

CORVINUS UNIVERSITY OF BUDAPEST

**DIVERSITY AND CHANGE STRATEGIES IN
THE IT SERVICES INDUSTRY**

DOCTORAL DISSERTATION

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Diversity and change strategies in the IT service industry

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DOCTORAL SCHOOL OF ECONOMICS

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Doctoral thesis

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To my mother and father

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1 Introduction

One of the fundamental questions of strategic research is what makes a company successful in the long term and what causes the failure, bankruptcy or acquisition of others can be traced back to. The issue is quite intricate and complex, as the closing sentence of Nokia CEO Stephen Elop's speech at the press conference of the company's acquisition by Microsoft faithfully reflects: "We didn't do anything wrong, but somehow we lost." In the 1990s and early 2000s, Nokia was one of the world's largest mobile communications companies in terms of volume and sales. Its market share in this period was around 80%, and Microsoft acquired it in 2013 as a closing chord of several unsuccessful strategic directions (Bouwman et al., 2014). Depending on the events, the following questions arise: How does a market-leading, successful company with a stable financial background, good reputation, adequate material and human resources, and experienced management get to the point where it has to accept its acquisition by another company? What reasons, antecedents, and processes lead to such a decision? What was in Nokia's DNA that made it unable to respond appropriately to market events?

The case of Nokia is quite common. Nanterme (2016) points out in his article that since 2000, just over half of the Fortune 500 companies have disappeared. These include, for example, the acquisition of Minolta and Motorola, the bankruptcy of Kodak (Viki, 2017), and the case of Blockbuster (Baskin, 2013), considering the acquisition of Netflix unprofitable. It is clear from these phenomena that understanding the reasons for corporate survival and the corporate paths designated by top management is a significant issue in the life of organizations.

The reason for the fall of successful companies can be a radical change in the external environment (Christensen, 1997), a lack of trust within the organization (Pudelko & Liu, 2020), management and organizational culture focused on excessive control (Bouwman et al., 2014; Pudelko & Liu, 2020). Christensen (1997) points out that the appearance of new business models and technologies is associated with the transformation of the market, i.e., the change in the external environment. However, while slow change gives organizations adequate reaction time so that they can react to it with innovation, radical changes are often detected too late and responded to in an inappropriate way. The possible response of companies to radical changes is a profound

strategic renewal, for which organizations must reform their strategic goals and capabilities in order to be able to adapt to the environment. By strategic renewal, I mean the set of all adaptive decisions and actions that a company makes or takes in order to change its path dependence and maintain a dynamic fit with the changing environment over time (Volberda et al., 2001: 160).

Recognizing the importance and necessity of strategic renewal, new research questions related to the topic arose, such as how can the various responses of companies to strategic renewal be explained (Baden-Fuller & Volberda, 1997)? Why were IBM and Intel able to adapt to environmental changes by renewing themselves and thereby maintaining their leading market role, and why not the previously mentioned Nokia or Kodak (Assink, 2006; Vuori and Huy, 2016; García-Granero, 2018)?

At the same time, the literature began to include the human resources side of skills and abilities based on the principle of connection and synergy. Related to this, questions arise such as: What learning and organizational processes, capabilities, and structures result in successful strategic renewal (Schmitt et al. 2018)? How do the characteristics and diversity of top management influence the company's strategic innovation (Talke et al., 2010)? How does managerial cognition influence internal and external renewal in a dynamic environment (Heyden, 2012)? What is the effect of functional and age diversity on the ambidexterity of organizations (García-Granero, 2018)? Summarizing the above: How do people with different profiles, demographic backgrounds, cognitive bases, and the groups within the organizations they form affect each other, the organization's performance, and life? Furthermore, how can organizations in a competitive environment simultaneously implement processes to increase efficiency and focus on the future (García-Granero et al., 2018; Kostopoulos & Bozionelos, 2011; Csedő & Zavarkó, 2019)?

As we can see from the above, a standard set of approaches to strategic renewal and ambidexterity and diversity has emerged within organizational theory studies, which was created thanks to theoretical antecedents such as Simon's bounded rationality (1976), Cyert and March (1963) dominant coalition, Hambrick and Mason's (1984) upper echelons theory, Thomas' (1991) diversity management as a business strategy model, and diversity and inclusion (Mor Barak et al., 2021; Vito & Sethi, 2019; Shore et al., 2011) regarding the latest insights and results.

Overall, I am looking for an answer to how diversity in the workplace (which includes the variety of the management layer, its conception, understanding, and management of diversity) affects the search patterns of managerial information within the organization, which are part of the strategic renewal and ambidexterity, and according to which patterns it can be to grasp these effects.

Accordingly, my research questions were as follows:

KK 1: How is the diversity of managers related to strategic renewal and ambidexterity?

KK2: How is the diversity of top managers related to the search patterns that form the basis of decision-making processes?

KK3: How does diversity as an organizational value affect strategic renewal and ambidexterity?

As I have tried to illustrate so far, my research contains, on the one hand, a quest for understanding, which anticipates the qualitative method of my research. On the other hand, my research questions (see Chapter 4.3) are predominantly practical and functionalist in nature, as they aim to capture explanatory patterns and explore connections. The editing of my research questions was also born as a result of conscious shaping. I wanted to support the achievement of the functionalist goals with a partially interpretive approach (I will explain this in detail later).

At the same time, my model and conclusions were not tested on a large sample, so from a positivist point of view, my results cannot be considered general. My choice of methodology (case study methodology based on qualitative interviews) focuses on typical situations or individual people or on words and not on numbers.

Figure 1 shows my research's main theoretical, practical, and methodological pillars.

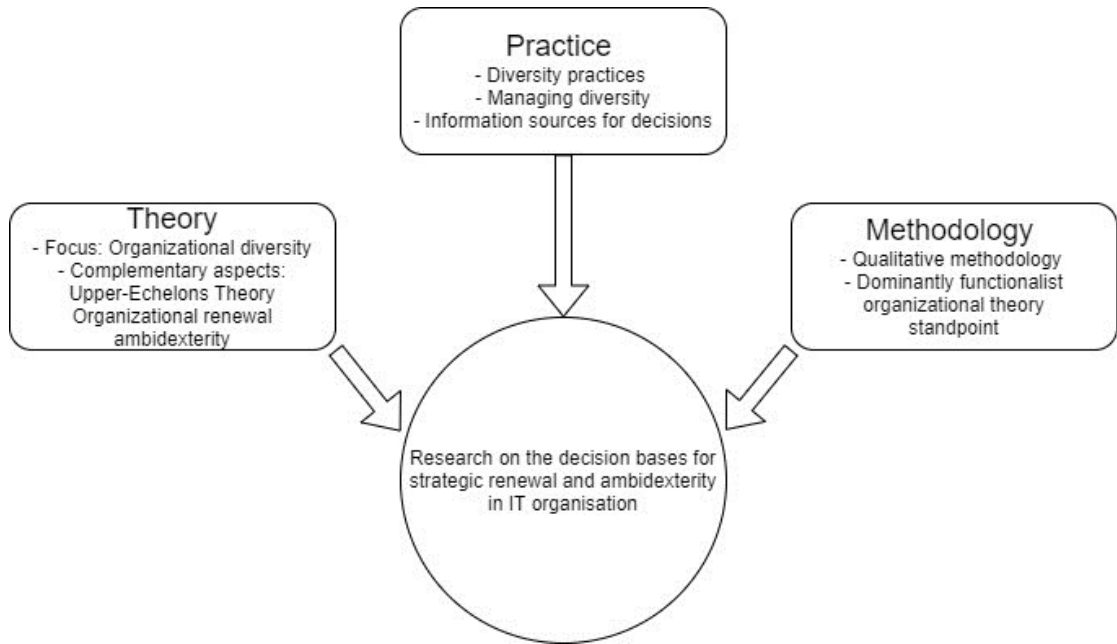


Figure 1: Theoretical, practical, and methodological pillars of my Ph.D. research

My own editing

To reveal the strategic renewal and ambidexterity of the examined companies, I examine the search patterns of the managers using the defining diversity features, the impact of understanding the diversity of top and middle managers, and treating diversity as a shared value.

Several factors contribute to the actuality, economic, social, and scientific importance of the topic:

- 1) The significance and importance of diversity have become an even more pivotal issue these days, including COVID-19 (McKinsey, 2020), the #MeToo movement (Marshall, 2019), harassment uncovered at related IT companies (MacDonald, 2018), negative media appearances (Mahdawi 2019), the effects of colonial history up to the present day (Geraldine, 2015), the low female workforce in IT companies (Olasz, 2021), which is the focus of the dissertation, due to unbalanced age management in Hungary (Tardos, 2016).
- 2) The change initiated by the fourth industrial revolution, during which the need for digitization generates technological changes that result in the transformation or termination of business branches. Digital transformation plays a decisive role in the fourth industrial revolution through technological innovations such as

artificial intelligence, cloud-based services, blockchain, the Internet of Things (IoT), Big Data, and 5G (Warner and Wäger, 2019). Companies must keep up with technological trends and growing user demands, a process that has been accelerated even more by the events generated by COVID (Ernst & Young, 2021). Company leaders, the strategic directions they choose, and the company's capabilities play a huge role in this process and in the company's path to success or failure. Accordingly, based on Hambrick and Mason (1984) - since organizations are the reflection of top managers - the demographic and cognitive diversity of TMT members, i.e., their profile, has a decisive influence on the path of organizations.

- 3) Related to this, the literature on top management theory is dominated by research that focuses mainly on the composition of the TMT, neglecting the role and importance of diversity management itself (Lo et al., 2020).
- 4) Qualitative research needs to include more literature on diversity management (Yadav & Lenka, 2020).
- 5) Most of the analyzes examine age, gender, and origin diversity, while work-oriented dimensions such as functional, educational, and tenure diversity are widely ignored (Yadav & Lenka, 2020).
- 6) The literature on top management theories has placed less emphasis so far on a more direct and more profound examination of cognitive processes. Nelly and his co-authors (2020) highlight the importance of filling this gap because this method connects managerial cognition with the company's strategic actions.

Given that IT has become an essential tool for today's organizations to stay on the market, the top management decisions and values that transform IT provide an excellent platform for examining the decision mechanisms and decision patterns made on the basis of the diversity that determines strategic renewal and ambidexterity. Cloud-based services, which play a key role in the strategic revival of the examined companies, significantly go beyond both IT suppliers and the digital economy. This fact is confirmed by the fact that, at the time of writing this research, eight of the world's ten largest listed companies deal with cloud services (CorporateInformation, 2020).

Cloud-based services with their technical background, market penetration, and legal

studies deal with its regulation. At the same time, the strategic renewal of domestic small and medium-sized cloud-based service companies according to the search patterns examined from the perspective of diversity, the impact of the ambidexterity that ensure competitiveness on the strategy, their understanding and interpretation of diversity is currently a poorly researched area; this gives the novelty of my research topic.

The structure of my dissertation is as follows:

- I continued my Ph.D. studies within the Department of Management and Organization framework, following the requirements and traditions of the institute, in Chapter 3. In the theoretical framework of the thesis, I present and clarify the theoretical focus of the research, my organizational theoretical foundations, and also how they affect the methodology to be followed and my diversity management research. In addition, I present the lens through which I examine and interpret previous theories related to diversity, related renewal, and ambidexterity. I also identify the research gap related to this.
- In Chapter 3, I present the process of carrying out the research and the goals that serve as the compass of my research work, which is part of it.
- In Chapter 4. Research questions and assumptions, I present the conceptual framework of my thesis, my research questions, and my models.
- I present my research results in detail in Chapter 5.
- Finally, in the 6th Conclusion chapter, I summarize the answers to the research sub-questions and the main research question, formulate my thesis in light of the assumptions, present the novelty of the thesis, and discuss the limitations and further research directions.

2 Theoretical framework

In this chapter, I present the most relevant theoretical foundations and definitions related to my research and the latest literature results on the subject. In addition, I examine the literature findings from the perspective of my own research question, interpret my own interpretations, and formulate conclusions by synthesizing the relevant

literature. Based on the literature analysis, I created my research framework to contextualize my research direction, goals, and results.

2.1 Theoretical focus

The research I conducted during my Ph.D. studies and the publications made from them examined the situation of some groups in the diversity categories, as well as the organizational change that ensured long-term effectiveness in response to the change generated by the turbulent environment. The theoretical focus of my research was also diversity management, as well as organizational renewal, their conscious management, and control, which I examined mostly concerning IT acquisitions.

In the present research, on the one hand, relying primarily on the work of Thomas (1991), Rijamampianina and Carmichael (2005), and Mazur (2010), I interpret workplace diversity as a "collective mixture of differences and similarities" supplementing it with Prasad et al.'s (2006) thesis on power blindness, according to which I do not consider all differences to be of equal weight. Dijk et al. (2016) point out that understanding this micro-dynamic factor is extremely important for diversity management science, as diversity research tends to treat different social categories as equivalent and thus ignores how belonging to a social category can affect the members' experiences.

Each change strategy results from the decisions and preferences of key decision-makers, which route is considered preferred by top managers in terms of strategy. Because the behavior, preferences, and decisions of the top management determine the distribution of resources, the expected relationships, the prescribed behavior, the actions of the organizational members, and their social involvement (Hambrick & Mason, 1984). The Upper Echelons framework formulated by Hambrick and Mason (1984) deals with the detailed examination of this question, in which the diversity of senior management and the individual profile of the leader plays a major role.

2.2 Fundamentals of organizational theory

In this chapter, I present the findings and conclusions with which I can present the underlying assumptions and considerations of my Ph.D. research. For this, I call on the social science defined by Burrell and Morgan (1979), the assumptions and paradigms regarding the nature of society, and their most important findings in the literature. The reason for my choice is that although there are several meta-theoretical classifications in the literature (e.g., Knights & Omanović, 2015; Prasad et al., 2006), given its broadest acceptance, the Burrell and Morgan (1979) paradigm matrix is used to present the differences in the views of individual diversity I use. Before detailing my organizational theoretical foundations, I consider it important to briefly present my motivation as a researcher and the theoretical connections deemed essential to me.

My Ph.D. research also served practical purposes; my motivation is twofold: On one hand, I want to draw the attention of domestic small and medium-sized IT companies to the contribution of diversity to long-term sustainability goals, supplemented by other insights, practices, and concepts. All of this is important for IT organizations - as for all businesses operating in a turbulent environment - because they must simultaneously be able to operate in the most efficient way in the present (exploitation) and to innovate in search of new opportunities (exploration), which ensures successful long-term operation (Duncan, 1976; March 1991). Stability is required for effective operation; flexibility is required for exploration, as it generates organizational change (Csedő, 2006). Accordingly, the goal of change management is organizational renewal (Csedő & Zavarkó, 2019). Successful change management requires an inclusive atmosphere, supportive leadership, and respect for diversity. Without this, organizational renewal fails and has harmful consequences (Vito & Sethi, 2020). Although the literature on upper echelons theory pays a lot of attention to TMT diversity, a deeper analysis of the management, role, and significance of diversity and inclusion is an area that has been less researched so far (Lo et al., 2020).

My research is based on a positivist approach, as it aims to explore general definitions and connections. In addition, I have a Ph.D. thesis on functionalist organizational theory related to this research, as its objective is to describe differences and phenomena, to capture explanatory patterns, and to clarify the effects of the analyzed diversity dimensions on the organization as a whole. At the same time, I built

my empirical research on qualitative methodology, which is closer to the interpretive paradigm (Burrell & Morgan, 1979). I present the interpretive and functionalist approaches in more detail in this chapter. This also means that the paradigms associated with critical theories - Burrell's and Morgan's radical structuralism¹ and radical humanism², as well as postmodern theories³ - I will not touch on them as they are not relevant to me because these approaches serve a completely different social purpose than the interpretive and functionalist paradigms.

