 2016). Stronger fit supports professional growth and commitment to shared goals (Herkes et al., 2020).

In the cultural dimensions, the strategic focus of the organization is strongly focused on market culture in the responses of both groups. In particular, group 1 experiences the characteristics of market culture as strong in the organization's current state (38.667). Group 1 hopes that the characteristics of market culture will decrease significantly in the future (-12.000). The wishes for change are in line with how respondents in group 1 experience the organization's strategy as strongly results-oriented and hope for more investment in community and personal development in the future. Respondents in group 2 do not experience market culture as strong in the organization's current state, which means that the wish for change in the future is clearly more moderate (7.500), although also downward, like in group 1. Group 1 is clearly more prepared to make more radical changes in the direction of strategy than group 2.

When examining the emphasis on organizational success factors, both groups agree that the importance of hierarchy culture and market culture should be reduced in the future. Group 1's assessment of the current importance of market culture is higher (31.667) than Group 2's (33.750), but both hope to reduce its importance as a measure of success in the future (Group 1: -6.667 & Group 2: -7.500). Both groups feel that the success of project management is strongly linked to project performance indicators. In particular, project managers in Group 2 emphasize the achievement of the *project's final result*, *performance indicators* and *individual performance* in measuring project management. Group 1 sees that they are measured somewhat more broadly as the sum of different areas and highlight, for example, *the importance of project team management*, *managing the big picture* and *communication*. In achieving results, Group 1 highlighted *personal*

growth, success and responsibility. Their answers emphasized *customer focus, quality and project success*, but also *personal development* and a *relaxed atmosphere*. The answers emphasized independent work and individual responsibility. In contrast, project managers leading projects in group 2 emphasize teamwork and community more strongly than the control group in their answers. In this group, the results aspect is emphasized through team encouragement and supporting people. According to the answers, community and mutual dynamics are emphasized more than individual performance in projects led by group 2. In both groups, it is hoped that employee development, teamwork and innovation will be emphasized more in the future. In particular, project managers in group 1 hope that clan culture will be emphasized significantly more in the success factors (11.667). Compared to group 2 (7.500), the desire for change is clearly greater. In contrast, group 2 hopes that the importance of adhocracy culture will be increased in the criteria of success in the future (7.500). Group 1's desire for change to strengthen the adhocracy culture is very moderate (1.667). This suggests that Group 2's desires for success metrics are more strongly related to emphasizing new ideas and experimentation.

The results show that the different dimensions of culture are strongly reflected in the leadership styles of project managers and the success of projects. Based on the results, project managers in group 1 emphasize *customer orientation, goal-setting, and quality management*. They yearn for more community and more participatory leadership, but value structures and a clear division of responsibilities. Group 2 experiences a strong hierarchy that *limits flexibility and cooperation*, even though performance and measurable end results are key. Based on the results, project management in group 1 is more strongly supported by a combination of market and clan cultures, which emphasize clear structures, maintaining customer relationships, and goal-oriented work. Group 2, on the other hand, operates in a hierarchical culture, where control and structures guide operations, but they experience this as limiting flexibility and cooperation. Table 9 below describes a summary of the group comparison through the different dimensions of culture.

CVF dimension	Group 1 (high performance)	Group 2 (low performance)
Dominant characteristics	Emphasizes efficiency and high-quality results. Needs more community and team spirit. Project managers are used to solving problems independently.	Perceives the organization as competitive and hierarchical, which limits creativity and collaboration. Controlling structures are perceived as an obstacle to effective project management.
Organizational leadership	Independence and responsibility are key, but more support and participatory leadership are needed. For example, more joint decision-making on the direction of projects is needed.	Current management is perceived as rigid and hierarchical. There is a desire for more flexibility, trust and participatory management, e.g. decentralization of decision-making.
Management of employees	Clear structures and responsibility are important. Customer focus and goal-orientedness are emphasized. For example, customer communication is seen as two-way and active.	Teamwork, planning and performance metrics are emphasized. Lack of time makes project management difficult, e.g. reporting and documentation are perceived as taking too much time.
Organization glue	Community is felt to be important, but competitiveness and a focus on results are too dominant. For example, team successes motivate, but internal competition can hinder cooperation.	The internal structures of the organization are seen as controlling. More trust-based cooperation and flexibility are needed, e.g. more open information flow and less bureaucracy.
Strategic emphases	The current strategy is strongly results-oriented, but more emphasis is expected on community and personal development. For example, strengthening team spirit would be seen as an important part of the organization's future.	The strategy emphasizes efficiency and business results. We hope for more innovation and flexibility, e.g. trying out new ways of working without strict rules.
Criteria of success	Customer focus, quality management, clarity of communication and individual development are important success factors. For example, successful customer communication is seen as critical.	Teamwork, measurable outcomes, and structured quality management are key. For example, project team results are systematically monitored and work efficiency is accurately measured.

Table 9. Summary of the group comparison across the dimensions of culture

6.4 Project management practices through the balanced scorecard

Project success and achievement can be viewed from many different dimensions, making it challenging to provide a completely unambiguous definition (Davis, 2017; Prabhakar, 2008). Several researchers have divided project success into two different dimensions: the success of the project itself and the success of project management (De Wit, 1988; Baccarini, 1991; Ika & Pinto, 2022; Zwikale & Meredith, 2021). In this study, we utilize these dimensions when examining project success. In addition, we break these dimensions down into four different areas according to the Balanced Scorecard model (BSC model). Kaplan and Norton (1992) created the Balanced Scorecard theory to expand the understanding of business success metrics and performance dimensions. The BSC theory also provides a working framework for defining the success of projects and project management.

In this study, the interview data shows that the target organization's metrics for measuring project success rely heavily on internal performance metrics. According to the respondents, the customers' experience of project success is measured using the Net Promoter Score. Both control groups feel that the focus on results and goals typical of a market culture is emphasized in measuring project success.

“Quite a lot depends on the effectiveness of the projects; how well the customer promise is achieved and of course also on customer satisfaction, e.g. based on NPS figures.” (Interviewee 6.)

“Cooperations are reviewed weekly in light of the figures, e.g. whether they meet the customer promise, what is the efficiency or hourly revenue. Customers are asked for NPS figures at certain intervals.” (Interviewee 5.)

“Of course, the project figures; how well the project is performing, how the project team is doing, the project's efficiency and figures that tell how well the project is

going and if there are any challenges; where they come from. The NPS number and how well you remember to do certain things, e.g. reports.” (Interviewee 2.)

Based on the responses, the most important indicators of project success are the achievement of the customer promise on a weekly basis and the Net Promoter Score. The efficiency and success rate measured in the project according to the organization's internal indicators are also mentioned as significant indicators of success. The fact that weekly customer promises are being fulfilled indicates that the final result of the project is its primary measurement target. In addition to these, some of the interviewees also mention the performance of the project team members and their development as part of measuring the success of the project. The responses do not indicate indicators related to the project manager's leadership or management practices, but their measurement is done indirectly through the performance of the project team and the customer experience.

Overall, the organization's measurement seems to focus on the final results of the project, and not on the actual processes, operating models or qualitative aspects of project management. The measurement model is typical in organizations dominated by a market culture, as the market culture emphasizes final results. Project managers experience conflicts between their own value systems in measurement that focuses on final results. For example, one respondent highlights in the interview the conflicts between management and the customer's experience of the success of cooperation.

“Sometimes the client can be very satisfied with the results of the project, but internal discussions reveal that management’s expectations for the success of the project have not been met.” (Interviewee 6.)

This creates a tension between customer experience and management expectations, which can lead to situations where the project is not considered successful from the organization's perspective, even if the customer is satisfied with the end result. Another

respondent highlights the conflict between customer experience and minimum commercial standards. The respondent experiences minimum work standards as mandatory, which causes a conflict between their own values and the operating models set by the organization's management. A culture that strongly guides work may, from the employee's perspective, place more emphasis on certain minimum standards and goals for work than on the authenticity and transparency of customer encounters.

"When there is a certain minimum offer standard that has to be met, which I understand, but I would like to adhere to it, I want to be honest and open with customers, but it doesn't feel like it's mandatory, then I wouldn't be happy to do it."

(Interviewee 5.)

Challenges and conflicts can occur in all cultural models. For example, value conflicts between team members easily pose challenges to managing organizational culture (McGregor & Doshi, 2024; Panahi, 2016), as discussed above. For this reason, it is important for organizations to consider how to reconcile different metrics in project performance measurement, through which factors related to the quality of project management processes and leadership can be taken into account in addition to measuring project outcomes, which specifically support long-term success and customer satisfaction.