2.2.1 Assumptions about social science and the nature of society

Burrell and Morgan (1979) organize the theories dealing with organizations into four paradigm types using two matrix dimensions (Primecz, 2018). One dimension divides the theories regarding the nature of science and the other of society. So, the first dimension deals with the issue of what science is, including ontology⁴, epistemology⁵, the nature of human action⁶, and methodology⁷ (Burrell & Morgan 1979). Accordingly, it chooses to build on the objective of the subjective philosophy of science. We have to

¹ The theorists in the radical structuralist paradigm are those who support the sociology of radical change from an objectivist point of view, thus questioning the *raison d'être* of capitalist society. For example, he assigns an important role to radical change, emancipation, and structural conflicts, which he tends to approach in a realist, positivist, deterministic and nomothetic ways (Burrell & Morgan, 1979). Consequently, the perspectives of this paradigm usually approach organizations as political systems that reproduce inequalities and social injustice, as they structurally silence, or disadvantage groups often constructed as minorities (Romani & Holgersson, 2020). Consequently, dominance and subordination struggles are seen as the norm rather than the exception (Janssens & Zanoni, 2021). The studies examine the construct of differences and diversity and the consequences of reproducing oppression (Romani & Holgersson, 2020), so this perspective is deeply intertwined with institutionalized power relations (Janssens & Zanoni, 2021).

² The goal of the radical humanist paradigm is to develop the sociology of radical changes from a subjectivist point of view. Its social science approach is similar to the interpretive paradigm in many cases. It assigns an important role in overturning existing social barriers and human self-awareness. One of the most basic principles of this paradigm is that human consciousness is driven by ideological structures with which he came into contact. It, therefore, focuses on the experiences of individuals while also tending to view society as a site of struggle, oppression, and conflicts (Burrell & Morgan, 1979).

³ Postmodern theories reject meta-narratives.

⁴ The main question of existential theory here is whether the investigated reality is created "outside" the subject of the observer or is a product of the individual's consciousness (Gelei, 2006).

⁵ Epistemology, the main question of which is whether reality can be acquired and transmitted knowledge or knowledge itself is much more subjective than this and can therefore only be understood through the experience reality (Gelei, 2006).

⁶ The examination of the relationship between man and his environment, the main questions of which here are whether the environment determines human response, or whether human consciousness, action, and interaction define reality and, accordingly, man has free will in his decisions (Gelei, 2006).

⁷ The method of acquiring knowledge about reality, the main question of which here is whether social science can be put on a methodological basis similar to natural science (e.g., large-scale questionnaire analysis, quantitative interview, document analysis, etc.) or not (e.g., in-depth interview, participant observation, discourse analysis, diary methodology, etc.) (Gelei, 2006).

see the choice as a continuum, so to represent the continuity, we call the endpoints "objectivist" and "subjectivist", respectively (Primecz, 2018). The dilemma of the second dimension is the social conflict, one side of which is the status quo, i.e., these theories do not discuss social issues and accept social structures. The other endpoint is sociology aiming to radically change macrostructures, i.e., theories that see manifestations of irreconcilable social conflicts in the life of organizations (Burrell & Morgan, 1979).

These two dimensions define a matrix that describes four paradigms - functionalist paradigm, interpretive (interpretive) paradigm, radical structuralist paradigm, and radical humanist paradigm - whose location I illustrate in Figure 2. This thesis deals only with the functionalist and interpretive paradigms, as they align with the dissertation's basic goal, i.e., the understanding and support of organizational diversity in the renewal process and during the use of ambidexterity.

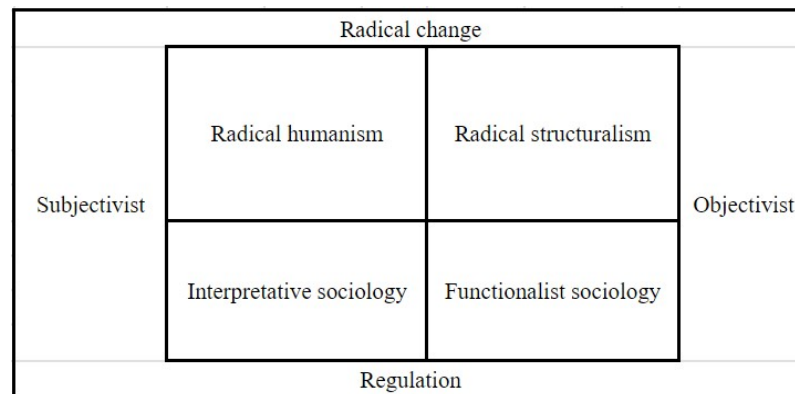


Figure 2: The sociological/organizational theory paradigms of Burrell and Morgan

Source: Burrell and Morgan, 1979, p. 22

In contrast, the radical structuralist and humanist paradigms criticize the capitalist social system. Consequently, analyzing the topic according to these paradigms cannot result in adding value to the parallel understanding and development of the existing system (Burrell & Morgan, 1979). I present the main elements of the assumptions described by Burrell and Morgan and summarized by me in Table 1.

What follows is a presentation of the literature on diversity management and organizational change according to interpretive and functionalist paradigms, intending

to point out their purpose and focus and also show how perspectives, dimensions of diversity, and change are handled.

A socio-philosophical position	Ontology	Nominalism	Society is nothing more than a set of names used to construct reality. It considers names to be the creation of crafts, which he sees only as a means of structuring reality. It does not recognize structures as reality, but makes them dependent on the individual.
		Realism	Outside of individual cognition, there is a reality that consists of relatively unchangeable structures. The individual was born and lives in a social world that has its own personality.
	Epistemology	Anti-positivism	The world is relativistic and can only be understood from the perspective of those directly involved in the activities being studied. Events taking place in reality cannot be explained by laws, cause-and-effect relationships and, accordingly, cannot be used to predict phenomena. The power of science to create objective knowledge is rejected.
		Positivism	The events taking place in the world can be explained by laws and cause-and-effect relationships, and they can be used to predict phenomena.
	Human nature	Voluntarism	Humans are completely independent and have free will, their actions cannot be explained by situational factors.
		Determinism	A person and their actions are completely determined by their environment and their situation.
	Methodology	Ideographic	The world can only be understood if we get to know it in a natural context, through direct data collection, in the field, using qualitative tools.
		Nomothetic	Basic assumption: the world can only be understood by following a systematic research technique, by testing hypotheses with quantitative tools.
Assumptions about the nature of society (sociology)	Status quo	Dynamics	Status quo
		Nature	Social order
		Decision/will	Consensus
		Participation	Solidarity
		Capital	Satisfaction of needs
		Timeframe	Actuality
		Scope	Actuality
	Radical change	Dynamics	Radical change
		Nature	Structural conflict
		Decision/will	Power, dominance
		Participation	Emancipation
		Capital	Deficit
		Timeframe	Option
		Scope	Future

Table 1: The main elements of the assumptions Source:

Own editing based on Burrell and Morgan, (1979)

2.2.2 Positivist science and functionalist organizational theory

The functionalist organizational theory paradigm is based on the same assumptions as positivist science. The approach of this paradigm is positivist from the epistemological point of view, realist from the ontological point of view, deterministic according to its conception of human nature, and nomothetic from the methodological point of view. It is characterized by the effort to explain the status quo, integration according to the social order, and solidarity (Burrell & Morgan, 1979). According to

Donaldson (2003), positivist science is quite dominant alongside the functionalist approach, as it modifies the functioning of the existing system in the direction of improving need satisfaction.

The functionalist paradigm combines the objectivist philosophy of science with regulatory theories that primarily examine underlying unity and coherence. The natural sciences are considered a research model; their basic characteristic is the analysis of relationships between variables. They aim to explore regularities, understand rational responses, order, stability, and balance, and maintain them through efficient and effective regulation (Burrell & Morgan, 1979). Furthermore, their endpoint is to describe the above with general theories through which knowledge can be increased (Donaldson, 2003). Positivist and functionalist works focus on predicting and controlling phenomena (Chia, 2003) and measurability, which is often implemented through quantitative tests using questionnaires (Burrell & Morgan, 1979). Functionalist studies study the characteristics of processes, systems, and non-radical change (Morgan & Smircich, 1980) to develop within the system (Cunliffe, 2011).

The metaphysical roots of the functionalist approach go back to the philosophical school of Parmenides, according to which reality is atomistic⁸, stable and relatively unchanged, independent of us, and has a graspable structure (Chia, 2003). In reality, as a concrete structure, people are the products of external forces. Stimuli in their environment lead them to behave and react in predictable ways (Morgan & Smircich, 1980). Accordingly, people are not shapers of the environment but simply responding or adapting elements (Morgan & Smircich, 1980). Consequently, human behavior is determined by the environment (Cunliffe, 2011).

The basis of modernist thinking is the assumption of stability and an external structure independent of us because the universal pattern of order gives us the opportunity to break it down into its elements and examine them separately. Emphasis is on being and not on becoming. It does not consider some aspects outside the process to exist; according to this view, any observed change is a change of location of the elements within a stable structure and not a transformation or their position on a broader system of relationships. Accepting these basic assumptions, it is possible to create general knowledge, so the value of knowledge is its generalizability (Chia, 2003). In

⁸ “Atomism posits that reality is made up of individual particles with identifiable properties and characteristics, which together create the diversity of our experiences” (Chia, 2003).

this approach, the human and organizational aspects can be explained by environmental situations, as environmental changes drive them. The change of the environment based on the contingency theory appears⁹ as an adaptation challenge; if it is based on the selection theory, it appears as a survival challenge. The answer to this is organizational change, which leads to a managerial decision striving for an optimal solution with efficiency and effectiveness in mind (Donaldson, 2003).

2.2.3 Interpretive science and organizational theory

The interpretive paradigm seeks to understand the world based on the subjective philosophy of science and the sociology of order. It seeks to experience and understand the fundamental nature of the social world on a subjective level. The followers of the paradigm see that the actors of society create social and organizational reality through their actions and interaction (Gelei, 2006). This approach focuses on shared meanings and symbols that make the world understandable in a given sociocultural context. Its purpose is to understand through experience, to interpret reality in its depth, the subjectively, socially constructed, and constantly changing world (Burrell & Morgan, 1979), which can be used to reveal the background of phenomena, the individual and community meanings (Hatch & Yanow, 2003). In addition, interpretive research aims to give voice to different interpretations, interests, and beliefs (Kelemen & Rumens, 2008), to explore possible narratives (Cunliffe, 2011), to understand symbolic discourses and the process of constructing reality (Morgan & Smircich, 1980). The methods are usually qualitative, favoring in-depth interviews and techniques inspired by ethnography (Romani & Holgersson, 2020), and then analyzing the data obtained in this way using different coding techniques, from which categories and subcategories are identified (Knights & Omanović, 2015).

In contrast to the metaphysical roots of the functionalist approach, according to the view of the interpretive approach, the world is constantly changing. According to its basis, the reality is a social construct created during such interactions (Kelemen & Rumens, 2008), where no permanent structures are independent of individual and community consciousness (Chia, 2003). In an extreme view, the social world and reality

⁹ Contingency theory examines how a given situation affects specific characteristics of the formal organization structure (Dobák & Antal, 2010).

are merely the projection of the individual's consciousness, the work of his creative imagination, which creates and interpellates symbols (Morgan & Smircich, 1980). This means that the social world and reality cannot be understood in the same way as the natural or physical world, so there is no possibility of creating general rules or theories (Hatch & Yanow, 2003). According to this, all knowledge is context-dependent because everyone constructs reality differently (Hatch & Yanow, 2003). During interactions, individuals create meanings in subjectively perceived time and space (Cunliffe, 2011). In this approach, "organizations can be seen as a set of cultures rather than a black box with inputs and outputs" (Kelemen & Rumens, 2008, p. 23). Accordingly, constantly changing social-community constructions (Cunliffe, 2011).

However, it is important to remember that, in contrast to the functionalist approach, the focus of the interpretive approach is not organizational adaptation or its success but the organization's perception of reality (Gelei, 2006). So, in contrast to the external environment that generates changes appearing in the functionalist approach, to which organizations must adapt, based on the interpretive approach, the reason that generates organizational changes also originates from within. The source of this can be new meanings, problem-solving and interaction patterns, new organizational self-definition, and external environmental interpretations due to changes in internal interaction patterns, power relations, and their transformation (Gelei, 2006). This two-way relationship between the environment and the organization becomes even more complex in the course of organizational change, as "the ambiguity of the organizational reality comes to the fore in an uncertain situation" (Bokor, 2000, p. 49). The ambiguity of organizational change is not static during organizational change because it changes continuously during organizational learning, since in the interpretive approach, "organizational learning is the process of forming a common world of meaning" (Gelei, 2002, p. 104).

2.2.4 The impact of organizational theory foundations on research methodology

As I illustrated above, it can be seen that the interpretive and functionalist paradigms that form the backbone of my research are based on opposing assumptions. As a result, I consider it necessary to introduce my basic position as a researcher briefly.

1. I accept the proposition of Lewis and Grimes (1999), according to which multiparadigm researchers use divergent paradigm lenses of existing literature in order to achieve a broader perspective.
2. I accept Giora and Pitre's (1990) statement that paradigms can be traversed, the transit zone of which is the area where the boundaries are not sharp, which provides the framework for multi-paradigm research.
3. Fundamentally opposing theoretical assumptions (Burrell & Morgan, 1979) may not appear simultaneously but sequentially within research.

Regarding the present research, the interpretive, qualitative perspective supported the broader functionalist research goals and answered questions. I also adapted my methodological tools to resolve the contradictions (case study methodology based on qualitative interviews).

2.2.5 The impact of organizational theoretical foundations on diversity management research

On the one hand, functionalist diversity management examines the relationships affecting a diverse workforce, the dimensions representing their characteristics (Knights & Omanović, 2015; Tardos, 2016), and its effects on organizational behavior (Romani & Holgersson, 2020). Typical topics in this paradigm are, for example, goal orientation (Pieterse et al., 2011), performance (Dwyer et al., 2003; Reynolds & Lewis, 2017; Ouin et al., 2020; Brahma et al., 2020), teams' collaborative and success factors, as well as decision-making and problem-solving ability (Knights, & Omanović, 2015). On the other hand, research related to deeper categories of diversity, such as personality (Hambrick & Mason, 1984), attitude (Shaffer, 2018), values (Reynolds & Lewis, 2017), and information (Dwyer et al., 2003); Qi et al., 2022; Van Knippenberg et al., 2004). Typically, a strong influence of social psychology can be felt in this research (Knights & Omanović, 2015), so it focuses on aspects such as different social identities and categorization (Tajfel & Turner, 1979), similarity/attraction (Byrne, 1971), self-categorization (Turner et al., 1987) and information/decision-making (Williams & O'Reilly, 1998) perspective.

Functionalist literature also seeks to identify human differences using organizational concepts such as management and leadership, project management, innovation, teamwork, team identity, strategy, communication and organizational commitment, and HR practices. Social contexts are typically treated as facts, so they are considered unchangeable or static over time, so diversity management is seen as a universal phenomenon (Romani & Holgersson, 2020).