Kaplan and Norton (1992) created the Balanced Scorecard theory precisely because focusing on financial indicators alone does not provide a sufficient overall picture of an organization's performance and long-term success. For this reason, the indicators must also be expanded to other dimensions of operations. A strong organizational culture creates a framework that guides behavior patterns and the direction of operations, which is a key factor in promoting organizational effectiveness and improving results (Cameron & Quinn, 1999). Culture creates the foundations that allow an organization to develop operating models that support the achievement of shared goals in the long term. Thus, culture not only guides the framework of operations, but also ensures that the measurement of project success covers both the final results and the elements of management.

6.4.1 Customer perspective

The customer perspective refers to the customer's experience of a company's operations and its ability to meet customer expectations (Kaplan & Norton, 1992). Customer satisfaction is a key measure of project success, as it reflects the project's ability to deliver value to customers and meet their expectations (Pinto & Mantel, 1990; Sastoque-Pinilla et al., 2022). Customer satisfaction is not only a measure of the final outcome of a project, but also of its entire process.

In the interview data, project managers gave their views on what they believe are the most important elements for the success of a project from the customer's perspective. Both groups felt that delivering a weekly customer promise was an important indicator of the customer's experience of how successful the project was in the customer's opinion. In addition, the responses from both groups emphasize the indirect benefits brought to the customer by direct project results, such as increasing the company's awareness and increasing commercial success. Martinsuo (2020) has mentioned that from a value creation perspective, long-term customer results are important, which are utilized even after the project ends.

"1. sales and 2. Growing the network; more potential customers" (Interviewee 1.)

"The fact that the work is of high quality, meaning that the meetings are ones that they can get business from in the future and take forward." (Interviewee 4.)

The differences in the responses are in which aspects of the customer experience the groups emphasize. Group 1 emphasizes the depth of the customer relationship and long-term customer orientation. This indicates a clan culture, where close cooperation, customer orientation and long-term relationships are at the center. In contrast, group 2 emphasizes more the customer's sales goals and the efficiency of project management

processes in their responses, which indicates a market culture that emphasizes goal-orientedness and business results.

“Of course, the results come at a steady pace and are of good quality. But then certainly one that allows for communication and that the customer knows where they are going.” (Group 1)

“If I were to say, when a customer feels that our collaboration has been successful is when they get a deal.” (Group 2)

In their responses, project managers in Group 1 emphasize customer relationship management and active communication with the customer. They describe that trust between the customer and the project manager increases when communication is active and the customer is aware of the project situation and its progress. Project managers in Group 1 feel that for their customers, the quality of the customer relationship, mutual trust, good service and access to information are important elements when evaluating the success of a project. In contrast, Group 2 emphasizes a more results-oriented view in their responses, where the customer evaluates the success of the project through direct measurable business results, such as the weekly number of customer results and work efficiency. Project managers in Group 2 describe the customer perspective as reflecting more the project's performance and efficiency.

When project managers described which management practices are used to meet customer expectations, Group 2 emphasizes systematic management practices, such as close monitoring of project team results and continuous quality control. Project managers in Group 1 also mention the importance of quality control and project team guidance, but in their responses they emphasize more on managing the big picture than on detailed practices. Project managers in Group 1 emphasize trust, flexibility and proactivity towards the customer.

"Every day there is a check-up of where the team is going and I keep a record of which team member I helped last and during the week I check how that [team member] is doing and in what situation." (Group 2)

"I am in contact with all the salespeople weekly by email or phone; is there anything that could be done differently -- then I follow what the team is doing; the team has done the work really well and I trust the team a lot." (Group 1)

In the control groups, the view of the customer experience reinforces the notion that the individual's experience through internal differences in the organizational culture is reflected in the individual's way of interpreting and applying the organization's values in practice. It seems that project managers in group 1 focus more on the long-term management of customer relationships in addition to performance, while project managers in group 2 place a little more emphasis on the importance of the immediate outcomes and internal measures of the project. The value experienced by the customer is ultimately based on how people themselves experience and embrace the value they receive, in addition to financial and business outcomes. This is often related to broader personal, community and societal expectations. (Martinsuo, 2020.) This kind of customer relationship management and precise communication are key to the success of the project (Munns and Bjeirmi, 1996).

6.4.2 Internal processes

The internal processes perspective focuses on the company's internal business processes that support customer satisfaction and enable efficient operations. Ultimately, excellent performance from the customer's perspective is the result of processes, decisions and actions that occur throughout the organization. (Kaplan and Norton, 1992.) The interview data emphasizes a strongly routinized and process-oriented weekly rhythm. The descriptions of the weekly rhythm of project management by the control groups are broadly similar.

Project managers describe their weekly tasks in detail, as the project management model is well established. Project managers plan the project team's weekly tasks in detail and allocate responsibilities to team members right at the beginning of the week. This way, it is clear to project team members who is responsible for handling project-related tasks at any point in the week. In addition, project managers spar with their superiors about project situations during the first week. With their superiors, they review the previous week's performance, any bottlenecks in the project and how to resolve them, and the most important measures for the week that has begun to advance the project. In the middle of the week, project managers review the progress of the projects in relation to the plan and ensure that each team member has done their part. If at this stage it is noticed that the project is not progressing as planned, project managers take measures to adjust the rhythm of the rest of the week so that the weekly goals are achieved. At the same time, project managers ensure that the team's work meets the agreed quality criteria. On Wednesdays, the progress of projects and the most important measures for the rest of the week are reported to the superior. At the end of the week, the progress of projects is reported to the customers. The operating model, which relies heavily on processes and routines, represents a typical hierarchical culture. The weekly rhythm is strongly aimed at maintaining weekly performance and achieving weekly goals, which is in line with the characteristics of the market culture prevailing in the organization.

Although the control groups describe almost similar weekly rhythms in terms of internal management processes, there are more references to weekly customer communication in the responses of group 1. This reinforces the perception that project managers in group 1 work in closer collaboration with their customer.

For example, quality management and managing the agreed quality level are important to both groups, based on the answers. In both groups, the most significant factors in quality management include monitoring the work of the project team and actively offering help to team members. However, every project manager in group 1 also mentions customer communication, and especially sharing the situation with the customer, as an

important part of project quality management. Some project managers in group 2 also mention the customer perspective as an important factor, but the main perspective is checking the work that goes to the customer before sending the product to the customer. The difference is that project managers in group 1 describe customer communication more as two-way communication, while project managers in group 2 focus more on communication from the team.

“The most important practices are checking and correcting communications from the team to the customer if necessary.” (Group 2)

“The most important thing is that we schedule quality meetings with customer leads and constantly communicate the current status to the customer.” (Group 1)

Mäntyneva (2016) emphasizes that identifying and understanding the perspectives of different stakeholders in a project is essential so that all parties can be served according to their needs and interests. For this reason, in project quality management, it is important to also strongly understand the customer's perspective as part of quality management.

Ingason (2020) has named quality planning, control and quality improvement as the basic concepts of quality management, which both groups report that they actively implement on a weekly basis. In the interview data, project managers strongly associate quality management with increasing the competence level of project team members. Developing the competence of project teams is a key factor in the success of a project, as it improves team performance and ensures that project goals are achieved (Hauschildt et al., 2000). It is important to note that project managers in group 2 report that they monitor team members' results and intervene in possible deviations more often than project managers in group 1. The responses suggest that project managers in group 2 make use of well-structured practices in monitoring team members' competence, which monitor the development of competence and when to return to discussions with team members. Group 1 project managers place more emphasis on sharing their personal

experience and proven practices and increasing team members' self-confidence in everyday situations.

"Basically, the fact that based on one's own experience, one gives tips, what one has learned over time and things that players may be unsure about; we open them up. One is able to spar and open up things that they may not necessarily notice in their own work." (Group 1)

"I have a sparring excel of the team, where I have listed all the members and their strengths and where they can improve, when they last listened to calls and when they last sparred;-- at the latest after the person's next work shift, I check whether the agreed things have been implemented." (Group 2)

Good people management contributes to the success of a project even more than technical elements (Scott-Young & Samson, 2004). The cornerstones of good management include, among other things, effective and clear communication (Muneer et al., 2022). In the research material, both groups emphasize a relaxed and free-form environment where it is easy to bring up even difficult issues if necessary. In particular, respondents in group 2 emphasize "good team spirit" in team communication, where "every team member is expected to contribute to the joint discussion". In group 1, on the other hand, there is more emphasis on "clarity of communication" and "clarity on both sides". In terms of successful project management, it is essential that the project manager, through clear communication, ensures that team members understand the common goals and measures that guide the project towards the goal (Muneer et al., 2022).

6.4.3 Learning and growth

According to the BSC, companies can grow and increase shareholder value by focusing on those capabilities that create added value for customers or continuously improve their efficiency (Kaplan and Norton, 1992). For example, effective resource management, utilizing team expertise, and continuous learning during projects help the organization remain competitive (Sastoque-Pinilla et al., 2022). Project learning requires the project

team to document and deliver the processes, techniques, tools, and methods used in the project to the project owner in a consistent manner. (Yap & Lock, 2017). The target organization has systematic ways to document and store project information.

The interviews show that there are precise instructions for documenting project information, which are important to follow in the organization. Project-specific practices and instructions are saved for the use of the project team and the project manager must update the information as changes occur. The measures taken within the project are reported weekly and delivered to the client in the form of a weekly report. Meetings held with the client are documented in memos, which are saved and the most important points are shared among the entire project team. Precise instructions, process focus and control highlight the features of the hierarchical culture evident in the target organization. Strict documentation practices and reporting obligations ensure that the progress of projects is monitored systematically, which supports efficiency and risk management.

The responses between the control groups show that the project managers in group 2 are somewhat more careful in documenting project information and saving the information for the project team to use together. They In particular, one project manager in group 1 stated during the interview that “I basically just have all the notes myself – changes happen so often that it is easier to go through them verbally, but more attention should be paid to that”. Other respondents in group 1 said that they document the changes agreed to in the project process on the project team’s common channel.

Collecting and storing information serves as an important tool for project managers to report and share the necessary information. Documented information is used to ensure process consistency, support project management, and promote team learning. At the same time, the organization supports work efficiency when things are found in the right place, which essentially highlights the efficiency mindset typical of market culture.

6.4.4 Financial indicators

The financial perspective describes the financial performance of the company and its impact on shareholder value (Kaplan and Norton, 1992). The project manager's task is

to complete the project on time and within the predetermined budget. Project managers describe that projects have several financial indicators that monitor the internal profitability of the projects and the performance of team members. The achievement of performance-oriented goals is monitored weekly. In addition, the work is monitored using minimis standards, the achievement of which is important in the organization. Monitoring operations through financial indicators enables strategic decisions to be made and operational improvements to be targeted at the right points (Kaplan and Norton, 1992.)

An interesting aspect of the interview data was that project managers were unable to answer questions about project budgeting. The specific performance indicators were related to the work of project teams, but the time spent on project management was not measured, although performance targets have been set for many other tasks. According to the project managers' descriptions, project managers in group 2 perform more weekly project management tasks and estimate that project management activities take almost twice as much time as project managers in group 1. The difference can be explained by many different factors, such as differences in working methods, inefficient management processes, challenges in management effectiveness, or the project team's need for more support. However, the research evidence confirms that the leadership practices of Group 1 are based more on trust and flexible learning through practical work, while the leadership practices of Group 2 are based on regular evaluation, predefined actions and a stricter structure.

The organization's operations are guided by clear financial indicators and performance monitoring, which creates a goal-oriented and performance-oriented work environment, which is typical of companies with a market culture. In addition to internal indicators, the project manager should also be interested in obtaining value from other stakeholders who influence the project. However, the time frame over which the success of the project is examined according to financial indicators is a matter of debate, since different stakeholders in the project examine success from different perspectives. (Zwikale & Meredith, 2021.) One key stakeholder for the project managers in the target

group of the study is the customers, who act as the financiers and owners of the project. Ensuring financial value for project owners helps to ensure the sustainability of operations in the long term (Kaplan and Norton, 1992). Project managers describe customer value as arising, among other things, from how customers manage to utilize the results achieved for them through the project.

“Of course, growing the customer pool through our scheduled meetings. This is marketing all the time.” (Group 2)

“That as a result of the project [the client] gets a foot in the door with the company or the decision-maker. Clients also experience our work as marketing work; for example, we reach people who have never heard of the client before, so we market to them.” (Group 1)

However, these results are not mentioned as being measured through any systematic monitoring. Owners and financiers see the project's performance primarily through its financial and strategic value, so they assess how the funds and resources invested in the project produce value and sustainable benefits in the long term (Zwikale & Meredith, 2021).

7 Summary and conclusions

This chapter examines the key findings of the study on the different levels of organizational culture and their impact on project management. The purpose is to summarize the most essential aspects of how organizational culture affects successful project management by first examining the current state of culture in the target organization, its manifestation at practical levels, and finally, how management practices in line with the culture affect the final results of projects. Finally, concrete suggestions are given to the target organization.

7.1 Current state of organizational culture at different levels

In this study, the current state of organizational culture was analyzed based on the results of the OCAI survey and the responses to the complementary qualitative interviews. By interpreting the results, different cultural emphases at its different levels can be perceived. Edgar Schein (1994) has stated that culture can be viewed at three different levels depending on how it appears to an outside observer. The model structures culture into outwardly and inwardly visible parts, from which outwardly visible are those cultural manifestations, artifacts that can be observed, seen and felt. The inwardly visible part is divided into two layers, the upper one reflecting the values and beliefs adopted in the organization and the lower one the basic assumptions of the organization. As a result of the study, we can build a view of what kind of culture prevails in the target organization through different levels.

In the overall analysis, the culture of the organization focuses on a combination of market and hierarchy cultures. The organization's operations emphasize results-orientedness, competitiveness, and emphasis on efficiency. These strong features of market culture are supported by features characteristic of hierarchy culture, such as strong regulation, precise instructions, and visible structure. According to the competing

values framework (Cameron & Quinn, 2006), these types of culture support stability and performance, but can also reduce flexibility and innovation.

At the level of artifacts, the culture appears to be strongly results-oriented, with a link to the community and cooperation typical of clan culture. When viewed at the level of artifacts, the organization has several strong forms of cultural expression. The organization uses a dress code that defines a common framework for office attire. In addition, the organization displays several behavioral routines and symbols that express the culture outwardly. These include, for example, celebrating various successes with thunderous applause and weekly pins distributed to project managers when the project they lead has achieved its weekly goals. In addition, the organization organizes various joint gathering rituals. Different teams gather together during the day to review the results of the day, and at the end of the week, the entire organization gathers together to hear the weekly results and share the successes of teammates. In summary, it can be stated that performance monitoring, continuous improvement of efficiency, and achievement of goals are visible manifestations of culture in the organization. Working together and playing as a team are emphasized in many outwardly visible parts of the culture. Concretely, this is condensed into common operating models, where actions are monitored jointly through performance indicators and precise situation-specific results.

In project measurement, objectives, schedules and efficiency are the most important metrics. Project managers are tasked with reporting on results within the organization during the week and to the client at the end of each week, which highlights controlled common operating models. In addition, the perception of a results-oriented culture based on control is reinforced by weekly monitoring meetings related to project results and management, as well as a hierarchical decision-making process.

At the level of artifacts, the culture appears to be strongly market-oriented and is linked to a lot of the emphasis on community that is typical of clan culture. The implementation

of these is supported by a controlled hierarchical culture, according to which repetitive operating models are built.

At the level of stated values, culture is particularly evident through various beliefs and experienced values. These are the values and principles that the organization has decided to emphasize and bring to the fore. At this level, it is clear what the organization wants to be and what kinds of things it values. (Schein, 2017.) The target organization has named five core values to guide its operations. At the center of these values is the person, because work is done specifically with people, whether it is colleagues or customers. This is surrounded by the values of courage, speed, growth and results. Courage reflects facing things, speed is taking action and being prompt, growth is both personal growth as a professional and a person as well as the growth of the customer and, finally, the result, which is the measure of all work and enables cooperation. Based on the research data, we can see that the implementation of the values in practice is not so clear-cut and it seems to cause conflicting feelings between the people participating in the study.

The research data shows that people are cared about and demanded of because they want to be helped to grow as professionals. Project managers strongly feel that people are taken into account at the level of values and that superiors genuinely want to help project managers succeed in their work and learn new things. However, sometimes project managers feel that the focus on results rises above this value. In addition, at the level of stated values, there is a contradiction that the work of project managers is measured based on the results achieved in the project. Project managers themselves feel it is important to be “easily approachable” and “helpful” towards project team members, in addition to which the core of the organization’s values, people, can be linked to the role of project manager in helping both customers and colleagues working in the team. However, there is no more precise set of indicators in use for the success of project management, but it is interpreted indirectly through the project results.