Interpretive diversity management researchers strive to understand phenomena and connections (Knights & Omanović, 2015). Their focus is on experiences related to individual differences and examining how the symbols related to these experiences and their interpretations are expressed in social or collective identity and perception (Toarniczky, 2012b). Research focuses on specific groups and professions. For example, they present the leaders' views on diversity and their interpretation within the organization (Dunavölgyi, 2017; Maji & Dixit, 2020), which enables us to understand their later actions and the interpretation of diversity within their organization (Romani & Holgersson, 2020).

There are many similarities between the positivist and interpretive traditions. On the one hand, both approaches deal with the effects of diversity rather than the conditions that enable it. On the other hand, both interpretive and positivist studies aim to identify gaps in the literature, which serve as a starting point for formulating research questions. Thirdly, although not explicitly in every case, they usually deal with management problems and the organizational life of managers (Knights & Omanović, 2015).

In addition to the above similarities, however, there are many differences between the two research traditions. While a significant number of positivist researchers measure the impact of diversity on organizational performance, those following the interpretive tradition focus on the understanding of meanings. In their investigations, interpretive researchers use concepts such as meaning-making (e.g., different interpretations of the business aspects of diversity) and understanding teamwork between national and organizational cultures (Knights & Omanović, 2015). Attention is paid to giving voice to the experiences of minority groups about the reality of the workplace. This includes, for example, studies that present women's experiences with stereotypes in the workplace (Dunavölgyi, 2017; Maji & Dixit, 2020), during the job search (Olasz, 2020), and in the field of education (Paksi, 2014). Consequently, in contrast to those who follow

positivist traditions, interpretive researchers seek to interpret and document the diversity-related interpretations and understandings of the persons involved in the research, for which they usually apply qualitative approaches. The empirical data obtained this way are often analyzed using different main and subcategories coding techniques. Accordingly, they do not require representative sampling.

	Functionalist paradigm	Interpretative paradigm
Task to be done	Investigating the impact of diversity on efficiency.	Understanding the experience of diversity through diversity categories or diversity management.
Target	Exploration of legalities and effects.	Understanding
Focus	Describing differences and phenomena, grasping explanatory patterns.	Perception, explanation of interpretations
Research focus sample	Clarification of the effects of dimensions on the organization as a whole or on its units.	Interpretation regarding leaders' interpretation of diversity and the experiences of minority groups.
Related discipline	Social psychology	Neurolinguistics
Contribution to management research	It points to inequalities in organizations based on diversity characteristics that previously formed the basis of meritocracy.	It expresses the voices of minorities and shows the interpretation of diversity from the perspective of several actors.
Connecting to culture	It focuses on several categories of diversity but ignores national culture.	
Methods	Usually quantitative, using large-scale studies and questionnaires.	Hermeneutics, qualitative method, ethnography and ideographic studies.
Similarities	They are mostly concerned with the effects of diversity rather than the living conditions that make it possible. He is motivated by the discovery of gaps in the literature, which help formulate research questions. They usually deal with management problems and the organizational life of managers.	

Table 2: Functionalist, interpretive paradigms and research frameworks in diversity management

Source: Own editing based on Romani & Holgersson, 2020, Burrell & Morgan, 1979; Knights & Omanović, 2015; Primecz, 2018; Romani & Holgersson, 2020

2.3 Contextualizing diversity

As I indicated earlier, the purpose of this chapter is to define the contextual nature of workplace diversity. However, before this, I consider it important to clarify the conceptual framework in a broader and narrower sense. This is necessary in order to define the use of the concept of diversity in my own research and to place it in the set of previous studies, as well as to provide the framework of my research framework.

It is customary in diversity literature for authors to highlight how complex and diverse the concept of diversity is (for example, Williams & O'Reilly, 1998; Van Knippenberg et al., 2004; Qin et al., 2014; Harrison & Klein, 2007; Yadav & Lenka, 2020). There is a need for this statement since the concept is very diverse and, as we will see, for example, the related research areas used, the focused perspective, the levels of analysis, the diversity categories used, and thus ultimately, the organizational

understanding of diversity, significantly influence the research aspects of the organization and its implementation. This may also result from the fact that the literature dealing with diversity is difficult to understand (Harrison & Klein, 2007), there are many definitions of the concept (Yadav & Lenka, 2020), the results of the research are very diverse (Qin et al., 2014), so it is difficult to synthesize them. (Harrison & Klein, 2007). In the following, I will attempt to present a brief summary of this.

As a socially constructed concept, diversity is complex, dynamic, and not limited to a single universal definition (Zapata-Barrero, 2009), as its meaning is always context-dependent (Jackson et al., 1995). In essence, it means acceptance and respect. In terms of sociological and psychological disciplines, it includes the understanding that each individual is unique and that individual differences must be recognized and explored in order to understand each other and to go beyond simple tolerance to accept and celebrate the richness inherent in the individual (Köllen, 2021).

In an organizational context, we usually use the adjective diverse or diverse to characterize the entire composition of different employees and the degree of diversity included in it (Yadav & Lenka, 2020). "The narrow concept of diversity management means the commitment of organizations to recruit, retain, reward and promote minority and female employees" (Ivancevich & Gilbert, 2000, p. 76). According to a broad interpretation, "diversity is a combination of differences between members of a social unit, a common characteristic regarding" (Harrison & Klein, 2007, p. 1200). The current definition includes two important aspects. On the one hand, diversity is always related to social unity, so it is a unit-level compositional construct (Jackson et al., 1995). Accordingly, it does not refer to individuals, but it can be linked to units such as the group or the organization. In this sense, diversity is a relational concept measured for at least one or more given attributes (Risberg et al., 2019). On the other hand, moving further along the line of thought, we have concluded that "a unit is not diverse in itself, but diverse in terms of one or more specific characteristics of its members" (Harrison & Klein, 2007, p. 1200). Consequently, the individual cannot be diverse per se (Risberg et al., 2019), and diversity does not exist at the individual level of analysis. However, the individual level of analysis is one aspect of diversity, as individual differences in various traits create diversity within a unit (Jackson et al., 1995). Accordingly, since diversity always denotes one or more characteristics related to a unit (Risberg et al.,

2019), the levels of analysis must be extended to the individual. Then the individual characteristics must be included as an aspect of diversity, i.e., obtained by adding up their configuration to the diverse structure of the group or organization (Qin et al., 2014). On the one hand, this view allows us to make categories typical of everyday life and to classify members based on specific characteristics such as gender, age, ethnicity, or sexual orientation. On the other hand, with the help of diversity, we can dig into deeper layers to find answers to interactions, reactions, and mechanisms of action (Risberg et al., 2019). Accordingly, several attempts have been made to divide diversity into different forms or types, such as upper and lower levels (Harrison et al., 1998), visible and invisible elements (Rijamampianina & Carmichael, 2005), the core layer, external, internal and work-related dimensions (Gardenswartz & Rowe, 2003), historically discriminated groups (Claes, 2019), surface and bottom-level characteristics (Hambrick & Mason, 1984), and easily perceived and underlying attributes (Jackson et al., 1995). etc.

These categorizations encompass the full spectrum of human differences (Qin et al., 2014). However, the emphasis and importance of each perspective vary depending on time, space, and situation (Nagy & Primecz, 2010; Mazur, 2010; Rijamampianina & Carmichael, 2005). Due to their influence, the concept expanded even more widely, and an evolutionary process and numerous scientific debates led to the concretization of its interpretations and related topics, such as the understanding and evaluation of differences, multiculturalism, acceptance, and inclusion (Nkomo & Stewart, 2006). Therefore, in order to understand the complexity of workplace diversity, before detailing the individual categorizations, it is necessary to briefly look at the evolution of the concept, going back to the early thinkers of management theories, such as Taylor, Fayol, and Mayo.

In this context, I will briefly go through some domestic and EU initiatives and events that, in certain periods, represented significant progress toward European and national workplace diversity. At the same time, I will mention the individual parts of the domestic legislation and related moments only tangentially here, and I will only cover their details later on in the current chapters, as it is not the focus of my dissertation. I aim to show what questions and approaches were preferred in each period, what underlying assumptions were built on, and how diversity was handled in the given period. The focus of this endeavor is, on the one hand, the presentation of workplace

diversity, which is the main basis of my dissertation, according to which assumptions, how it was formed, and which related areas shaped it. On the other hand, I consider the summary presentation of diversity in Hungarian to fill a gap, with which I can reach a wider circle at the domestic level and clarify the issues surrounding diversity while popularizing the topic.

2.3.1 Silencing diversity

There is a discrepancy in whether or not the concept of diversity exists in early management literature. According to Nkomo and Stewart, the lack of a concept of diversity is evident in the work of early thinkers such as Taylor, Fayol, and Mayo (Nkomo & Stewart, 2006). Like the previous ones, Burrell points out that the universalizing tendencies of these approaches ignored the idea of diverse group identities (Nkomo & Stewart, 2006). On the other hand, Schachter (2018) points out in his study that as early as 1915, the need to involve worker representation and to discuss areas dominated by women with women arose as a demand at the Taylor Company. Pryor and Taneja (2010) show, through the presentation of Fayol's principles and their current interpretation, that the need for diversity appears in Fayol's work. The Hawthorne studies led by Mayo focus on the individuals working in the organization but do not mention gender roles, age, or ethnicity, for example, even though there are all-female and all-male workplace groups, nor that more of the women were immigrants (Sundin & Billing, 2006). Based on the above, diversity appears either not at all or only in traces in the early roots, but mostly its silence is characteristic.

2.3.2 Protecting diversity

At the organizational level, the roots of the high degree of attention to diversity issues go back to the legislative events of the 1960s. The era is characterized by the expression of dissatisfaction of American minority groups and women against injustice and inequality (Nkomo & Stewart, 2006). Civil rights movements are equal employment opportunity (EEO)¹⁰ and affirmative action programs (Affirmative Action,

¹⁰ EEO theories that can be divided into liberal and radical approaches (Jewson & Mason, 1986). The basis of the liberal approach is the principle of fair procedures and the treatment of talent ability as individual characteristics. According to the liberals, in order to maximize this, it is necessary to eliminate

hereinafter: AA)¹¹ were conducted (Qin et al., 2014). For example, it was then accepted in the USA¹² (Yadav & Lenka, 2020) and some parts of Western Europe¹³ (Claes, 2019) women and races¹⁴, as well as the Civil Law and the Law on Equal Pay, requiring equal opportunities for national minorities, as well as the regulations confirming them (Nkomo & Stewart, 2006). However, despite the measures, the barrier to women's entry into leadership positions at this time was absolute, as President Nixon faithfully reflects: "I do not think a woman should be in any government job...mainly because they are unpredictable. And they are emotional. Men are also unpredictable and emotional, but the bottom line is that a woman is more likely to be" (Eagly & Carli, 2007).

From a European point of view, this was also significant because, on the one hand, in the early stages of European integration, diversity-focused primarily on diversity between member states rather than within member states. As a result, the linguistic, national, or ethnic minority diversity of each country was initially ignored, and only as a result of the Western European regionalist movements that arose in the 1960s and 1970s and the wave of migration from Eastern European countries and colonized states it became clear that the topic had to be addressed. In addition, it is characteristic of the era that individual demands were limited within national borders, and individual minority issues were not treated as EU issues (Bieber & Bieber, 2020). On the other hand, the ILO convention took place at this time¹⁵ for full compliance. At

the distortions of the capitalist labor market, and the intervention rules and processes must be consistently applied to all people. In contrast, the radical approach was based on the principle of fair distribution of rewards. Its differentiated measures include positive discrimination, such as using quotas (Jewson & Mason, 1986; Pringle & Strachan, 2015).

¹¹ A measure closely related to EEO was signed by President Johnson, which raised legal efforts for equal employment opportunities to a strategic level. The order setting out the goals and schedule was ratified under President Nixon (Ivancevich & Gilbert, 2000).

¹² Article VII of the Civil Law Act of 1964. The article was conceived as a mission statement (Ivancevich & Gilbert, 2000).

¹³ The most important treaty of the Council of Europe, the European Convention on Human Rights, was signed in 1950.

¹⁴ It is important to emphasize here that the concept of race has different meanings in Europe and America. Discrimination based on race or ethnicity is illegal within the legal framework of the EU because, in the European context, race has a negative connotation, the roots of which go back to the Second World War. As a result, the concept of race was completely rejected in Europe (Lentin, 2008). On the other hand, in Anglo-Saxon thinking, it can be linked to the period of colonization. In this process, the concept of race did not receive a negative charge (Garner, 2010). In this dissertation, when using the concept of race as an element of diversity, given the literature with similar roots on the topic.

¹⁵ The ILO (International Labor Organization) Convention No. 100, adopted in 1951, talks about "equal remuneration for men and women for work of equal value," which the Republic of Hungary only ratified in LVII of 2000. announced by law (Rácz, 2019).

first, the initiative was mostly based on economic considerations¹⁶, to avoid the distortion of economic competition between member states (Becánics, 2012). In the mid-1970s, 75/117/EEC¹⁷ acquired its social aspect with a directive (Rácz, 2019). Because thanks to the directive, the conditions have become uniform, and the decision within the member states of what is considered equal work and whose wages should be considered equal has ceased. Accordingly, the directive already complied with the provisions of the ILO Convention (Rácz, 2019), which practically formed the basis of the principle of equal treatment that later developed in other areas, too. (Kardosné, 2000).

The political and social changes taking place in our country at this time are the Roma, who are considered the largest domestic minority¹⁸, caused a specific shift in her position and traditional female roles. The comprehensive industrial policy initially saw the guarantee of employment growth in the mass involvement of females (Nagy et al., 2018; Dunavölgyi, 2017) and then Roma (Dupcsik, 2009) workforce. This was equal to the proclamation of equality in the socialist era. However, the idea was only realized in principle because although it extended to work and public roles, it did not change anything about women's household duties. Consequently, it manifested in authoritative hierarchical male-female relations (Nagy et al., 2018). The status of the Roma changed from social outsiders to a disadvantaged position in the light of prudery and the common work environment. The research of the era was exhausted in the theses "Gypsies are a people without tradition," "Gypsies must assimilate," and "the Gypsy question turned from an Indian question to a Negro question" (Dupcsik, 2009, p. 172, 175).

Overall, it can be said that in this period, the purpose of the provisions and movements was to represent diverse social groups based on their proportion within the population (Nkomo & Stewart, 2006), thus achieving equal employment opportunities

¹⁶ The Treaty of Rome, which established the European Economic Community in 1957, not only established the prohibition of discrimination, but the original article number 119 also stated that "from the first stage, each member state shall ensure and continue to maintain the application of the principle that men and women receive equal pay for equal work". Thus, the "equal work" framework of the Treaty of Rome initially focused only on employers, unlike the ILO regulations, it did not cover discrimination between professions or occupational groups (Rácz, 2019).

¹⁷ The purpose of the Directive is to ensure equal treatment for both sexes in terms of work, and vocational training, professional advancement and working conditions (Rácz, 2019).

¹⁸ The political terminology most often used by the European Union, the members of which are called Gypsies, Beas, Kelderars, Romungros, Sontos, etc., throughout Europe. In this dissertation, in accordance with EU policy, the use of the term Roma is characteristic, which means the diverse group as a whole (EC, 2020a). At the same time, I kept the term gypsy faithful to the text for the individual quotes.