A strong focus on results and measuring success at work through results is experienced as challenging and stressful in an organization. Such value conflicts between the organization and employees are one of the most common challenges in organizational culture and have been found to have negative effects on work efficiency and employee engagement (Panahi, 2016). One of the most significant findings in this study relates to value conflicts experienced by individuals. The analysis of the research data found that in the higher-performance group, values were experienced as more concretely supporting everyday work. They offered employees clear goals and a performance-based metric that is felt to guide their work in the right direction. A goal-oriented and competitive environment was experienced as supporting one's own value system. In contrast, in the lower-performance group, more and stronger conflicts were experienced between the values spoken about in the organization and practical operating models. Project managers managing lower-performing projects show a greater discrepancy in their thinking about how people management and a goal-oriented and performance-oriented organizational world are linked to each other and how they perceive it to be in line with their personal beliefs and values.

At the level of stated values, contradictions begin to emerge when employees compare the values communicated by the organization with their daily activities. At the level of artifacts, the organization's culture appeared to be mainly uniform, but the stated values do not necessarily fully correspond to the practices implemented in the organization's everyday life. In the target organization, people-centeredness has been elevated to a central value, but at the same time, operations are strongly guided by results-orientedness and competitiveness, which reinforces the market culture prevailing at the level of stated values.

At the deepest level of organizational culture, i.e. the level of basic assumptions, the target organization is strongly driven by systematicity, control and process optimization. At this level, the deepest and most significant cultural core of the culture emerges, which has emerged in the history of the organization and is shared jointly among the members

of the group. Basic assumptions determine how the members of the organization perceive, think and react to their environment and situations, even if they are not aware of these deep beliefs. (Schein, 2017.)

At this level, the influence of hierarchy and market culture is significantly stronger than at the surface level. Although working together, community and common habits are visible, these practices are based on strong control and predetermined ways of acting. Although project managers have power in carrying out their own work, the close reporting pace, joint project monitoring moments and centralized decision-making show that the organizations have a very strongly controlled operating culture. Precise role assignment and expectations for managing one's own area of responsibility reinforce the hierarchical culture in the organization's deepest basic assumptions. Strongly controlled operations are guided by performance and competitiveness, which emphasize achieving and exceeding pre-agreed goals as a key part of success at work.

A highly hierarchical culture can be seen as inflexible and rigid if the operating environment requires creativity and adaptability, and does not leave enough room for it when solving everyday bottlenecks (Cameron and Quinn 1999). A conflicting attitude towards the basic assumptions of the organization can cause challenges to performance. The research material found that in lower-performing teams, a highly hierarchical cultural model was experienced more as an obstacle than an opportunity. Strict rules, strong adherence to processes and centralized decision-making were experienced as strongly limiting their own project management. As a result, there was no flexibility or opportunity for innovation at work. In contrast, project managers leading higher-performing projects had a more positive attitude towards a highly hierarchical culture and saw more room to influence their own work within specific frameworks. Although this group experienced the well-defined decision-making process as sometimes causing delays in advancing things, they accepted it as part of their operating environment. In addition, a competitive environment was used as motivation towards better results. The

organization's precise operating models were felt to support project management and promote efficiency.

At this deepest level of organizational culture, value conflicts can become even more pronounced because basic assumptions guide actions on an unconscious level. Although the organization communicates people-centeredness and collaboration as its core values, at the level of basic assumptions, actions are defined by hierarchy, control, and competitiveness. Strict structures can support performance and efficiency for those who adapt to the hierarchical operating model.

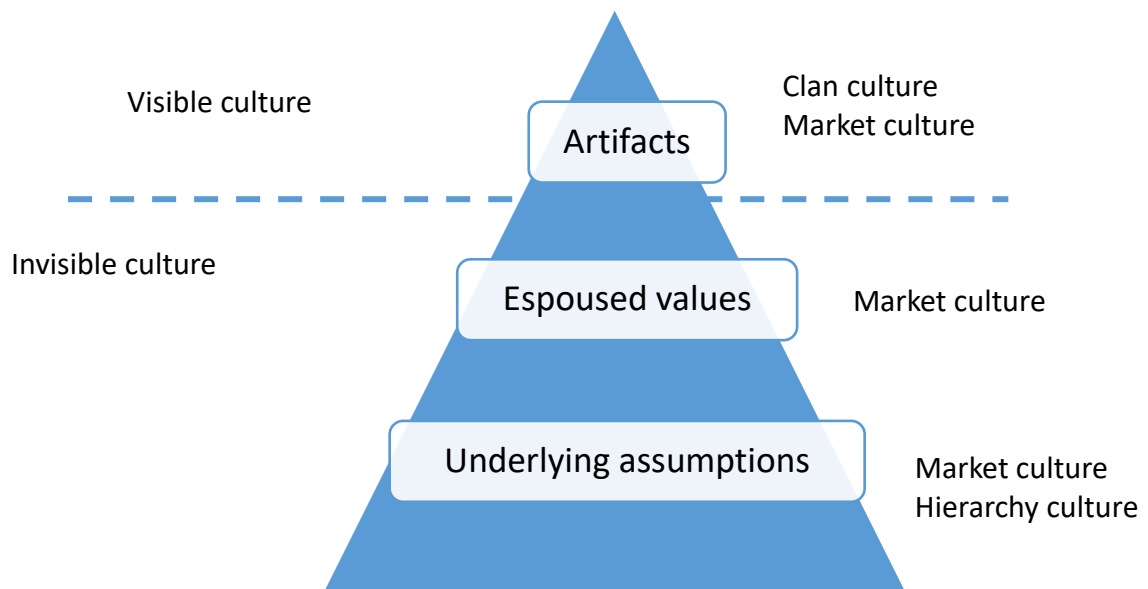


Figure 14. Layers of culture in the target organization.

7.2 The role of organizational culture in project management

This study aimed to better understand how the culture prevailing in an organization affects project management. The purpose is to deepen the understanding of how culture hinders or enables the success of projects and project management.

The results of the study show that the culture prevailing in an organization alone does not allow direct conclusions to be drawn about how it affects the success of projects. The deepest essence of culture and its impact on the organization is ultimately related to the individual's experience of the culture surrounding them.

The most significant differences in the effects of cultural manifestations, and in particular their effects on project performance and project management, are fundamentally related to the project manager's own attitude towards the manifestation in question. Schein (2016) has stated that the cornerstone of the culture prevailing in an organization is built around shared beliefs, values, and desired behaviors. When an employee's own values correspond to these values associated with the organization's cornerstone, the individual feels a sense of compatibility and relevance (Deschenes, 2024). Some people feel that they fit into the organizational culture better than others, and these better-fitting individuals are also likely to achieve better results (Schneider, 1987). Stronger compatibility supports professional growth and commitment to shared goals (Herkes et al., 2020). This study also found that project managers in the group leading higher-performing projects experienced stronger identification and compatibility with the values prevailing in the organization than project managers whose projects were not as high-performing.

At a practical level, an individual's attitude towards culture is strongly reflected in whether they experience the operating models and habits that are strongly present in the organizational culture as an obstacle or as an opportunity. Cultural values guide the organization's ideal operating principles, and cultural norms, in turn, reflect how the values shared in the organization are actually realized in practical everyday life. (Graham et al., 2022). As Schein (2016) has stated, culture determines how individuals experience themselves as part of the organization and how they adapt to its values and practices. Essentially, it is about how the manifestation of organizational culture in everyday life supports the individual's experiences of the meaning of work, motivation, commitment, effectiveness and job satisfaction. In this study, a comparison between groups shows

that the everyday operating models that emerge from these experiences affect the interpretation and resolution of everyday situations encountered in project management.

The meaning of work is determined by the shared values and beliefs shared in the organization (Deschenes, 2024). In terms of successful project management, the experience of the meaning of work plays a significant role and must be in line with the culture and values of the organization. An individual's experience is always subjective, but the basic assumptions and norms of the culture guide the individual's understanding of what is valuable in work and what motivates them (Schein, 2016). When work is experienced as meaningful through individual growth, responsibility, and personal successes, it leads to seeing the work that leads to results as valuable, not just the end results. This supports the success of project managers and projects, as the solution-oriented focus is focused on active action, which is followed by the end results. Hierarchical and performance-oriented cultural types support this perspective, as they value responsibility and performance. This compatibility between organizational culture and individual values enables effective and motivated project management. Conversely, a team that values community may find its work less meaningful if there is too much emphasis on individual performance and results orientation.

The compatibility of culture with an employee's personal values is also a significant factor in their experience of motivation towards their work. When work is perceived as meaningful, it also has positive effects on the motivation level (Kristof-Brown et al., 2002). Motivation is guided by the cultural norms and practices of the organization and is a key factor in the success of project management. When the organization's culture supports individual motivation, for example through the employee's ownership of the values, it improves job satisfaction and performance (Herkes et al., 2020). High-performing project managers experience their motivation as arising from independence, responsibility and competitiveness, which supports their goal of continuously improving their performance. However, continuous improvement of their own performance can

increase pressure, which can lead to a decrease in motivation. In the study, project managers leading lower-performing projects shared the fact that they did not find the organization's competitive and goal-oriented work environment meaningful. For them, community and team success were important in terms of motivation. This may indicate that a performance-oriented environment is perceived as pressured, leading to a division of responsibility and, as a result, no one ultimately takes full responsibility. Ultimately, it can be stated that a mismatch between the organizational culture and the values of individuals can weaken motivation and thus affect project performance.

Since employees constantly interact at multiple levels of the work environment (Herkes et al., 2020), there is a possibility of finding different types of fit at different levels. These fits affect how well employees enjoy, succeed and are committed to their work (Kristof-Brown et al., 2002). Organizational culture strengthens the success of project management when it provides a cultural environment in which individuals feel heard and are able to utilize the decision-making processes and operational frameworks set by the organization. The results of the study confirm Pool's (2000) view that work efficiency increases when employees feel valued and feel that they can utilize their own skills effectively. On the other hand, if employees do not see opportunities to influence within the specified structures, it has a negative impact on the motivation and commitment experienced at work.

Table 10 below summarizes the findings of the data into a clear entity, which makes it easier to understand the key results of the study.

Theme	Supporting factors	Unsupported factors
The importance of work	Shared values, professional growth, successes, community	Value conflicts, Incompatibility between individual and organization
Motivation	Self-development, responsibility, cooperation, clear goals	Unclear expectations, lack of support in a competitive environment
Commitment	Cultural compatibility, social relationships, leadership clarity	Conflict of values, uncertainty, lack of collaboration
Efficiency	Clear norms, Role clarity, teamwork	Bureaucracy, inflexibility, unclear processes
Job satisfaction	Sense of security, sense of belonging, achievements, professional support	Insecurity, excessive control, weak team spirit

Table 10. Summary of the effects of organizational culture on project manager performance.

Essentially, the manifestation of organizational culture in everyday life significantly affects an individual's experiences of work meaning, motivation, commitment, effectiveness, and job satisfaction. Work meaning arises when the culture and the individual's values are aligned. Motivation and commitment increase when an employee feels that the values and norms implemented in the work environment support his or her needs and ways of working. When an organizational culture enables effective collaboration, open interaction, and personal growth, it enables an environment that supports the success of projects. Effectiveness and job satisfaction are enhanced when an organizational culture supports the needs of individuals and ensures an environment in which the project can proceed smoothly and successfully.

7.3 Leadership practices and culture's impact on project outcomes

The aim of this study was to understand how project managers' leadership styles and practices reflect organizational culture and influence project outcomes. The results show that project managers' leadership styles and practices are closely linked to organizational culture and influence project outcomes. The organizational structure, leadership, and

strategic priorities either support agile and customer-oriented project work or constrain it through rigid operating models or an emphasized hierarchical decision-making process.

Based on the results, clear leadership, self-direction and flexibility are emphasized in the management of successful projects. In the management of project teams, trust in the work of the project team and a coaching approach to helping individuals are emphasized. The success of projects is supported by a culture that encourages open information sharing, teamwork and customer orientation. On the other hand, strongly hierarchical, strongly controlling management, excessive focus on results and rigid processes hinder the smooth running of projects, weaken employee motivation and limit innovation. In addition, they negatively affect the development of project managers' own skills if their own thinking in the work task and in everyday decision-making is not able to develop.

The table 11 below illustrates how different dimensions of organizational culture and leadership are reflected in project management and affect the final results of projects.

CVF	Supporting the success of projects	Obstacles to the success of projects
Dominant characteristics	<ul style="list-style-type: none"> - A communal and open culture, where information sharing and collaboration are at the center. - Teamwork is systematically supported, and the success of projects is also measured through the functionality of the team. - certain basic structures of operating methods and roles in management practices, so that decision-making and the division of responsibilities remain functional 	<ul style="list-style-type: none"> - Overly competitive and individual-focused culture - Projects are seen as the responsibility of individual employees, which reduces collaboration and support networks. - Overly strong control and inflexible processes slow down the progress of projects to the next stage
Organizational leadership	<ul style="list-style-type: none"> - Project managers act as coaches and sparring partners, supporting the team in decision-making and problem-solving. - Leadership emphasizes interaction, listening to team members, and clear role assignment. 	<ul style="list-style-type: none"> - Management is hierarchical and controlling. - Decision-making takes place at the top level, and the project team does not have access to influence practices or solutions.
Management of employees	<ul style="list-style-type: none"> - Working is flexible, and project teams have the opportunity to adapt their methods to the situation. - A clear model for competence development and systematic and fair feedback - Project management processes are clear and consistent, but enable agile development and independent work. 	<ul style="list-style-type: none"> - Work is based on predefined processes, and flexibility is not allowed. - ignoring skills development and only communicating negative feedback strongly - Hierarchy and strict job descriptions limit creativity and initiative.
Organization glue	<ul style="list-style-type: none"> - An open and encouraging feedback culture, where team members support each other and celebrate successes together. - Supervisors and project managers provide regular support and sparring. - Loyalty and mutual trust between colleagues serve as a unifying factor 	<ul style="list-style-type: none"> - Communication is limited, and feedback is only given for mistakes. - Team members feel they are working alone, and there is not enough time or space for collaboration. - Silos, rigid structures, or weak collaboration practices
Strategic emphases	<ul style="list-style-type: none"> - A customer-driven operating model, where the success of projects is measured through the creation of customer value. - Customer needs guide project development and decisions. 	<ul style="list-style-type: none"> - The strategy focuses primarily on financial metrics, such as schedule and budget management. - The customer perspective remains secondary and performance-based metrics dominate decision-making.
Criteria of success	<ul style="list-style-type: none"> - Success is measured in a variety of ways, for example by customer satisfaction, project quality and business impact. - Successful projects are based on clear leadership, goal-setting and the ability to manage the big picture. - Clear roles and accountability 	<ul style="list-style-type: none"> - Results are assessed through individual performance and mere efficiency measures, which reduces the importance of overall management and cooperation. - Excessive focus on results can lead to short-term decisions that ignore long-term customer value. - unclear division of responsibilities and the distribution of responsibility to "no one"

Table 11. How different dimensions of organizational culture and leadership are reflected in project management and affect the final results of projects.

Although an individual's experience is always subjective, the basic assumptions and norms of the culture guide the individual's understanding of what is valuable and motivating in work (Schein, 2016). The culture of an organization influences how the organization approaches project management and the achievement of its goals. Project success is a multidimensional concept and cannot be measured in a completely unambiguous way. Organizational culture guides the perspective from which success is viewed. The Balanced Scorecard (BSC) combines the different dimensions of success and helps ensure that the goals set for the project and the management practices leading towards them are in line with the organization's strategic vision. When examining the different dimensions, it is important to understand the most essential factors for the success of the project; although success can be viewed from many different perspectives, the BSC guides the examination from the most central perspectives for the business of the project's various stakeholders. This allows the organization to focus on the most essential perspectives in business development.

Table 12 below describes project management practices that support the success of projects from a BSC perspective.