(Qin et al., 2014) and eliminating discrimination (Pringle & Strachan, 2015) became a central issue, for which affirmative measures and regulations provided a tool (Qin et al., 2014). Organizations were thus forced to recognize the structures of inequality in their systems. The compulsion arose for several reasons: 1) they were afraid that social unrest would spill over into the workplace; 2) equal opportunity and affirmative action laws forced organizations to comply with the law; 3) they aligned themselves with moral and ethical standards in order to act as deemed correct (Ivancevich & Gilbert, 2000). From the point of view of organizational theory, the characteristic of the period is that the attention of professionals was mostly focused on women and races (Nkomo & Stewart, 2006) with the aim of promoting the employment and career development of members of these groups (Köllen, 2021). Most of the research was based on works that grew out of a structural-functionalist framework, which was dominated by the assimilation process of people who were considered different (Nkomo & Stewart, 2006). Most of the literature dealing with women at this time sought to minimize gender differences in order to achieve equal opportunities (Alvesson & Billing, 2009).

Criticisms of the programs include, among others, that 1) they created an exploitative system in which groups that had never experienced discrimination benefited at the expense of white men; 2) lower admission and performance standards were applied to the minority, which many viewed as almsgiving because based on their assumption, the phenotype was not the dominant screening criterion, but abilities; 3) consequently, the measures had a stigmatizing effect in many cases (Ivancevich & Gilbert, 2000).

2.3.3 Managing diversity

Workplace diversity practices displaced equal opportunity and affirmative action programs (Qin et al., 2014) because, in the early 1980s, political support for diversity decreased, and companies wanted to act to reduce the cost of implementing legislation (Nkomo & Stewart, 2006). The process paved the way for the idea of "managing diversity, MD" (Nkomo & Stewart, 2006), which was significantly strengthened and then moved to the next stage of development by the "Workforce 2000" prepared by the

Hudson Institute¹⁹. report, according to which the influx of women and minority ethnic groups into the labor market can mean a positive shift in the labor market (Pringle & Strachan, 2015). In practice, it was a matter of repackaging EEO with the aim of making the initiative acceptable to white men (Nkomo & Stewart, 2006).

The MD concept is based on the fact that organizations must manage diversity. The workplace measures aimed to remedy vertical and horizontal segregation, which they wanted to achieve by assimilating marginalized groups. Since it was believed that the management of employee diversity brings competitive advantages and diversity was seen as a potential source of conflict, the subject matter of diversity fell into the hands of top management. Assimilation from minority members, while "color blindness" from other members of the organization²⁰ was expected (Prasad et al., 2006). Although the study of the effects of social differences in age and physical disability began at this stage, the main focus of research continued to be on the inclusion and integration of women and races to understand how different groups are able to move up in the organizational hierarchy (Qin et al. 2014). At the same time, widespread interest in the topic increased significantly during this time, which is also shown by the fact that in the 1980s, the most important business journals worldwide paid quite a lot of attention to the sociodemographic characteristics of managers (Abatecola & Cristofaro, 2020), which processes Hambrick and Mason (1984) served as the basis of his defining research. It can also be attributed to this period that, parallel to the strengthening of the discourses, criticisms appeared, questioning the social justice of the trend. According to their criticism, this approach is based on depoliticization and ahistorical perception of differences (Pringle & Strachan, 2015). Therefore, this approach has gained a significant role in critical studies (Zanoni et al. 2010).

In the early and mid-1980s period, the European Union was characterized by expanding and enforcing minority rights. However, this period can be considered mostly an idealistic initiative, as they encountered resistance from key member states.

¹⁹ Besides considering global economic and labor trends, possible future US economic cycles, demographic changes, and their impact on work, the report made recommendations for the future workforce. Interestingly, the majority's attention was captured by the part of the report, according to which by 2000, white men will be in the minority among new entrants to the labor market. In contrast, the fact that 64% of the new entrants are women has received less attention (Pringle & Strachan, 2015).

²⁰ Colorblindness is a position that does not notice or focus on any biological or socially constructed differences. In essence, it insists on similarities while ignoring differences. However, the silence and "blinding" of origin, gender, sexual preferences, and other socially significant differences alone cannot erase the consequences of oppression and discrimination over generations (Prasad et al, 2006).

For example, among the countries with significant minorities, while Italy and Spain were open to asserting minority rights, France and Greece did not even recognize the existence of minorities. Consequently, despite the fact that minorities were already in the focus of attention then, they remained on the periphery, as they only affected well-defined regions of the member states (Bieber & Bieber, 2020).

2.3.4 Diversity management

At the next significant stage in the scientific history of workplace diversity, the place of diversity management is taken over by diversity management (DM) and the affirmation of diversity (Prasad et al., 2006), which means a business strategy adopted by organizations to recruit and retain individuals from different backgrounds. Moreover, it was aimed at its inclusive development (Thomas, 1991). The term was coined by Thomas in 1990 in the context of the United States, which gradually spread throughout the world (Pringle & Strachan, 2015).

Thomas saw all differences as equal. The most frequently quoted definition of diversity also reflects this view: "Diversity applies to everyone: it is not defined by race or gender. It includes age, personal and organizational background, education, position, and personality. It applies to lifestyle, geographic origin, time spent in the organization... as well as management or non-management experience" (Thomas, 1991, p. 10). So, at the center of this paradigm is the individual and individual differences, and all differences have equal value. Consequently, diversity applies to everyone, including leadership style, gender, race, personal and organizational background, personality, position, and cognitive patterns. As a result, the approach can be characterized by power blindness, since while treating all differences on an equal level, it ignores that 1) some individual social identities are likely to represent a more serious disadvantage in the workplace than others (e.g., hair color or communication styles) (Prasad et al., 2006); 2) to what extent and how belonging can influence their belonging to a social category (et al., 2016).

During this period, otherness was used to control different markets or gain legitimacy. The focus is on why diversity is good for the organization. That is why the approach is also called the "business case" of diversity (Qin et al. 2014), which poses a

great risk for minority groups, as it offers a rational justification for discrimination²¹. (Nkomo & Stewart, 2006) and reproduces stereotypes²² (Risberg et al., 2019) by making equality of opportunity dependent on organizational benefit (Nkomo & Stewart, 2006). It is based on the assumption that the immutable essence of a person is the identity of his own group since biological properties are responsible for social behavior, certain skills, and personality traits (Risberg et al., 2019). Precisely for these reasons, Rijamampianina and Carmichael (2005) suggested that the success of diversity requires the creation of a management system and environment that supports equal opportunities.

In contrast to the essentialist approach, critical studies vote for the constructivist perspective, in which social interactions shape and produce more differences (Risberg et al., 2019). Accordingly, reality is socially constructed (DeLamater & Hyde, 1998) and not given (Risberg et al., 2019). According to the assumption of the perspective, society provides each individual and group with meaningful content, based on which it forms different categories with negative or positive content. These attributes reflect the power of individual groups, which are reproduced, so it is difficult to change them (Risberg et al., 2019).

The paradigm shift of the European Union also took place during this period. With the Maastricht Treaty signed in 1992, the integration efforts also focused on minorities. The main catalysts were the end of the Cold War and the shift of integration towards Central and Eastern Europe, which confronted the EU with a new diversity (Bieber & Bieber, 2020)²³. On the other hand, after the fall of the Berlin Wall, the UN, in its efforts to create a global consensus, has achieved success on several points with its efforts to create new paradigms in its international conferences²⁴ considered as a positive result²⁵. The texts of intergovernmental negotiations appear in this era²⁶ in its

²¹ Discrimination means the unfavorable treatment of some people on the basis that they are members of a specific group (Andorka, 2006).

²² A stereotype is a set of negative ideas and prejudices against a group based on distortion, exaggeration and simplification (Andorka, 2006).

²³ Democratic processes starting in 1989 resulted in the expansion of the European Council. The number of members of the ET increased to 41 in a short time, which Hungary joined in 1990 (Kardosné, 2000).

²⁴ Conference on education (Jontien, 1990), children (New York, 1990), environmental protection (Rio, 1992), human rights (Vienna, 1993), population (Cairo, 1994), social development (Copenhagen, 1995) (Peters, 2020).

²⁵ Contrary to Peeters (2020), I positively evaluate the initiatives of the UN, which is why I modified the approach of the original text.

²⁶ The term social gender was already found in documents from Jontien, Rio, Vienna, and Cairo (Peeters, 2020).

environment, the term gender, which will be explained in more detail later (Peeters, 2020). It got admitted into the Civil Law at the World Conference on Women IV held in Beijing in 1995. She won civil rights at the World Conference on Women (Peeters, 2020). The Beijing Declaration and the Action Program document were adopted at the Conference. The latter defines 12 critical areas: poverty, education and training, health, violence against women, war conflicts, economy, power and decision-making, institutional mechanisms to support women, and human rights²⁷.

The sudden change in the political system in the Central and Eastern European region created capitalism, in which multinational companies took on a dominant role in terms of investment, lending, and other segments of the economy, such as employment and financial performance (Nagy et al., 2018). The demise of the large-scale socialist industry brought with it the marginalization of a significant part of the workforce, especially those with low education, such as the Roma (Dupcsik, 2009). At the same time, the changes also affected those who managed to keep their jobs, which was manifested in taking on more jobs and overtime, significantly affecting female employees as well. These processes brought with them the change of the traditional family model. As the role of women in the labor market increased, childbearing decreased (Nagy et al., 2018).

2.3.5 Embracing diversity

Recently, the term diversity management is often replaced or supplemented by the term inclusion (Risberg et al., 2019; Morgan Stanley, 2020) or equality (Dixon-Fyle et al., 2020). Although the terms ‘diversity’ and ‘inclusion’ are often treated as interchangeable, the two concepts are significantly different (Hafeez et al., 2019). Since diversity management practices mainly focus on the inclusion of marginalized group members in the workplace, inclusion practices aim to provide minority group members with equal access to decision-making, resources, and upward mobility opportunities (Shore et al., 2018). In other words, while studies dealing with diversity management offer solutions to issues related to conflicts, minorities, and the functioning of groups, inclusion indicates the extent to which the employee is accepted and treated as an insider (Hafeez et al., 2019). Mor Barak and his co-authors (2016) define inclusion as

²⁷ www.un.org/womenwatch

an integral part of diversity management in addition to recruitment, promotion, and retention. Shore and his co-authors (2018) found that the inclusion literature aims to define ways to create an inclusive environment and practices that are an organizational advantage. Consequently, diversity refers to superficial and unobservable demographic differences among members, and inclusion refers to a work environment where the unique contribution of employees is valued (Mor Barak et al., 2021).

Accordingly, in the diversity literature, inclusion brings about a state in which the workforce is valued and respected. All of this is based on organizational culture, management practices, and interpersonal relationships that support a diverse workplace based on both functional and structural aspects (Shore et al., 2011). Treating differences as values presupposes the coexistence of differences and can be matched with the idea of cultural pluralism (Morgan Stanley, 2020). In this interpretation of diversity, the "good society" does not eliminate or overcome group differences but ensures equality between socially and culturally differentiated groups, whose members mutually respect each other and strengthen their differences (Geraldine, 2015). Therefore, diversity does not only mean the employment of people from diverse ethnic and cultural backgrounds and increasing the number of underrepresented groups in the organization but also the respect and acceptance of different worldviews and cultural perspectives (Vito & Sethi, 2019). In agreement with several studies (Mor Barak et al., 2021; Vito & Sethi, 2019), I believe that senior management plays a major role in the success of these processes, which is also supported by the "upper echelon" theory. According to this, the top management, through the decision-making that is part of its primary tasks and through the development of policies that influence the operation and efficiency of the work environment (Hambrick & Mason, 1984) and related organizational procedures that demonstrate inclusion (Mor Barak et al., 2021) it communicates and illustrates the organization's values, which largely reflect its own value system (Hambrick & Mason, 1984). The attitudes of middle management regarding diversity and equality are just as important as those of top management (Tatli & Özbilgin, 2009), as they play a significant role in the practical implementation of this approach (Mor Barak et al., 2021).

It is also important to emphasize the realization of constructivism that scientific fields were characterized by myopia for a long time. They pointed out that 1) previous research only considered literature and results related to their own field of study, so

their structure and organizing principle remained within the framework of the given field of study (Romani, 2010); 2) the individual studies, as well as a significant part of the sources used, were country- and culture-specific, primarily reflecting Western perspectives; thus they were connected to different historical backgrounds, value systems, and problem management aspects (Mazur, 2010). As a consequence, the universality of diversity management and the universality of the experiences of American affairs were questioned²⁸, pointing out that previous theories did not consider the employment environment, national culture, and country-specific legislative environment (Pringle & Strachan, 2015). As a result, researchers draw attention to the fact that related research must be handled in context, using each other's results, which includes, among other things, the consideration of related scientific fields (Romani & Holgersson, 2020), country-specific issues and culture (Jonsen et al., 2011 ; Kokot et al., 2021). For example, the power (Tatli & Özbilgin, 2012), intercultural (Romani & Holgersson, 2020), intersectional²⁹ (Hearn & Louvrier, 2016; Geraldine, 2015), examining identity according to theoretical (Mazur, 2010) aspects.

The expansion of the European Union in 2004 with Eastern European members, including Hungary, drew attention to the large number of minorities living in the new member states, which included the Hungarian population across the border with a related state and a large number of Roma without a related state (Bieber & Bieber, 2020). The need for action was urgent. In Hungary, for example, the change of regime did not bring the expected results, the background of which was the renewed political conflicts with our country, which made the life of Hungarians and Roma across the border significantly more difficult (Ablonczy & Bárdi, 2010). The accession in 2004 and related processes drew attention to the need for cultural integration of the diverse population (Eger et al., 2012), the aging society, and technological development, which resulted in profound social changes (EC, 2009). Without claiming to be complete, for example, the attitude of European countries to minority protection and collective rights has changed (Ablonczy & Bárdi, 2010).

²⁸ It is important to highlight two general practices here: 1) the introduction of research on diversity was for a long time about the American workforce and referring to the demographic composition; 2) since there is a strong institutionalized bias in many social science journals, a significant part of the publications are American and UK publications (Jonsen et al., 2011).

²⁹ The concept of intersectionality takes into consideration that every person embodies at least one, but in most cases more dimensions of diversity. Accordingly, for example, a man is not only associated with his gender but also with his age, skin color, origin, and native language (Köllen, 2021).

EU expansion was significant in terms of business activities in several ways: 1) thanks to the processes and events, theoretical and practical approaches evolved from their original focus on equality and compliance with legal norms to the proactive application of diversity with a broader perspective; 2) the free movement of workers increased labor diversity within the EU, which was accompanied by problems of demographic development and immigration pressure (Eger et al., 2012); 3) to the categories of diversity defined by the diversity policy³⁰ relevant existing EU legislation had to be incorporated into the legislation of each EU member state, which entailed that companies had to comply with these regulations and implement each category of diversity in their policies (EC, 200). However, as we will see later, this was not fully implemented in practice.

The differences-related aspects of workplace diversity have undergone significant changes. Summarizing what has been said so far, on the one hand, it can be stated that the borders of the certain historical stages are not sharply separated from each other because they were created as a result of several parallel processes. On the other hand, legal compliance approaches alone are insufficient to keep organizations committed (Cagnon & Cornelius, 2006). Thirdly, during the presentation of each era, I tried to point out the European and American roots of diversity. My goal was to highlight why it is necessary to scrutinize individual diversity approaches and treat them according to the local context. Because as we have seen, although diversity management has American roots and arrived in Europe through the international subsidiaries of American parent companies, anti-discrimination efforts, and positive action programs have already existed on our continent. However, these regulations and legal instruments have not been uniformly introduced in Europe. Interpreting the literature results, the following summary conclusions and findings can be made in the aspect of managing differences (Table 3).

³⁰ Article 13 of the Treaty of Amsterdam amending the founding document of the EU, which entered into force on May 1, 1999, covers discrimination based on gender, origin, or ethnic origin, religion or belief, disability, age, as well as discrimination based on sexual orientation (Claes, 2019).