CUSTOMER PERSPECTIVE	
SUPPORTING THE SUCCESS OF PROJECTS	OBSTACLES TO THE SUCCESS OF PROJECTS
<p>Maintaining the delivery pace and generating customer value throughout the project, where customer needs guide decision-making.</p> <p>Active communication and building trust, ensuring that the customer knows the status of the project and experiences the partnership as long-term and reliable.</p> <p>Overall picture management and clear guidance to the project team, ensuring that the customer continuously receives added value at different stages of the project.</p> <p>Measurement in terms of customer satisfaction, recommendation rate and verifiable results.</p>	<p>Uncertainty in deliveries and inadequate and reactive communication that does not build customer relationships.</p> <p>The customer relationship is not seen as the focus of cooperation. The most important stakeholders are not identified.</p> <p>Customer needs remain secondary to internal metrics.</p> <p>Short-term thinking and focusing only on individual quality control practices without managing the overall picture can weaken the quality and reliability of customer relationships.</p>
INTERNAL PROCESSES PERSPECTIVE	
SUPPORTING THE SUCCESS OF PROJECTS	OBSTACLES TO THE SUCCESS OF PROJECTS
<p>Clear divisions of responsibility, proactive planning and open communication enable smooth decision-making and more efficient project management.</p> <p>Regular management support to solve everyday challenges faced by project managers.</p> <p>Developing the project team's competence through regular quality monitoring and personal feedback. Focusing on successes.</p> <p>Agile problem-solving culture, where project managers have the space to also make their own solutions. The framework set by the organization creates security and gives direction to everyday decision-making.</p> <p>Self-direction is supported by the process so that employees can focus on the essentials without unnecessary delays.</p>	<p>Unclear division of responsibilities and inadequate role assignment lead to ambiguity.</p> <p>Overly structured and controlled project management eats away at flexibility and can cause a lack of trust in the project team.</p> <p>Focusing only on improving internal efficiency can ignore the overall value received by the customer.</p> <p>Excessive reporting obligations and complex approval processes can slow down the progress of work and increase the administrative burden.</p> <p>A strong preference for hierarchy in an organization can lead to employee passivity, prevent initiative and leave project managers waiting for decisions from top management, which reduces efficiency. Employees' own problem-solving skills are not developed.</p>
LEARNING AND GROWTH PERSPECTIVE	
SUPPORTING THE SUCCESS OF PROJECTS	OBSTACLES TO THE SUCCESS OF PROJECTS
<p>Communal and participatory leadership promotes the sharing of lessons learned and the absorption of new knowledge.</p> <p>Systematic collection and recording of project information supports efficiency and improves risk management.</p> <p>The opportunity for employees to develop their skills and try new ways of working helps them adapt better to changes, develop innovative solutions and increase motivation and job satisfaction.</p>	<p>If the values and practices of the organization do not support personal and collective development, learning and growth may be limited.</p> <p>Overly controlled and active competence development can lead to a decrease in motivation and a feeling of inadequacy.</p> <p>Strictly controlled and regulated work reduces employees' independent development, creativity and the courage to make their own decisions, which weakens long-term performance.</p>
ECONOMIC PERSPECTIVE	
SUPPORTING THE SUCCESS OF PROJECTS	OBSTACLES TO THE SUCCESS OF PROJECTS
<p>When resources and budgets are managed flexibly and their allocation takes into account the needs of different stakeholders, projects progress more efficiently and the quality of the end result remains high.</p> <p>Clear metrics and realistic goals help monitor financial performance without project teams experiencing excessive pressure.</p> <p>Well-planned and efficiently implemented projects support financial goals and ensure that added value is delivered to the customer.</p>	<p>If financial targets are set too tightly or resources are allocated too tightly without flexibility, project teams may be forced to compromise on quality or innovation.</p> <p>Focusing solely on financial metrics for project success can lead to insufficient consideration of customer value and quality of work.</p> <p>Focusing too much on cost-effectiveness can lead to staff wellbeing and motivation being overlooked, which can increase turnover and undermine long-term success.</p>

Table 12. Project management practices that support the success of projects from a BSC perspective.

7.4 Development proposals for the organization

The purpose of this study is to better understand how organizational culture affects project management. At a practical level, it is important to first understand the current state of the culture in the target organization and which practices in line with the current culture support the work of project managers and thereby the success of projects. The current state of the culture in the target organization is described in section 7.1. and its effects on the activities of project managers in sections 7.2. and 7.3.

The target organization has a strong culture that guides the behavior of its community members (Bolcaş & Ionescu 2019). Kaplan and Norton (1992) have stated that a culture that provides strong performance and clarity is built specifically around one culture type, which can borrow features from other culture types. The target organization's strong brand culture type and the hierarchical culture that supports it must be kept at the center of all development so that operating models can support the deepest essence of the culture and maintain a consistent identity in the organization. According to the study, the organization's strengths are goal-oriented, systematic, and competitive. These strengths can be utilized more effectively by balancing control and flexibility, concretizing stated values, and ensuring through meaningfulness that people really experience the values being realized in everyday life.

A dialogue between organizational values and operating models could increase project managers' experience of the meaning of work and the appropriateness of operating models. Especially among project managers leading lower-performance projects, the conflicts between the organization's stated values and everyday operating models were perceived as contradictory. In contrast, project managers leading higher-performance projects did not experience such a great contradiction. The deepest personal values of both groups were quite aligned, so it can be concluded that opening up different meanings to all project managers can contribute to understanding the conflicts between values and operating models.

At the communication level, it is also worth examining the feedback culture. Project managers who managed better performing projects felt that they received little or no feedback, and project managers who managed lower performing projects had unpleasant experiences with too strong and even inappropriate feedback, which occurred especially among colleagues, and not, for example, by a superior. According to McGregor & Doshi (2024), in companies that focus heavily on managing poorly performing units and employees, challenges arise in high-performance cultures. This is because conflicts arise between the views of the organization and the employees, because the organization's operations and resource allocation do not correspond to its own stated values. If an organization communicates that it values top performers, but in practice invests most in those who perform poorly, it may create the experience that the organization does not act in accordance with its own principles. It is therefore worth paying attention to strengthening a positive feedback culture in the target organization. It does not have to conflict with a goal-oriented market culture, but it is important that good performance is not taken for granted. Increasing the dialogue between the organization's values and operating models and opening up the chains of meaning of things during feedback moments strengthens the feedback culture in the right direction. Hauschildt et al. (2000) have stated that thanking and showing appreciation are simple but effective means of communication and can be as rewarding as financial compensation.

In addition to strengthening a meaningful feedback culture, the organization should pay attention to defining the success of the project and project management. Currently, the success of a project in the organization is strongly defined in the light of internal indicators, whereby the performance of the individual in the project team is given a stronger weight than the contribution made to project management. With the Balanced Scorecard, the organization can develop project management in a diverse and balanced way so that the most relevant perspectives are taken into account.

From a customer perspective, the customer experience is well understood in the organization, but its measurement can be further developed. Project managers considered the recommendation rate given by customers to be one of the most important indicators of project success. Kaplan and Norston (1992) have also stated that customer satisfaction and customer value creation are directly related to the organization's ability to compete and grow in the market. Project managers highlighted that sometimes the expectations communicated to the customer and the reality of achieving expectations do not match each other. The organization needs to take a closer look at the management of the needs and expectations of the different stakeholders in the projects. A key element of successful stakeholder management is to identify the most important and influential parties (Mäntyneva, 2016). In addition, for example, the benefits brought by the end results of the projects, i.e. concrete results that improve the customer's business, were not identified and measured systematically. As Martinsuo (2020) has stated, from a customer perspective, the key is precisely the long-term production of value and its utilization even after the project has ended. This requires that the target organization systematically and long-term monitoring of verifiable results produced for the customer in collaboration with the customer.

In terms of internal processes, project managers leading higher-performing projects experienced more alignment with organizational practices than project managers leading lower-performing projects. The most significant difference between the groups was whether the processes were seen as opportunities or as constraints on their own work. As a rule, clear roles and procedures increase efficiency (Graham et al., 2022) and the sense of security and control experienced by the individual (Schein, 2017). According to Kaplan and Norton (1992), a company's internal metrics should consist of those business processes that have the greatest impact on customer satisfaction. According to project managers, internal performance metrics are currently emphasized in measuring project success. Several people who have studied project success have stated that project success should be divided into two different dimensions; the success of the project itself and the success of project management (De Wit, 1988; Baccarini, 1991; Ika & Pinto, 2022;

Zwikale & Meredith, 2021). It would be a good idea for the target organization to add metrics that can also be used to measure the leadership of project managers from the perspective of leadership success, and not only based on the effectiveness of the project team and the customer's recommendation rate.

From a learning and growth perspective, it would be good for the organization to consider the need for increased internal community and cooperation identified in the study. The organization's management supports learning through weekly joint one-to-one sparring sessions. In addition, the organization organizes training courses for project managers. Although various forums developed for competence and growth exist, it is good to consider how a sense of community could be added to them. If the messages at different development moments are operating models given by management, the project manager's own thinking and solution-focus cannot develop. The organization should therefore consider how community could be increased, for example by directing more experienced project managers to mentor less experienced ones and by creating genuine joint opportunities for influence. According to PMI's 2024 Pulse of the Profession report, only less than half of organizations offer support measures, such as mentoring programs, that support skill development and career development. However, the report shows that project performance is significantly better in organizations that invest in three or more support activities. (Project Management Institute, 2024.) The target organization should also strategically strengthen and prioritize the development of the skills of all project managers through several different systematic and needs-based support activities.

Ultimately, the financial success of an organization should be a logical consequence of doing the basics (Kaplan and Norton, 1992). The purpose of financial metrics is to show how improved operational performance affects profitability and to help understand why expected financial results are not realized. As noted, the value experienced by the various stakeholders of the project in the target organization should be measured using metrics that are appropriate for them. For project managers leading higher-performance projects, the long-term value experienced by the customer was included in the

responses from different perspectives. Skilled project managers know how to consider the interests of various stakeholders in terms of long-term benefits, even if their contribution is limited to a shorter time frame in the overall picture (Zwikale & Meredith, 2021). It would be important for the organization to consider how longer-term customer value will be concretized in the future as part of a successful project and as part of successful project management.

For example, Google conducted a "Project Oxygen" study to find out what their employees think makes a good leader and how leadership could be improved to increase team productivity and well-being. That study identified, described, and established the key behaviors for good leadership at Google, and it led to programs that focused specifically on leadership practices that promote collaboration, feedback, and employee professional development. (Garvin, 2013.) In Google's example, employees in the organization were allowed to influence the construction of a good and effective leadership scorecard. Marion & Richardson (2022) and Galvis et al. (2023) emphasize that involving employees in decision-making increases motivation and commits the team because members feel that the plans are appropriate for them. Involving employees in the target organization could increase cooperation between management and employees and reduce the currently experienced strong hierarchy and control. At the same time, project management metrics can be developed to support dialogue between the organization's values and operating models.

8 Discussion

8.1 Discussion of the significance of the study

This study investigated the relationship between organizational culture and project management on project performance. The aim was to understand how different cultural factors influence prevailing management models and either support or hinder project management effectiveness and desired outcomes. The Project Management Institute (2017) has stated that as project-based business becomes more common, significant skills shortage problems are expected in the future.

The traditional perspective equates project success with the dimensions of time, cost, and quality (Barnes, 1969; Ika & Pinto, 2022). However, defining project success has been found to be a more complex subject than this. (Davis, 2017; Prabhakar, 2008; De Wit, 1988; Baccarini, 1991; Ika & Pinto, 2022; Zwikale & Meredith, 2021). This study shows that project managers need clearer metrics for success in their own work. Since success can be measured from many different perspectives, the metrics used must also support a dynamic and constantly changing environment. Since defining success is inherently challenging and complex, it raises the question of how the project management institute (2017) mentioned the support skills gap can be bridged? Filling the skills gap absolutely requires defining the most critical capabilities and skills in organizations and this requires a shared understanding of the organization's definition of project success. According to Schein (2017) and Graham et al. (2022), consistent and supportive practices in the organization's culture increase job satisfaction and efficiency, so organizations must definitely be able to examine projects and project management with a clear and materially aware set of metrics in the future. This study gives organizations a new and broader perspective on project success. Based on this, it can be stated that the study also has an important impact from a practical perspective.

This study is the first to combine the competing values framework (CVF) and the Balanced Scorecard (BSC) theory to examine project management success. In doing so, the study expands the existing literature on the relationship between organizational culture and project performance and project management. Traditionally, BSC and CVF have been examined as separate frameworks. Both examine organizational performance, so combining them in the same study is justified. This study shows that organizational culture (CVF) can either support or hinder project success as measured by performance measures (BSC). As stated, performance measures alone are no longer enough, and understanding cultural factors is essential for organizations to improve their operations.

This study can be shown to complement the existing literature on the effects of organizational culture on project management. The topic has been discussed to some extent, but the effects of organizational culture on company performance (Liu et al., 2021) and the definition of project management success have not yet received consensus among researchers (Ika & Donnelly, 2017; Abdullah et al., 2010; Shokri-Ghasabeh & Kavousi-Chabok, 2009).

The study also provides concrete evidence for examining the dynamics between culture and project performance. This study showed that certain features of organizational culture can either promote or hinder the achievement of goals set from the BSC perspective. Organizations must first understand their own cultural profile and then compile the strengths in line with the cultural profile and harness them into a whole that supports the organization's performance. Ultimately, however, the principles and practices followed in the organization continuously shape culture (Bolcaş & Ionescu, 2019). The types of operating models and norms that are permitted and fostered in a community are deeply rooted in the basic assumptions of culture (Schein, 2017). Overall, culture determines how individuals experience themselves as part of the organization and how they adapt to its values and practices (Schein, 2016). Therefore, identifying the cultural profile of one's own organization is a prerequisite for how organizations can

support the enhancement of project performance and the success of project management.

In this study, the target organization was found to have a strong market culture, which is strongly supported by the characteristics of a hierarchical culture. Culturally, the strengths are goal-oriented, systematic and competitive. By harnessing these strengths in the field of BSC, a versatile set of indicators can be created for the work of project managers that measures the work of projects and project managers, which takes into account the complexity of the phenomenon. In this way, the organization can strengthen the unity of the culture and enhance the success of project work.

8.2 Reflection on research limitations & further research opportunities

There are no clear guidelines for assessing the reliability of qualitative research, but the research is assessed as a whole, with emphasis on its internal consistency (Gronmo & Grønmo, 2023; Hennink, 2020). Therefore, a completely clear conclusion on the reliability of the research cannot be drawn for this study. The reliability of this study has been analyzed in more detail in Chapter 5.

The focus of this study is the dynamics between organizational culture and project performance. The main purpose is to investigate how organizational culture influences project management practices and project success. The significance of the study from a practical and academic perspective has been discussed in more detail in Chapter 8.1. The original purpose of the study is to deepen the understanding of the effects of organizational culture on project success and to produce high-quality research data on how organizational culture supports or does not support project success.

As the research progressed, the understanding grew that the connections between culture and performance are more complex and multifaceted than initially thought. When the research began, it was not fully anticipated how different cultural and identity-

related elements together shape the organization's operations. In further research, it would be good to examine this research more broadly to see which combinations (configurations) of culture and identity best support different project work and which ones, in turn, create conflicts or inefficiency.

This has been an interesting and important insight during the research process. For example, Hennink (2020) & Vilkkä (2021) have stated that ultimately the criterion for the reliability of the research is the researcher himself and his actions, choices and solutions during the research. For this reason, it is important to consider the researcher's own commitment to the research; why the topic is important to the researcher and how thoughts have changed during the research process (Tuomi & Saarijärvi 2018). For this reason, it is worth considering that the researcher himself works in the organization that is the subject of the research as a limiting factor. This may raise concerns about the reliability and objectivity of the research, but it does not automatically make the research unreliable. Hennink (2021), Gronmo & Grønmo (2023) and Tuomi & Saarijärvi (2018) each emphasize the personal importance of the researcher in assessing the reliability and limitations of the research. Regardless of the relationship between the researcher and the organization being studied, it is important that the researcher continuously reflects on the appropriateness and functionality of choices and conclusions in terms of the research results (Hennink 2020). In particular, Gronmo & Grønmo (2023) and Puusa & Juuti (2020) emphasize the trust between interviewees and the researcher in qualitative research, which can also be seen as a strength of this study.

In this study, the informants of the study, i.e. the people interviewed in the study, were purposefully gathered from the same organization in order to obtain in-depth information about the organization's culture and its impact on the success of projects. This choice enabled the examination of the internal practices and cultural factors of the organization under study through a unified perspective. At the same time, the choice also highlights a potential limitation, as organization-specific perspectives can be linked to individual practices and values, which affects the generalizability of the results

(Hennink, 2020). This can also be seen as an opportunity for future follow-up studies, which can be targeted more broadly to cover different industries and different organizational cultures, from different company forms to a global examination. In addition, the study only examined the effects of one organizational culture type on the management of projects in one community. For broader generalizations, companies representing other cultural types should be studied in addition to organizations representing a market culture.