	Equal Opportunity Programs (EEO)	Affirmative Action Regulation (AA)	Diversity Management (MD)	Diversity Management (DM)	Diversity and Inclusion (D&I)
Objective	Elimination of discrimination	Prevention of negative discrimination	Changing attitudes towards others	Full exploitation of opportunities	A culture that ensures equality and openness
Source	Ethical and moral issue	Legislation	Competitive advantage	Business advantage	Organizational goals
Person responsible	HR managers	legislative bodies	Management	Managers and personnel managers	Management
Target group	Different groups in the organization	Designated population groups	Various employees, customers	Marginalized group member	Members of a minority group
Providing better opportunities	For groups	For groups	For minority groups	In terms of involvement	Equal access
Action level	Recruitment and selection	Government deadlines and targets	Complete company and customers	Complete management process	Informal and formal processes
Applied tools	System-level changes	Legal instruments	Assimilation	Reorientation of organizational culture	Acceptance, evaluation
Driving force	Legal compliance, social pressure	Legal compliance, social pressure	Competitive advantage	Business results	Implementation of organizational goals
Advantages	Increased workforce participation of designated groups	Increased workforce participation of selected groups	Fixing vertical and horizontal segregation	Decision quality, innovation and creativity increase	A win-win solution
Disadvantages	Minority groups are treated as "interest groups".	Problem-oriented: There is no emphasis on equality	Assimilation; Depolarization : Color blindness	Risk of conflicts, costly, measurement difficulties.	Challenges related to transition

Table 3: Aspects of historical stages of diversity

Own editing based on Cagnon & Cornelius, 2006; Agócs & Burr, 1996; Prasad et al, 2006, Nkomo & Stewart, 2006; Jonsen et al., 2011; Yadav & Lenka, 2020; Hafeez et al., 2019

2.4 Basic assumptions of diversity

As the above information shows, the concept of diversity is multifaceted, very complex and there are many interpretations in the literature and in practice (Toarniczky, 2008; 2012a, b), behind which four generally accepted basic assumptions can be discovered: 1) the multitude of individuals with different social identities (Social Identity Theory, SIT), (Tajfel & Turner, 1979); 2) the self-categorization perspective (SCT) (Turner et al., 1987), 3) the similarity/attraction perspective (Byrne, 1971), and 4) the information/decision-making perspective (information/ decision-making) (Williams & O'Reilly, 1998). However, it is important to emphasize that, as we will see later, not all perspectives arise in all research. The reason for this can be traced back to the fact that professionals and scientists 1) form their views on the aspects of diversity along certain dimensions and perspectives; 2) cast their vote in favor of negative/pessimistic, positive/optimistic aspects, or a combination of these, and a contextual presentation.

In my study - in agreement with the literature (Manata, 2021; Van Knippenberg et al., 2004; Qin et al., 2014; Jonsen et al., 2011) - I consider it important to synthesize negative and positive views in order to gain a deeper and better understanding of diversity. Therefore, I pay attention to the elaboration of optimistic and pessimistic perspectives and their inclusion in my research, which I will present in detail below.

2.4.1 Different social identities perspective

Social identity theory (SIT) is one of the social psychological theories introduced by Tajfel (1978) and further developed by Tajfel and Turner (1979). It is based on group dynamics (Trepte & Loy, 2017) and the stereotype that the perceiver develops about "others" (Prasad et al., 2006). The cognitive social psychological theory makes a connection between social structures and individual identity through the meanings that people perceive as signs of belonging to identity groups (Mor Barak, 2009). According to the idea, individuals want to maintain a high level of self-esteem (Williams & O'Reilly, 1998), and their degree is shaped according to how they evaluate their own group (Tajfel, 1981), i.e., the evaluation is based on social comparison with others. During the comparison, individuals must define themselves, which they do through a self-categorization process, during which they classify themselves and others into social categories (Williams & O'Reilly, 1998), evaluate their own group and other groups, and then compare their value (Trepte & Loy, 2017). The greater the value they attribute to their own group, the greater the level of self-esteem and categorization (Van Knippenberg et al., 2004), the maximization of in-group or inter-group differences, and the less attractive others are judged (Williams & O'Reilly, 1998). Accordingly, an individual forms groups and organizes their environment on the basis of which they distinguish their own group and its members from the outside group and its members (Van Knippenberg et al., 2004).

Since people tend to trust and feel closer to members of their own identity group than out-group members, they tend to prefer in-group members to out-group members. Therefore, workgroup members have more positive attitudes toward their work group and the people within it if they are more similar to their own selves (Williams & O'Reilly, 1998). Categorization processes can create subgroups within the workgroup, thus creating "us" and "them" subgroups, which can result in challenging and problematic subgroup relationships (Tajfel, 1981; Tajfel & Turner, 1986). All this strengthens the sense of belonging, but at the same time, it can strengthen the stereotype against members of the other group, which can appear in the form of covert or actual discriminatory behavior (Mor Barak, 2009). This can result in cultural disharmony, indirect cultural conflicts, and a social environment that hinders information processing

and undermines creative performance (Qi et al., 2022). Consequently, it can damage team functioning through micro-dynamics such as group competence, members' behavior towards target group members, and the behavior of adults (Dijk et al., 2016).

Studies based on this perspective have been criticized for assuming that the outstanding diversity categories are fixed, stable and analyzable, thus independent of time and space, i.e., hardly changeable (Tatli & Özbilgin, 2012). Holck and Muhr (2015) argue in favor of this statement when they point out that although this perspective provides the individual with some autonomy in identity formation by identifying with different groups, at the same time, it creates a rigid perception of identity, according to which identity has a fixed and permanent core. This, in turn, means that people can be classified and mapped so that they can be better managed. It follows that the SIT perspective largely ignores the complexity of change and the multiple forms of identification that people rely on in changing situations and contexts (Calás et al., 2013). Another key criticism of the SIT perspective is 'depersonalization,' which sees the self as an embodiment of the prototype within the group. This can lead to privileging the group or organization as the source of identity while assuming that different individuals understand themselves and their group/organization. opinion can be compared (Holck et al., 2015). This essentialist approach to the study of diversity is often limited to a single category (e.g., gender, origin, ethnicity, or age), thus ignoring the role of difference, the intersection of its multiple forms. In addition, it often lacks context and thus ignores the dynamic nature of power and inequality relations (Holck et al., 2015).

2.4.2 Self-categorization

Self-categorization theory (SCT) (Turner 1999), which differentiates between social and personal identity, is a revised version of the theory of social identity with a cognitive emphasis. While social identity depends on an individual's group membership, personal identity is more or less independent of it. According to the assumption of the theory, depending on the situation, one of the identity processes plays a more dominant role, or they jointly exert their influence on the individual's behavior (Trepte & Loy, 2017). Consequently, social and individual identity jointly guide behavior, cognition, and the self (Hornsey, 2008).

SCT characterizes identity categorization with different levels of inclusion, based on which it distinguishes between human, social, and personal identities. The self as a human being is the highest, the self as a member of a social group in opposition to other groups is the middle, and the self as a person based on interpersonal comparisons represents the bottom level. The emphasis of each level depends on three cognitive mechanisms, which are 1) readiness to use the category, 2) comparative, and 3) normative fit. The readiness to use the category³¹ shows how willing we are to use the category based on our previous experience. The relative constancy appearing in category use is complemented by fit information that refers to how relevant the use of a category is in a given situation (Turner et al., 1987). Comparative fit means the extent to which a person perceives a more remarkable similarity between themselves and their own group and between themselves and other groups in a given social context. The degree of perceived difference will influence the individual's self-categorization process. Because the smaller the degree of perceived difference with the members of one's own group and the more significant is the difference with the members of other groups, the greater is the probability that one categorizes oneself according to one's own group. Normative fit indicates how perceived differences between groups correspond to expected differences in meaning, i.e., stereotypical beliefs (Oakes et al., 1991). Consequently, the process is always based on the perceiver, depends on the context, and changes dynamically (Hornsey, 2008). Self-categorization is part of a person's self-concept, i.e. the set of cognitive representations of what the individual thinks about himself. This means that during self-categorization, they treat themselves and the other members of their category as similar ("us") based on cognitive groupings. At the same time, he classifies outsiders into another category ("them") (Reimer et al., 2020). Accordingly, the individual determines his social group and ultimately categorizes himself. This includes, for example, status, income, and education (Reimer et al., 2020). I illustrate the above process in the figure below:

³¹ This cognitive mechanism was originally called relative accessibility by Turner (Turner et al., 1987).

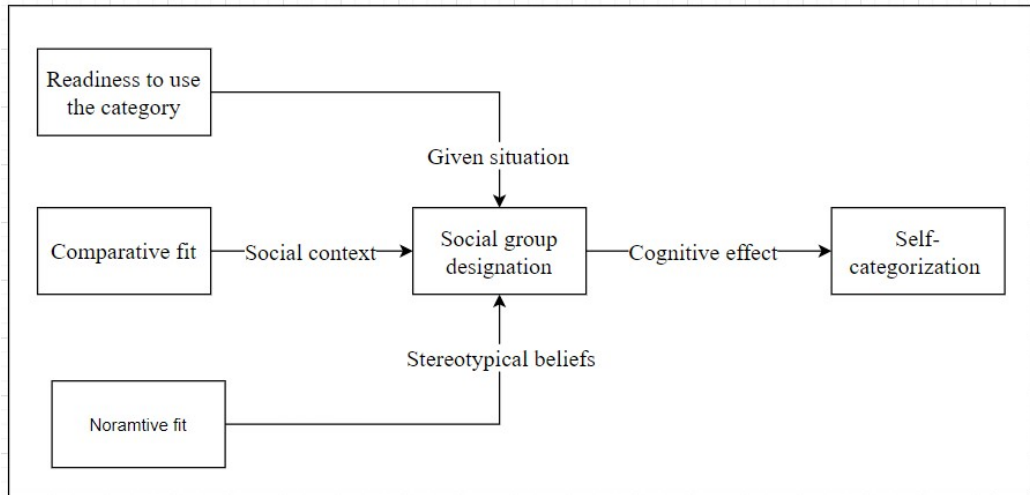


Figure 3: Self-concept

Source: Own editing based on Turner et al., (1987); Oakes et al, (1991); Hornsey, (2008); Reimer et al., (2020)

A change in self-categorization affects an individual's attitude, behavior, and perception (Trepte & Loy, 2017). However, certain social identities can be given more emphasis, and identification with the group members takes shape to a greater extent. This may result in the self-image becoming impersonal (Trepte & Loy, 2017), a process Turner calls the cognitive redefinition of the self (Turner, 1984). This means that the individual reshapes his self-image based on the group's needs, norms, and characteristics of the group, and experiences himself in a way that is interchangeable with the other group members, i.e., his behavior becomes collective (Hornsey, 2008).

As the above shows, the theories of SIT and SCT are closely related in many respects since, among other things, both were based on the assumption that people perceive the difference observed during comparisons as a deficiency, and this can be the basis of discrimination and bias against members of the outgroup (Williams & O'Reilly, 1998). They cannot be separated from each other because SCT is often referred to as an extension of SIT (Trepte & Loy, 2017); however, during the review of the literature, I found minimal differences between the two theories on several points, which I summarized in the table below:

	SIT	SCT
Process approach	It is based on continuity, with two poles	Context dependent, determined by the perceiver.
Base	Group paradigm	It is internalized as a relevant aspect of self-concept.
Center of investigation	Effects of social comparison results	Processes during which people form a cognitive representation.
Social category	It is defined by society	Defined by individual.
Emphasis	Social categorization	Social categorization and emphasis principle.
Desires of an individual	Positive assessment within the group	It varies depending on the context.
Self image	Defined by social categories	Defined more strongly by one of human, social or personal identities.
Possible results	Status; Leaving a group; Constant social competition; Self-esteem increases	Status; Self-evaluation; Depolarization; Leaving a group.

Table 4: Comparison of social identity theory and self-categorization theory

Source: Own edit based on Tajfel és Turner, 1979; Reimer et al., 2020, Trepte & Loy, 2017; Hornsey, 2008

2.4.3 Similarity/attraction perspective

According to the basic idea of the similarity/attraction perspective, regardless of personality, people are more likely to be persuaded by those who are similar to them than by those who are different from them (Tajfel, 1982). The general explanation of the phenomenon is that people prefer people who are similar to them based on visible demographic characteristics (e.g., ethnicity, gender, age), thus presumably influencing their behavior and attitudes more (Ruijten, 2018). Practically speaking, based on similarity, people give meaning to the environment based on similarity through consensus-based validations by jointly shaping the observable characteristics. This reduces people's uncertainty and eliminates their initial social screening processes. Accordingly, this paradigm is based on the reduction of uncertainty as an underlying mechanism (Schaffer, 2018).

According to Byrne's (1971) insight, the similarity-attraction theory not only shed light on the fact that people find those with similar characteristics attractive, but also on the fact that they feel challenged by those who are different from them. Over time, the similarity/attraction perspective was extended to describe differences beyond physical, visible differences. For example, Harrison and his co-authors' (1998) research

focused on deep-level similarities and differences and showed that personality, values, attitudes, and beliefs, i.e., actual deep-level diversity, have a positive relationship with perceived deep-level diversity. Accordingly, perception is reality itself, as actual psychological characteristics closely match perceptions of psychological characteristics developed in others (Harrison et al., 1998).

Consequently, according to the present paradigm, similarity strengthens beliefs and attitudes (Shaffer, 2018), helps maintain positive self-identity, increases performance (Knights & Omanović, 2015), role effectiveness, interpersonal attraction (Tsui et al., 1992), and interaction provides an experience (Williams & O'Reilly, 1998); whereas difference increases uncertainty (Shaffer, 2018), hinders social integration, social relations and is considered hypocritical (Williams & O'Reilly, 1998). Thus, the more homogeneous a workgroup, the greater the commitment of the members (Riordan & Shore, 1997; Tsui et al., 1992) and the group cohesion (O'Reilly et al., 1989), the lower the number of relational conflicts (Jehn et al., 1999; Lau & Murnighan, 1998), turnover is less likely (Wagner et al., 1984) and prejudice is lower (Bezrukova, 2010). As a result of the above, since people are more attracted to similar people, they prefer to work in teams where they are surrounded by similar people (Knights & Omanović, 2015). Accordingly, categorization processes can create "us" and "them" subgroups, resulting in conflicts within organizations (Van Knippenberg et al., 2004).

2.4.4 Information/decision-making perspective

The present theoretical perspective draws from the ecological and cognitive models of variation, selection, retention, and the cybernetic principle of necessary variety, intending to highlight the advantages of the information sources' heterogeneity (Harrison & Klein, 2007). The current perspective is also called cognitive diversity (Qin et al., 2014), the identification of which is linked to Williams and O'Reilly's (1998) literature-wide research. The pair of authors explain the dual nature and contradictions of diversity by saying that, in addition to the social categorization and similarity/attraction perspective, there is also a third tradition of studies related to the diversity and performance of work groups. This is the information/decision-making perspective (Yadav & Lenka, 2020), which, in contrast to the previous ones, focuses on the task-related aspects of group processes and claims that the performance of diverse

groups is better than that of homogeneous ones (Van Knippenberg et al., 2004). According to the basic idea of the perspective, diverse groups are more likely to have a wider range of knowledge, skills, and abilities related to the task, so tasks are solved by combining several points of view and opinions (Van Knippenberg et al., 2004). Diverse group members process information by clashing different ideas (Shin et al., 2012) and knowledge (Hambrick, 2007) (Shin et al., 2012), which includes the discussion of differences in views, individual processing, feedback, and then its discussion and their joint integration (Homan et al., 2007). Thus, the need to reconcile conflicting viewpoints may force a diverse group to process the set of information related to the task more thoroughly, which may prevent members from reaching a consensus too easily along familiar patterns (Williams & O'Reilly, 1998). Consequently, this perspective considers different experiences, knowledge, and points of view as a valuable resource for teams and emphasizes the positive effects of diversity, as the diversity of skills, knowledge, and expertise enriches the team with a variety of information that is useful for tasks such as innovation (Talke, 2010), complex problem solving or decision-making (Williams & O'Reilly, 1998, Van Knippenberg et al., 2004). In addition, it also points out that diversity increases resources such as different approaches to problems, and different availability of information, which helps the team in a broader and more thorough analysis and better use of information (Williams & O'Reilly, 1998).