The ethics of the study were ensured by following the principles of good scientific practice. Before the study was carried out, the persons invited to the study were sent written information by email about the purpose of the study, the processing of the data and the implementation of the study. The preliminary material can be found in the appendices of this study (Appendix 1). The information in the preliminary material was also reviewed orally at the beginning of each interview. The voluntary nature of participation in the study and the anonymity of the data were particularly emphasized to the respondents. The interviews were processed and stored anonymously so that only the researcher had access to the data. In addition, neutrality was sought in the analysis and reporting so that the researcher's own views would not influence the interpretation of the results.

Other research opportunities open up simply by utilizing the theoretical framework of this study. In the future, by studying the combination of BSC and CVF, the impact between culture and organizational performance can also be examined from other perspectives. This study did not consider the perspectives of project teams or the management of the target organization on culture or project performance. Luukka (2019) has stated that in many companies, management and employees see culture differently. This study was intentionally limited to addressing the perspective of project managers on the topic under study. In subsequent studies, it is worth considering other groups under study, because when the management's vision does not match the everyday lives of employees, differences of view and conflicts arise, which can weaken the

organization's ability to support its goals and maintain high performance (Panahi, 2016; McGregor & Doshi, 2024).

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Appendices

Appendix 1. Interview guidelines for participants

Hello,

and thank you for participating in my research.

This email contains instructions for the pre-assignment as well as other important information related to the interview. Please make sure to read the message carefully.

I am currently finalizing my Master's studies at the University of Vaasa, and my Master's thesis focuses on the impact of organizational culture on project management. The estimated completion date of the thesis is March 2025. At this stage, I would like to express my sincere gratitude for your assistance in conducting the research.

PRE-ASSIGNMENT (approximately 10-15 minutes)

- Attached to this email is an Excel file, the responses in which aim to understand the prevailing culture within the organization and identify its current state, as well as the interviewees' perspective on the ideal cultural state.
- The survey consists of 6 themes, each with 4 statements. Your task is to allocate 100 points for each theme among the four statements as follows:
 - Give the most points to the statement that you feel best represents both your perception of the current state and your ideal vision of the desired state.
 - You can distribute the remaining points among the other statements based on how well they represent the situation. Assign fewer points to statements that you feel are less relevant or suitable to your experience.
 - You can distribute the points evenly or emphasize them as needed, but the total sum of the points for each theme must always equal 100 points. The total of the points you allocate will be displayed below the scoring boxes.
 - Current State column: Assign points based on how well the statement reflects the current situation in your organization.
 - Desired State column: Assign points based on how you would like or envision the organization to be in an ideal situation.
- Return the completed Excel file as an attachment by replying to this email no later than the agreed interview date.

OTHER IMPORTANT INFORMATION:

- This research examines the impact of organizational culture on project success. The goal is to gain a deeper understanding of individuals' experiences and interpretations of how organizational culture influences their work. The interviews provide valuable insights into how participants perceive the organizational culture and its effects on project management.
- Participation in this study is entirely voluntary. You may withdraw from the interview at any time or refuse to answer specific questions without any consequences.

- All information collected in this study, including your interview responses, will be handled with complete confidentiality. All responses will be anonymized to ensure that you cannot be identified in the research findings. The data will be used solely for this study and will not be shared with third parties.
- The interview will be recorded for the purpose of data collection and analysis. The recordings will be deleted once they have been transcribed and processed for analysis. The anonymized text-based data may be retained in a research archive for potential future studies, but without any identifiable information.
- The data will be handled by the researcher (Elli Eskola), and all information will be stored in a secure environment.
- The interview will take approximately 60 minutes. Depending on the participant's location, the interview will be conducted either remotely or in person.

If you have any questions regarding the interview or the study, I am happy to answer them. You can contact me by email or phone at [phone number].

Thank you for your time and valuable contribution to this study!

Best regards,
Elli Eskola

Appendix 2. OCAI template

KULTTUURIN ARVIOINTI		
<p>The survey contains 6 questions, each with 4 statements. You have 100 points per theme to discuss. Your task is to divide the 100 points you have for each theme among the 4 statements presented in the question so that you give the most points to the statement that best reflects your opinion. In total, you will divide 6 times 100 points for the current state of each theme and 100 points for the desired state of each theme.</p> <p>In the current state column, mark the points according to how you feel the statement is being implemented in the organization at the moment. In the target state column, mark the points according to what you think is the most ideal situation.</p>		
1. Dominant characteristics	Current (100p)	Target (100p)
a) Our organization is very communal and resembles an extended family. People are open and share personal things with each other.		
b) Our organization is dynamic and entrepreneurial. People are ready to take risks and act with courage.		
c) Our organization is strongly focused on achieving results. The most important thing is to get things done. Competitiveness and achieving goals are at the heart of it.		
d) Our organization is tightly controlled and structured. Official procedures and instructions largely determine what people do.		
p.	0	0
2. Organizational leadership		
a) The leadership of the organization could be characterized as caring, encouraging, supporting individual growth, or mentoring style.		
b) The organization's leadership could be characterized as emphasizing entrepreneurship, innovation, and risk-taking.		
c) The organization's leadership could be characterized as results-oriented, straightforward, and matter-centered.		
d) Organizational leadership could be characterized as embodying systematicity, organization, and efficient operations.		
p.	0	0

3. Management of employees		
a) Leadership in an organization is based on teamwork, inclusion, and building a shared vision.		
b) Leadership in an organization is based on individuality, creativity, freedom and innovation.		
c) Leadership in an organization is based on a fierce competitive spirit, high demands, and an emphasis on achieving achievements.		
d) Leadership in an organization is based on stability, consistency, and the preservation of employment and human relationships.		
p.	0	0
4. Organization glue		
a) The unifying factor of the organization is loyalty and mutual trust. People's commitment is high.		
b) The unifying factor of the organization is innovation, pioneering and development. People find it important to be at the cutting edge of the industry.		
c) The unifying factor of an organization is the achievement of goals and objectives. For people, achieving goals and winning are important themes.		
d) What unites an organization is clear rules, procedures, and practices. Maintaining smooth operations is important for people.		
p.	0	0
5. Strategic emphases		
a) The organization emphasizes personal development. High trust, openness, and participation are important themes.		
b) The organization emphasizes new challenges and expansion of operations. Trying new things and seizing opportunities is valued.		
c) The organization emphasizes competition and achievement. Stretching to achieve goals and ambitious goals are prioritized.		
d) The organization emphasizes permanence and stability. Efficiency, control, and smooth operations are important.		
p.	0	0
6. Criteria of success		
a) In an organization, success is defined through developing personnel skills, strengthening teamwork, and taking care of employee well-being.		
b) The organization defines success based on unique and innovative development ideas. The goal is to remain a trendsetter in the industry and at the forefront of development.		
c) In an organization, success is defined by achieving market position and surviving the competition. Winning and competitiveness are core values.		
d) In an organization, success is defined by efficiency and smooth operations. Reliable deliveries, precise scheduling, and cost-effective operations are important.		
p.	0	0

Appendix 2. Interview manual

1. **Introduction:** (5 minutes)
 - Introduction to the aim of the research, the confidentiality of the interview and the rights of the interviewee.
2. Experience of organizational culture through the eyes of a project manager: (15 minutes)
 - Describe your role as a project manager?
 - How long have you been in this role?
 - Describe what is expected of you as a project manager?
 - How are you measured in the role of project manager?
 - What values guide your work as a project manager?
 - How does management support your development as a project manager?
 - How would you describe your organization's story, values, and culture?
 - What kinds of operating models are valued and considered meaningful in the organization?
3. Questions about project management practices: (20 minutes)
 - What kinds of operating models are valued and considered meaningful in the organization?
 - What management practices do you use to ensure that customer expectations are met?
 - Describe weekly project management: what kind of management practices does your typical work week involve?
 - Describe how management practices aim to keep the project on budget?
 - Describe how management practices support project quality management? Which management practices do you think are the most important in quality management?
 - Describe communication with the project team? What kinds of things do you think are important when communicating with the project team?
 - Describe how you manage the project team's competence?
 - How are the processes and methods followed in your project documented? How is documented information utilized?
 - How do you feel that the culture of the organization influences the outcome of the project?
 - How do the operating models that are valued and considered meaningful in the organization appear in your weekly management work?
4. Project Manager and Management: (20 minutes)
 - What kind of cultural practices support your project management and motivate you to succeed as a project manager? Have you identified any features in your organization's operations that pose challenges to project management? What kind?
 - Give examples of situations where organizational culture has supported you as a project manager and situations where organizational culture has caused challenges in project management.
 - Have you identified any conflicts in the culture of the organization? Give an example of how the conflicts you mentioned manifest themselves?