Studies also highlight that team members who are exposed to views that differ from their own exert more cognitive effort, pay attention to more aspects of a situation or challenge, and are more likely to find innovative solutions or make new decisions (Van Knippenberg & Schippers, 2007, Beauregard, 2019). I will explain cognitive diversity in detail later. However, it is important to point out here that the literature emphasizes, on the basis of the above, that in a turbulent environment that requires innovation and complex cognitive processes, for example, gender, age, or ethnic diversity can have a positive effect on group processes (Mansoor, 2019), as they can bring unique views, approaches and more experience to the organization by representing wider groups of society (Williams & O'Reilly, 1998). On the other hand, in an environment that favors routine tasks and efficiency, homogeneous groups prove to be more effective, because here, the focus is on convergent thinking (Beauregard, 2019). However, organizations must have the seemingly opposite ability at the same time,

since in addition to efficient operation in the present, they must ensure long-term effectiveness by focusing on the future (Csedó & Zavarkó, 2019). However, such two-way mechanisms can only be realized in an organization where they are open and supportive (Reynolds & Lewis, 2017). In my opinion, this finding is consistent with the conceptual frameworks and views of diversity and inclusion.

2.4.5 Summary of basic assumptions

Summarizing what has been done so far (Table 5), it can be concluded that the theories of social identity (Tajfel & Turner, 1979), similarity/attraction (Byrne, 1971) and self-categorization (Turner et al., 1987) focus on relational aspects (there Knippenberg et al., 2004) and together offer the conceptual basis of relational demographic theory (Tsui et al., 1992). The grouping of Harrison and Klein (2007) classifies these theories as separation theories. The basis of the ideas is that difference breeds disagreement or opposition (Risberg et al., 2019). So, these theories reflect a pessimistic view and point out that demographic characteristics within work units, such as origin, gender, age, and nationality, greatly influence the behavior and attitude of the individual (Yadav & Lenka, 2020). Overall, it can be said that these theories deal with the negative effects of diversity within work groups and suggest that homogeneous teams produce better performance-related metrics than heterogeneous teams because they are more attracted to members with similar characteristics within the group (Qin et al., 2014). Their reference base is the comparison process between the group members and organizational units, which does not depend on the attributes of the individual, but on the comparison to others and the perception of differences. Thus, it is characteristic of most relational demographic research that when describing the diversity of a unit or group, a given attribute describes the unit or group as a whole, rather than the difference of the member in focus from other members (Harrison & Klein, 2007).

Opposed to this are optimistic approaches, whose basic idea is that diversity - especially in a turbulent environment (Hambrick & Mason, 1974) - is a potential advantage for organizations (Yadav & Lenka, 2020) because members integrate heterogeneous points of view when sharing information and making complex decisions. (Manata, 2021). It focuses on the performance of tasks and emphasizes function-oriented attributes such as time spent in the organization, knowledge, team leadership

skills, studies, and experience (Yadav & Lenka, 2020). In Harrison and Klein's (2007) grouping³² this perspective equates to diversity, which is based on the value of diversity.

Theory	Relational demography theory	Information diversity theory
Examination level	Individual and group level	
Perspectives	Different social identities Self-categorization Similarity/Attraction	Informational/decision making
Orientation	Relationship orientation	Task orientation
Mediating effects	Comparative fit Ready to use the category Normative fit	Cognitive processes
Attributes	Gender Race/Ethnicity Nationality Disability Age Religion and faith Sexual orientation Personality Attitude Values Social Status	Time spent in a job/ at an organization Functional background Professional experience Educational attainment Knowledge Skills Experience Expertise
Preferred team type	Homogeneous	Heterogeneous
Reference sheet	"we" and "they"	"we"
Mechanisms that take place in a team	The number of conflicts is decreasing Group cohesion increases Commitment increases Team efficiency increases	Broader, more thorough analysis Complex problem solving/ decision making Learning Cooperation

Table 5: Comparison of the basic concepts of diversity

Source: Own edit based on Yadav & Lenka (2020), Qin et al (2014), van Knippenberg & Schippers (2007) and van Knippenberg et al. (2004)

However, it is important to point out that given the contradictory pattern due to the double-edged sword metaphor (Köllen, 2021), a significant number of recent studies question the "simplistic view that diversity increases performance" (Qi et al., 2022). Van Knippenberg et al.'s (2004) literature review concluded that there is insufficient evidence that demographic diversity has a clear negative, while informational diversity has a positive effect on outcomes. The reasons for the inconsistency may be that: 1) insufficient attention has been paid to the mediating effect of social categorization and biases (Beauregard, 2019; Van Knippenberg et al., 2004); 2) although demographic

³² The third group of Harrison and Klein (2007) includes the inequality characteristic of diversity, which refers to differences related to valued social goods or resources, such as salary or status. This perspective is not the focus of this dissertation, so I refrain from detailing it.

diversity is less related to work than functional background or education attributes, there are demographic characteristics that are important in a given context, while in other cases not at all (Beauregard, 2019; Van Knippenberg et al., 2004; Van Knippenberg & Schippers, 2007; Rijamampianina & Carmichael, 2005); 3) the variety of conceptualization of diversity (Qin et al., 2014); 4) in many cases, diversity research did not adapt the background processes of information processing, so their moderating role was not scrutinized either (Van Knippenberg et al., 2004).

In order to overcome these contradictions, Van Knippenberg et al. (2004) created the Categorization-Elaboration Model (CEM). CEM integrates pessimistic and optimistic perspectives related to diversity theory, namely relational demography and information decision-making theory, and also includes mediating and moderating variables in a unified framework to mitigate conflicting perspectives on diversity (Van Knippenberg et al., 2004).

In their literature review, Yadav and Lenka (2020) identified a number of mediators and moderator variables³³ identified with the integration of the dual aspect of diversity. However, at the same time, it is highlighted that none of the studies investigated HR practices and diversity management practices as moderators of workplace diversity in order to eliminate the negative aspects of diversity and increase organizational performance (Yadav & Lenka, 2020). The logic of mediating effects is based on the idea that diversity leads to social categorizations, which lead to biases between subgroups. As a result, bad communication and conflicts between teams can develop (Figure 4). However, the literature still does not pay enough attention to this assumption, which is why Beauregard (2019) highlights its necessity.

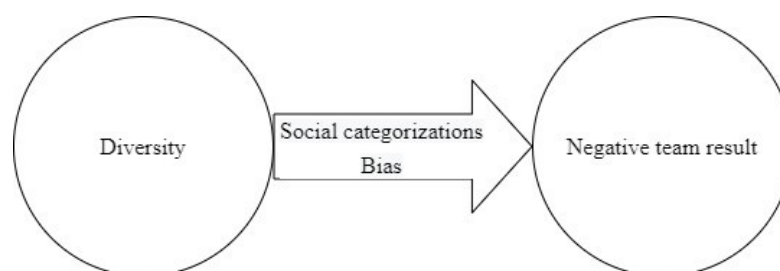


Figure 4: Mediating effects of diversity and negative team results

Source: Own editing based on Beauregard (2019) and van Knippenberg & Schippers (2007)

³³ "Task interdependence; Team management; Ethnic status; Routineness of tasks; Transformational leadership; Business strategy; Complexity of tasks; Team size; Common objectives; Task-specific ability; Team orientation; Social context; Motivation; Organizational culture; margin of error; Beliefs about diversity; Diversity climate" (Yadav & Lenka, 2020, p. 920)

2.5 Categories of diversity

Regarding diversity, it is important to mention that it has an infinite number of dimensions based on conceptual aspects (Prasad & Mills, 1997) because it can include any dimension or category in which people share a specific form of manifestation of this dimension, or, as the opposite, they differ in terms of the specific manifestation of the dimension. As we saw earlier, this is important because, in a given environment or context, different dimensions have an impact on the process of inclusion, exclusion, and the related hierarchical structure (Shore et al., 2009). At the same time, the peculiarity can also be observed within academic and practical discourses on the topic that the number of dimensions is usually reduced to a few. The reason for this is to be found in the different advocacy power and power of various civil rights and social movements, which promoted and still support social integration (Köllen, 2021) and the driving forces behind the amendment of the law (Nkomo & Cox, 2006).

The creation of the diversity categories can be considered an important stage in the European view of diversity categories, which grew out of the legislation implementing the Community's general anti-discrimination policy, Article XIII of the Treaty of Amsterdam, which regulations prohibit discrimination based on gender, race and ethnicity, religion and belief, disability, age, and sexual orientation (Claes, 2019). These six categories became the basis of European diversity management, also known as the "Big Six"³⁴(Primecz, 2019). Therefore, in the European Union, we usually deal with these six diversity categories in social and organizational practice (Primecz et al., 2019).

In our country, the concept of the diversity category is little known (Primecz et al., 2019). The concept of "disadvantaged situation" is often used as the Hungarian translation of the concept of deprivation to describe the situation of social groups that are unjustifiably disadvantaged in countless areas of socio-economic life and threatened by exclusion and discrimination. So, it applies to income and other disadvantages (Andorka, 2006; Forray, 2013). At the legislative level, the concept can be interpreted in the field of education concerning disadvantaged students and students with special

³⁴ In the American context, Plummer (2003) coined the term "Big 8", which includes all the diversity categories that are mentioned most frequently in the USA. These include race, gender, age, ethnicity/nationality, mental/physical abilities, organizational role/function, sexual orientation and religion.

educational needs (see Act CXC of 2011 on National Public Education) (Primecz et al., 2019). We can also talk about geographical and characteristic disadvantages. The latter group includes people with acquired or congenital health impairments or disabilities. In addition, there are also disadvantaged groups in the labor market. This group includes career starters, the long-term unemployed, the Roma, and those with health problems (Kenderfi, 2011). The multiple disadvantage situation "refers to persons and families who have more than one disadvantage (e.g., low income and poor health)" (Andorka, 2006, p. 60). In addition to the disadvantaged group, the vulnerable social group and the group focused on equal opportunities are sometimes used terms (Varga, 2013).

Based on the above, it can generally be said that depending on which identity group is the focus of the investigation, the following segments of diversity can be distinguished: descent and ethnicity, race, gender, social class, sexual orientation, disability, age, cultural and national affiliation, physical talents/abilities, religion, and faith (Toarniczky, 2008). For example, Acker (2006) emphasized origin, gender, and class, while in the case of Litvin (1997), ethnicity, gender, sexual orientation, age, and physical attributes and abilities were highlighted. In addition, Shore et al. (2009) highlight race and ethnicity, gender, age, disability, sexual orientation, and cultural and national affiliation concerning globalization. The previously mentioned "Big Six" focus on gender, race and ethnicity, religion and belief, disability, age, and sexual orientation (Primecz, 2019), (Table 6).

	Acker (2006)	Tatli & Özbilgin (2012)	Litvin (1997)	Shore et al. (2009)	Amsterdam Treaty (1999)
Race and ethnicity	Hundred	Ethnicity	Ethnicity	Ethnicity	Race and ethnicity
Gender	Gender	Gender	Gender	Social gender	Gender
Social class	Social class	Társadalmi osztály	-	-	-
Sexual orientation	-	Sexual orientation	Sexual orientation	Sexual orientation	Sexual orientation
Disability	-	Disability	-	Disability	Disability
Age	-	Age	Age	Age	Age
Cultural and national belonging	-	-	-	Cultural and national belonging	-
Physical abilities/abilities	-	-	Physical abilities/aptitudes	-	-
Religion and faith	-	-	-	-	Religion and faith

Table 6: The most important diversity categories according to authors and based on the Amsterdam Treaty

Source: Acker (2006), Tatli-Özgilbin (2012), Litvin (1997), Shore et al. (2009) and Claes (2019)

2.6 Levels of diversity

In addition to the narrower definition of the concepts of diversity presented above, there are also broader definitions that include less visible qualities and have a more diverse influence on self-identity. As I already indicated in the conceptual definition of diversity, there are numerous typologies of diversity. Examples include Hambrick and Mason (1984), Jackson et al. (1995)³⁵, Harrison et al. (1998)³⁶, Gardenswartz and Rowe (2003)³⁷ Rijamampianina and Carmichael (2005) grouping. By synchronizing the literature (e.g. Harrison et al., 1998; Claes, 2019; Tajfel and Turner, 1979; Byrne, 1971; Turner et al., 1987; Van Knippenberg et al., 2004), in my opinion, overall, it can be said that 1) no matter how many layers it creates, it basically distinguishes two well-defined levels, the first of which includes the easily recognizable, visible elements, while the second includes the invisible components that can be learned in a longer or shorter time; 2) consequently, the first level - depending on the cultural roots of the given author - mainly includes groups belonging to the diversity categories that have suffered a systematic disadvantage in the course of history; 3) first-level components serve as the basis for first impressions of people, while deeper ones can modify these impulses; 4) as a result, relational demographic theories can mostly be linked to the first level components, while task-oriented theories can be linked to the second level components; 5) consequently, the longer the teams work together, the more information they get, so their perceptions are based more on observed behavior and less on stereotypes caused by overt characteristics.

In the following, I will only cover the first and last typification in more detail since these two theories form the basis of my theoretical model related to workplace diversity. I chose these two models because, on the one hand, similar to

³⁵ Jackson et al. (1995) classified diversity attributes into easily perceived and underlying groups. Easily detectable properties can be determined quickly and by consensus and are usually immutable. The underlying attributes are more subject to construction and can be changed.

³⁶ Harrison and his co-authors (1998) distinguished two levels of heterogeneity, where the upper-level diversity includes those visible and biological dimensions. In contrast, deep-level diversity focuses on individuals' values, beliefs, and attitudes. This type of diversity is not direct. It can be observed over time through verbal and non-verbal interactions.

³⁷ Based on the approach of Gardenswartz and Rowe (2003), diversity has four layers, the core layer of which is personality, which is surrounded by internal, external, and then organizational dimensions. At the heart of the model is the individual's personality, which has been formed over time and consists of different traits. The internal dimensions are assumed to be fixed characteristics. Contrary to that, external dimensions are not fixed or decisive. The fourth layer comprises the organizational dimensions, so it includes all the characteristics determined by the individual's workplace.

Rijamampianina and Carmichael (2005), Mazur (2010), and Thomas (1991), I believe that the basis of diversity is a collective mixture of all human differences and similarities, since the interweaving and synthesis of dimensions based on which the individual's unique profile is created, which makes them similar to or different from other people (Mazur, 2010). At the same time, I share the view that the importance and emphasis of each dimension depend on time, space (Nagy & Primecz, 2010), context (Jackson et al., 1995), situation, circumstances (Rijamampianina & Carmichael, 2005) and environment (Pringle & Strachan, 2015) has different weights depending on it. Therefore, we cannot consider them as static and of equal weight (Rijamampianina & Carmichael, 2005) but rather as dynamic (Mazur, 2010; Zapata-Barrero, 2009), thus avoiding the trap of power blindness (Prasad et al., 2006). On the other hand, relying on the research of Hambrick and Mason (1984) and the results of many later studies (Mor Barak et al., 2021; Flores, 2016; Mor Barak et al., 2021 Tatli & Özbilgin, 2009), I believe that 1) the top management of the organization in its approach to diversity; while 2) middle managers have a decisive role in its practical implementation; 3) which decisions and actions are greatly influenced by the collective mix of the given leader's diversity, which 4) is formed depending on local contexts.

2.6.1 Typification by Rijamampianina and Carmichael

Rijamampianina and Carmichael's (2005) framework is based on the interrelationship and integration of four main processes: motivational, interactional, visioning, and learning processes within the management system. In their research, they point out that diversity indirectly affects the performance of the group or organization through these processes. The individual processes are closely related to each other, so if a change occurs in one, it affects all the others and then leads to a shift in the performance of the group/organization in some direction (Rijamampianina & Carmichael, 2005).

Their approach builds on Thomas's (1991) definition of diversity, according to which diversity is “the collective mix of human differences and similarities along any given dimension”. According to their argument, these dimensions, interwoven into a unit, create unique syntheses of the human profile, which forms the basis of

differences from others and similarities to others (Rijamampianina & Carmichael, 2005).

The authors continue the thought process of dividing diversity into visible and invisible elements, represented by the iceberg metaphor. On the analogy of the iceberg model marked by Hall's name in cultural management, three layers appear here as well. The "above water" part shows the visible elements of diversity, while the "underwater" sector shows the invisible elements. The primary dimensions include all the prominent characteristics that form the basis of many constitutions and anti-discrimination laws worldwide. Secondary dimensions include subsurface features that cannot be revealed at first glance, and which can be revealed over time. At the same time, they are more malleable, and several of the elements belonging to them change over time. The third dimension includes the characteristics found deep below the surface, which provide the core of individual identity, thereby ensuring the true essence of diversity. This group includes, for example, beliefs, assumptions, perceptions, attitudes, feelings, values, group norms, etc. In accordance with the concept of diversity, the author pairs names and depicts only a few of the possible dimensions in the ice place model while emphasizing that each dimension's importance depends on the situation and context (Rijamampianina & Carmichael, 2005).

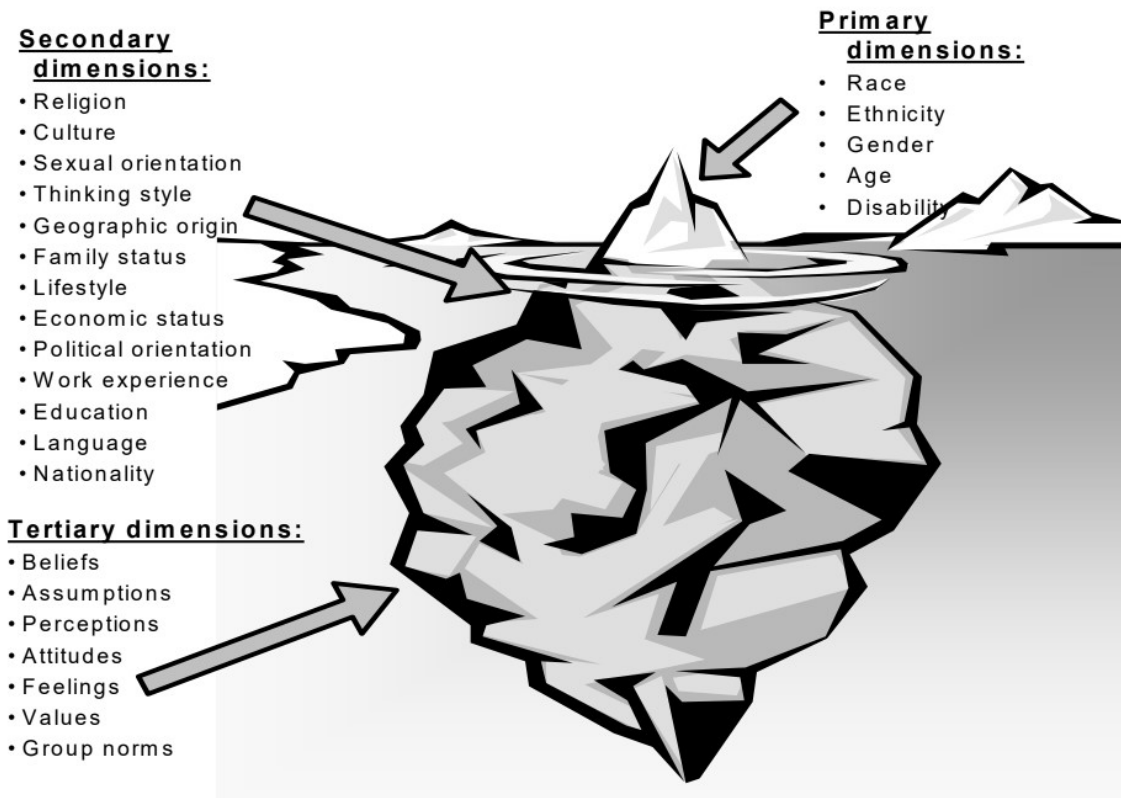


Figure 5: Rijamampianina and Carmichael dimensions of diversity

Source: Rijamampianina & Carmichael (2005)

2.6.2 The theory of the top management team

Hambrick and Mason (1984) "Upper Echelon Theory (UET)," i.e., top management team³⁸ (Top Management Team, TMT) theory is considered one of the most influential perspectives in strategic management literature. Top Management Team (TMT) refers to the CEO and those senior managers who are responsible for making important decisions about the company (Wiersema & Bantel, 1992; Mihalache et al., 2014; Hortoványi et al., 2019; Taródy et al., 2021).

The birth of the theory can be linked to the important social phenomenon that took place in the 1980s, already mentioned in the section on the historical development of diversity, that the most prominent business magazines paid more and more attention

³⁸ By senior management team, we mean the relatively small group of the most influential leaders at the top of the organization, namely the CEO and senior managers who are responsible for making important decisions about the company (Carmeli & Halevi, 2009; Mihalache et al., 2014; Hortoványi et al., 2019; Taródy et al., 2021; Finkelstein et al., 2009). Accordingly, TMT can be defined as the top two layers of corporate decision-makers (Wiersema & Bantel, 1992).

to the socio-demographic characteristics of managers. Hambrick and Mason's attention was extended to investigating the causes of the phenomenon and answering the whys (Abatecola & Cristofaro, 2020). As a result of their research, they created a conceptual framework, the essence of which is that "organizations become a reflection of their top managers" (Hambrick & Mason, 1984, p. 193) since the TMT determines the company's development path based on the preferences and behaviors embedded in their strategic decisions and through abilities (Cyert & March, 1963; Hambrick, 2007; Heyne, 2012).

The established framework relies heavily on the work of Carnegie School theorists, namely Simon's bounded rationality (1976) and Cyert and March's (1963) dominant coalition model. According to Simon's concept, although the individual acts rationally according to his intentions, his cognitive limitations prevent him from making rational decisions objectively³⁹ (Simon, 1976, p. 80). Cyert and March (1963) see an organization as a coalition of individuals. In this approach, individuals create sub-coalitions and place different expectations on the organization. The dominant coalition includes the elite network with the greatest impact on organizational goals, organization formation, and strategy selection. Accordingly, the outcome of the supreme coalition's collective choice is the organization's performance (Cyert & March 1963).

Hambrick and Mason (1984) created their own model by combining the above two concepts, the main pillars of which are: 1) managers make their decisions based on their personal interpretation of reality; 2) the personal interpretation of reality stems from the managers' cognitive processes, beliefs, personality traits, experiences, and ethical standards of conduct. According to their argument, a strategic decision is a typical example of a complex decision. This is characterized by the limited rationality of the decision-makers, complexity, multi-directional goals, and many meanings and alternatives. Based on these two pillars, they created their framework, according to which: 1) Similar to Cyert and March (1963), they see that the analysis of the profile of the top management team enables a better understanding of the corporate strategy than only the analysis of the individual profile of the CEO (Hambrick & Mason, 1984)); 2) although in an incomplete and imprecise way (Hambrick, 2007), the sociodemographic characteristics of managers represent their cognitive schemas.

³⁹ Objective rationality is the starting point of neoclassical economics and normative-analytic decision theory. According to his assumption, decision-makers know all decision alternatives, examine all variants concerning their consequences and finally choose the one that provides them with the greatest degree of goal achievement (Simon 1976, p. 80).

The early model considers age, functionality, professional experience, education, socio-economic roots, financial situation, and group characteristics as sociodemographic characteristics. It considers the cognitive basis and values as psychological elements (Hambrick & Mason, 1984) (see Table 7). Looking at the individual characteristics, these components are the same as the points of diversity typification models, including many elements of Rijamampinina and Carmichael's (2005) iceberg model. According to Hambrick and Mason's (1984) model, leadership character comprises observable and psychological elements.

Characteristics of senior management	
<i>Psychological</i>	<i>Observable</i>
Cognitive base	Age
Values	Functionality
	Professional experience
	Educational attainment
	Socio-economic roots
	Financial situation
	Group characteristics

Table 7: Hambrick and Mason diversity dimensions

Source: Hambrick & Mason, 1984

Accordingly, the profile of managers results from a unique mix of the above elements, which determines the directions, goals (Heyne, 2012) and strategy (Dobák, 2008) chosen by organizations because the choices and decisions of managers are developed along these complex characteristics, shaped by their personal interpretations their impact on the organization as a whole (Hambrick, 2007). Consequently, leaders make decisions based on their interpretation systems filtered in the situations before them and bring values and beliefs, i.e., a cognitive basis, to their formal role, through which understanding, and action are embedded in the established social world (Heyne, 2012). This cognitive base " filters and distorts the decision maker's perception of what is happening and what needs to be done about it" (Hambrick & Mason, 1984, p. 195). Because cognitive characteristics include, on the one hand, the decision-maker's 1) ideas and assumptions about the future, 2) knowledge of the alternatives, and 3) the consequences related to the alternatives. On the other hand, it reflects the leader's value system; it shows the preferences on which he makes his decision, what is important to him and what is not. Thirdly, the external and internal environmental effects of the

organization continuously shape it. Fourth, they filter and distort the decision-maker's understanding of what is happening and what to do (March & Simon, 1958).

Accordingly, the theory assumes that managers have all the skills and abilities, thus a cognitive basis⁴⁰ and cognitive ability⁴¹, which is necessary for making decisions. In this way, after recognizing and rationally evaluating all alternatives, they can jointly choose the most appropriate action plan for the organization. After selecting the action plan, the necessary resources are acquired and deployed for the sake of competitive advantage (Volberda & Lewin, 2003). Accordingly, from a strategic point of view, middle managers and members at lower levels of the organization play the role of executor (Flores, 2016; Mor Barak et al., 2021 Tatli & Özbilgin, 2009). Therefore, the characteristics of the organization's members, such as professional preparation, management skills, authority, the ability to tolerate and resolve conflicts, the tendency to communicate and cooperate, and the ability are also integral to success (Dobák, 2008). In other words: based on the cognitive basis of the TMT, it provides all the bases necessary for the operation of the organization, which determines the path of strategic choice, the organizational goals, common vision, interest, and evaluation systems and thus also affects the performance of the organization (Taródy et al., 2021). Based on the above, it can be said that UET is an information processing theory (Heyden, 2012), which, like the information/decision-making perspective, approaches diversity from an optimistic perspective (Yadav & Lenka, 2020) and argues that diverse teams have greater innovation potential and reconciling different points of view provides a broader perspective for the organization (Manata, 2021). At the same time, Hambrick (2007) emphasizes that the diversity of the TMT team alone is not enough to increase the efficiency and performance of the organization. In his view, TMT team diversity can only be effective if companies create diverse teams and then manage them effectively by sharing knowledge, information, and decisions.

In the literature, the source of the information used by managers was a question. Focusing on the environmental level, Heyden (2012) concluded that the CEO tends to

⁴⁰ According to Wiersema and Bantel (1992, p:94), the cognitive base includes assumptions about future events, knowledge of alternatives, and the consequences associated with alternatives.

⁴¹ Managerial cognitive ability refers to the manager's ability to participate in the creation, querying, and modification of knowledge structures, i.e., "mental activities." Mental activities interact with each other, but they can also be separated. Based on psychological studies, he distinguishes two ways of mentally processing information, which are 1) automatic and 2) controlled mental compulsions. Automatic mental activities enable quick reactions to external stimuli and data. In contrast, controlled mental activities are slower and support a more conscious response to circumstances (Helfat & Peteraf, 2015).

seek advice from external sources in a rapidly changing dynamic environment. Its results are consistent with the results and findings of the domestic and international literature (Csedő et al., 2019; Taródy, 2012; Arendt et al., 2005). At the same time, Heyden (2012) did not experience a tendency for managers to seek advice only from internal sources in the case of low environmental dynamism. In my view, this may be because if counseling is indeed an induced problem-solving behavior to improve judgment accuracy, then CEOs operating in a stable environment can rely on established processes and routines and trust their judgment based on experience.

The theory served as a catalyst for many research areas within and beyond the scope of management science (Abatecola & Cristofaro, 2020). This includes all research that investigated how managers' characteristics and experiences shape managers' perceptions, choices, and actions of managers in such a way that they ultimately influence different company results (Neely et al., 2020). The exponential increase in the popularity of UET can be explained based on the literature 1) with the goal of exploring the diverse aspects of human behavior (Abatecola & Cristofaro, 2020); 2) with the increase in the role and importance of managers compared to the past (Neely et al., 2020); 3) with new opportunities opened up by environmental, technological, political and economic changes (Hambrick, 2019); 4) by validating the relationships of the previous model (Abatecola & Cristofaro, 2020).

Thanks to the above, the elements of the 1984 model were continuously expanded. The set of socio-demographic characteristics was expanded to include, for example, sex, origin, international service, military service, nationality, and religion (Abatecola & Cristofaro, 2020), as well as sexual orientation and gender representation (Neely et al., 2020). Psychological variables have also begun to be investigated in connection with understanding human decision organizations. These researches include, among others, the typology of top management personality traits⁴² (Lovelace et al., 2018) and the Big Five personality model of top management⁴³ (Barrick & Mount,

⁴² The top management personality traits are as follows: Creator, Transformer, Rebel, and Savior. A Creator creates new businesses/new products. The Transformer radically transforms the company's strategy/culture in order to avoid future problems. A Rebel develops a new strategic direction contrary to industry norms/conventions. The Savior saves the company from failure, typically through disciplined cutbacks and consolidation (Lovelace et al., 2018). Since this topic does not form the scope of this dissertation, I will refrain from further detailing it.

⁴³ The Big Five traits consist of Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Since this topic does not form the scope of this dissertation, I will refrain from further detailing it.

1991; Harrison et al., 2019). For example, concerning the Big Five, numerous studies show that the personality traits of CEOs influence the leader's organizational behavior, among other things (Chatterjee & Hambrick, 2007; Harrison et al., 2019). Research by Harrison et al. (2019) shows that while managerial openness increases the degree of strategic change in organizations, friendliness decreases it. At the same time, they found that in the case of well-performing companies, while managerial conscientiousness and emotional stability decrease, and the degree of strategic change increases in parallel with the increase in extroversion.

Based on the research of Hambrick and Mason (1984), the view emerged that the senior management team members bring an orientation to their work that is usually formed from experience gained in some primary functional area. The studies showed that when managers in different functional areas were asked about a specific problem affecting the organization as a whole, the individual managers analyzed the situation according to the activities and goals of their own area. Based on their research results, they distinguished three types of managerial functionality: 1) output function, 2) transitional function, and 3) peripheral function. Output functions prioritize growth and the search for new opportunities and monitor and adjust products and markets. Transient functions include work aimed at optimizing processes. The peripheral function includes tasks that are not the main activity focus of the organization. García-Granero et al. (2018) point out that although functional diversity may cause task conflicts among TMT members, it is associated with better problem-solving ability.

Studies related to top management (e.g., Hambrick & Mason, 1984) claim that managers' tenure affects organizational results. According to Hambrick's (2007) study, the experience, value system, and personality of managers have an impact on how they interpret the situations before them, thus influencing their decisions. Leaders carry what they have experienced during their careers as part of their cognitive and emotional endowments. Attributions serve to filter and distort the decision-maker's perception of a given situation and how it should be handled (Hambrick, 2007). A variable evolution of tenure diversity can be observed since the birth of UET, denoting a single position within a company or a position held in a single company/industry (Abatecola & Cristofaro, 2020). Wang et al. (2012) point out that tenure can positively or negatively affect organizational performance. On the one hand, longer tenure can result in greater resistance, a tendency to strategic/organizational inertia (Hambrick (2007)) in the face

of change, and a lower willingness to innovate; on the other hand, it can be associated with greater experience and reputation (Wang et al., 2012); and thirdly, it has a positive effect on top managers on their ability to function as part of an integrated team (Hambrick, 2007). At the same time, Harrison et al. (1998) showed in their empirical study that the longer group members work together, the weaker the negative effect of demographic diversity on work group cohesion (Harrison et al., 1998). The literature also indicates that dominant coalitions with longer tenure find external support more easily (Tang et al., 2015) and have greater team coherence (Finkelstein & Hambrick, 1996).

Heyden's (2012) research on work experience diversity shows that the greater the work experience diversity of the TMT, the more it influences the direction of innovation. His empirical study also supports that while lower TMT diversity promotes exploitative innovation, a higher proportion of diversity promotes exploratory innovation (Heyden, 2012).

The diversity of TMTs' school backgrounds suggests that they have diverse curricular backgrounds (Hambrick et al., 1996). The curriculum background of senior managers shapes the manager's knowledge, which affects the interpretation of strategic situations and the environment (Eggers & Kaplan, 2013). During the training, mental templates of managers develop, which influence how the manager processes information (Finkelstein & Hambrick, 1996; Hambrick & Mason, 1984). Based on Milliken and Martins (1996), TMT with different school backgrounds are more likely to use diverse mental templates, which increases the collective information search and processing capacity. Turbulent environmental changes impose time constraints on “win or lose” decisions (Eisenhardt, 1989; Prasad & Junni, 2017; Yoon et al., 2016). In such an environment, decision-making becomes more complex, as it requires the TMT to simultaneously evaluate the problem and process and interpret many different pieces of information at the same time (Kauer et al., 2007). TMT with different educational backgrounds interprets real-time events and related information differently. At the same time, although the diversity of the educational background enhances the TMT's ability to gather and process real-time information, the turbulent environment is likely to hinder the effective discussion of relevant information (Parola et al., 2015; Prasad & Junni, 2017).

Regarding the educational level of the TMT, Tihanyi et al. (2000) concluded that managers with a higher-than-average level of education in the sample have more effective access to information, promoting business development. Because the higher the TMT's educational level, the higher its cognitive complexity and the greater its reputation. The authors also point out that the higher the educational level of the TMT, the more precisely they can determine the position of the company in a complex environment, which positively affects the strategic development of the organization. The results of Jahanshahi and Brem (2017) show that the lower average age within the TMT, more time spent in an office, and international experience than the average of the subjects in the research sample, as well as higher education have an impact on the company's internationalization. In contrast, Xu and his co-authors (2019) pointed out that there is no relationship between the performance of organizations and the educational level of TMT. Furthermore, based on the research of Wiersema and Bantel (1992), highly qualified managers would get more resources and support through social relations and diversify their businesses.

Based on the literature review of Kokot et al. (2022), the heterogeneity of the industry background of senior management teams enables networking with other industries and includes the possibility that the company's strategic orientation differs from existing industry standards. It is also emphasized that the high degree of heterogeneity of the industrial background of the top management is related to the high level of strategic dynamics. According to their argument, members of heterogeneous teams bring new perspectives and a broader perspective thanks to their previous experiences, which can lead to the discovery of new opportunities and markets.

Many studies have researched cultural diversity (Lo et al., 2020). However, less attention was paid to the effect of TMT cultural diversity on performance (Nielsen & Nielsen, 2013) for a long time. Therefore, these studies cannot be considered sufficiently grounded due to the lack of coherent theory and consensus (Lo et al., 2020). A characteristic of this research is that nationality is considered the basis of cultural diversity. Consequently, the TMT can be considered culturally diverse if its members come from other nationalities as much as possible (Lo et al., 2020). Hambrick (2007) emphasizes that TMT cultural diversity positively affects efficiency only if companies create culturally diverse teams and manage them effectively by sharing knowledge, information, and decisions. At the same time, he also highlights that although cultural

diversity is an important prerequisite for effectively managing complex business situations, it can result in personality differences that increase communication and coordination costs (Hambrick, 1995). Nielsen and Nielsen (2013) also point out that managers with different regional family backgrounds can play an important role in creating a knowledge base that enables the organization to become international. Eerola and his co-authors (2021) pointed out that the meaning of life is determined by institutions and their experiences, such as school, workplace, healthcare, and religious communities.

Hambrick and Mason (1984) also point out, relying on previous research, that social background affects the strategic directions of organizations. According to the stratum from which the senior managers of the given organization came, 1) entrepreneurial, 2) family, and 3) professionally managed companies were distinguished. Based on the research results, the managers of the organizations belonging to the entrepreneurial group had a lower, maximum high school education, in contrast to family and professional management, where the managers came from higher social strata and completed their higher education at prestigious universities. The author pair also presents the research of Harris (1979), according to which the average age of senior managers working in the railway is higher than in other industries, and the characteristic of TMT is that they have built a career within the given organization. In contrast, the managers of electronics companies were young and had a short tenure within the given organization (Hambrick and Mason, 1984).

During the evolution of the model, managerial discretion and job requirements were added to the possible moderators of predictive scopes⁴⁴. Managerial discretion denotes the degree of freedom of action of managers, the extent of which varies from country to country (Abatecola & Cristofaro, 2020) and is influenced by factors such as environmental and industrial determinants and the manager's tolerance for ambiguity (Hambrick, 2009). Hambrick (2009) also points out that management characteristics are reflected in strategy and performance only when there is managerial discretion. Furthermore, he highlights that the demand for workers increases in parallel with the decrease Abatecola and Cristofaro (2020) point out. According to this, the more complex a market is, the greater the degree of discretion and the risk-taking of

⁴⁴ Managerial job requirements are not the same as the stress experienced by managers because "job requirements, in addition to many determining factors, are potential sources or determinants (stressors) of stress" (Hambrick et al., 2005, p. 475).

managers. At the same time, they emphasize that further research is needed on the subject. Managerial job requirements refer to the extent to which the manager perceives his work as difficult or challenging. This moderator consists of the task challenges, performance challenges, and leadership aspirations factor group.

The role of these mediators is twofold. On the one hand, they can change the attention to available information and risk preferences, thus making the decision-making task more difficult; on the other hand, they enable managers to create innovative alternatives to problems (Hambrick, 2007). At the same time, the UET scientists also pointed out that 1) the higher the managerial job requirements, the more the dominant coalition tends to use decision heuristics, which largely reflect the professional background and work experience of the members, but this can lead to biases and distortions in many cases; 2) in the case of low work pressure and deadlines, dominant coalitions perform more objective and rational analyzes (Abatecola et al., 2018). At the same time, Hambrick (2009) also draws attention to the fact that the above two moderators represent opposite constructions, as the managerial job requirements do not always change in parallel with the ratio of managerial discretion.

The literature results of UET and diversity will be explained in more detail for the individual dimensions that are significant from the point of view of this dissertation. At the same time, it is important to highlight two important aspects here:

On the one hand, TMT literature surprisingly neglects to examine diversity management's formal and informal mechanisms. During my research, I found only one research that integrated the resource-based approach and transaction costs with the diversity literature and examined the impact of diversity management processes and procedures on the relationship between TMT cultural diversity and company performance. The research results showed that socialization as an informal mechanism plays an important role in strengthening the positive effect of cultural diversity on performance. In contrast, no relationship was found related to the time spent at work (Lo et al., 2020).

On the other hand, the literature (Taródy et al., 2021; O'Reilly & Tushman, 2004, Garcia-Granero et al., 2018) emphasizes that in order to create a long-term competitive advantage, organizations must simultaneously pursue exploration and exploitation activities. The literature calls this activity ambidexterity. At the same time, he also highlights that the biggest challenge of ambidexterity is the management of

fundamentally different strategies and competencies, which can lead to paradoxes (Garcia-Granero et al., 2018). While discovery involves experimentation, flexibility, and diverse thinking, exploitation involves efficiency, refinement, and focus (March 1991). Therefore, the behavioral integrity of the TMT team (Tarody, 2021), its provision of entrepreneurial, planning, and implementation skills (Hortoványi, 2012), as well as the involvement of the various levels of the organization's hierarchy in the processes of strategic renewal (Schmitt et al., 2018) are therefore important for successful cooperation.

2.6.3 Criticism of the upper echelons theory

For a long time, there was no comprehensive critical study related to the theory, which can be explained by the fact that each critical research used a critical concept with a different meaning (Neely et al., 2020). For example, the "black box problem" can be found in all critical studies, but at the same time, it is not entirely clear what the term "box" means. While others use different terms, such as "causation" (Hoskisson et al., 2017) and "unobservable heterogeneity" (Hiller et al., 2011), in connection with which Neely and his co-authors (2020) point out that each concept can actually be linked to model uncertainties. In their view, the lack of a systematic review and best practices that would help fully understand the theory contributes to the poverty of the entire critical literature review. To compensate for these shortcomings, a metacritical framework of the theory of top management was created by synthesizing the related literature, which includes three conceptual and two methodological elements. Conceptual components include 1) inadequate exploration of the black box; 2) inadequate exploration of the relational black box; and 3) a more systematic evaluation of critical situations, while the methodological criteria include 4) the (non)compliance of constructions and measures, and 5) the need to increase attention to endogeneity.

Inadequate exploration of the cognitive black box suggests that research applying the theory has not previously paid sufficient attention to the process mechanisms that mediate the relationship between leadership orientation and corporate outcomes. These black box criticisms actually refer to two different conceptual issues: 1) the lack of explicit exploration of managers' cognitive processes; and 2) the relationship of processes (Neely et al., 2020). To overcome these gaps, a more direct and in-depth

study of cognitive processes is needed that connects managerial cognition with the company's strategic actions (Neely et al., 2020). In other words: a deeper examination of the influence of managerial characteristics and experiences helps in a more thorough understanding of cognitive processes, such as the exploration of managers' information search patterns (e.g., limited field of vision), information foci (e.g., selective perception) and information weighting (e.g., interpretation). Neely and his co-authors (2020) also highlight that a significant majority of studies use different conceptual frameworks, integrate the latest meanings, and examine the socially embedded nature of organizational life.

Inadequate exploration of the relational black box draws attention to the interaction of the manager, the management team, and stakeholders as an important process mediator. According to their argument, the relational black box can be opened with greater focus if we gain a deeper understanding of the actual and expected functioning of managers within the organization. So, in this case, the primary focus should be on how they can and should operate in order to promote successful results. Implementation proposals include, for example, the use of new methods, the expansion of the range of stakeholders, a deeper analysis of the back-and-forth examination of relationship systems, and the examination of relational dynamics for effectiveness (Neely et al., 2020).

In the case of a more systematic evaluation of critical situations, Neely and his co-authors (2020) express their concern regarding the empirical results and findings related to the black box, as early studies often used unknown proxy variables. The authors emphasize the consideration of contextual factors, as they argue that these elements can moderate the influence of managers on company results. Such factors can be, for example, the culture and institutional environment, corporate governance practices, and the background of the senior management team. Their research proposals include, for example, 1) examining the influence of the characteristics that determine managerial views and decisions on each other and on processes; 2) study of TMT principles with comparative culture analysis; 3) establishing fault lines within TMT groups, by examining the diversity of subgroups (Neely et al., 2020).

In connection with the (non)compliance of constructs and measures, critics call for a more conscious approach to measurement, which can instill greater confidence in test results and enable a more general, systematic evaluation of upper echelons theory.

Instead of demographic variables, they suggest analyzing less visible, non-self-reported characteristics such as personality, understanding, and values. In addition to the distorting effect of surveys based on self-evaluation, attention is drawn to the fact that the analysis of deeper layers of personality traits helps leaders understand society and the world. Furthermore, individual differences such as openness, the tendency to take risks, intellectual/emotional problems, and the need for autonomy can be outlined (Neely et al., 2020).

Critics of increasing the attention paid to endogeneity call for the examination of causal relationships with deep meaning that have an impact on decision-making. Therefore, it is recommended that the research horizon should be broadened and 1) actors should be included in the research who present a more accurate picture of the leaders than they do during their self-reports; 2) in order to understand the broader contextual effects, it is necessary to analyze events that influence the profile of managers in each strategic situation. However, they also highlight that the endogeneity conceptual frameworks need to be more consistent. If left unchecked or mismanaged, endogeneity can bias the results and interpretations of non-experimental empirical studies, discovering erroneous associations (Neely et al., 2020).

2.7 Dimensions and elements used in the research

Based on the previous definitions of diversity and diversity management, in my dissertation, relying on the work of Rijamampianina and Carmichael (2005) and Hambrick and Mason (1984), I define workplace diversity as follows:

By workplace diversity, I mean "the collective mixture of differences and similarities", learned, inherited, and passed on behavioral, action, and cognitive patterns, manifestations, and results achieved as a result, which describe the external and internal relationship and shared views of the individual and his environment, any given along a dimension characterized by a system of ideas and values inherited over generations.

I agree with the above; all diversity categories are part of human nature. At the same time, in order to avoid power blindness, it is crucial to keep in mind that the importance and emphasis of each dimension depend on several circumstances, such as time, space, context, situations, and environment.

According to my approach, the relevant components of the concept are:

- 1) Contrary to Rijamampianina and Carmichaele's (2005) model, I do not consider the components of diversity as a set of three-level elements but divide them into visible and invisible elements, the number of which, in my view, is also infinite.
- 2) Implemented for a workplace environment, we arrive at the following model, using the scope of the question and Hambrick and Mason's (1984) division:

<i>Psychological</i>	<i>Perceptible (visible)</i>
Cognitive basis	
Values Religion	
Culture	
Sexual orientation	
Way of thinking	
Geographical origin	
Marital status	
Lifestyle	Race
Economic situation	Ethnicity
Political orientation	Gender
Language	Disability
Nationality	Age
Beliefs	Functionality
Assumptions	Professional experience
Perception	Educational attainment
Attitude	Socio-economic roots
Feelings	Financial situation
Knowledge	
Skills	
Experience	
Skills	
Expertise	

Figure 6: Distribution of the diversity of the dissertation

Source: Own editing based on Rijamampianina & Carmichaele, 2005 and Hambrick & Mason, 1984

- 3) By combining the above division with the elements of relational demography and the information/decision-making perspective, we can refine it with additional elements:

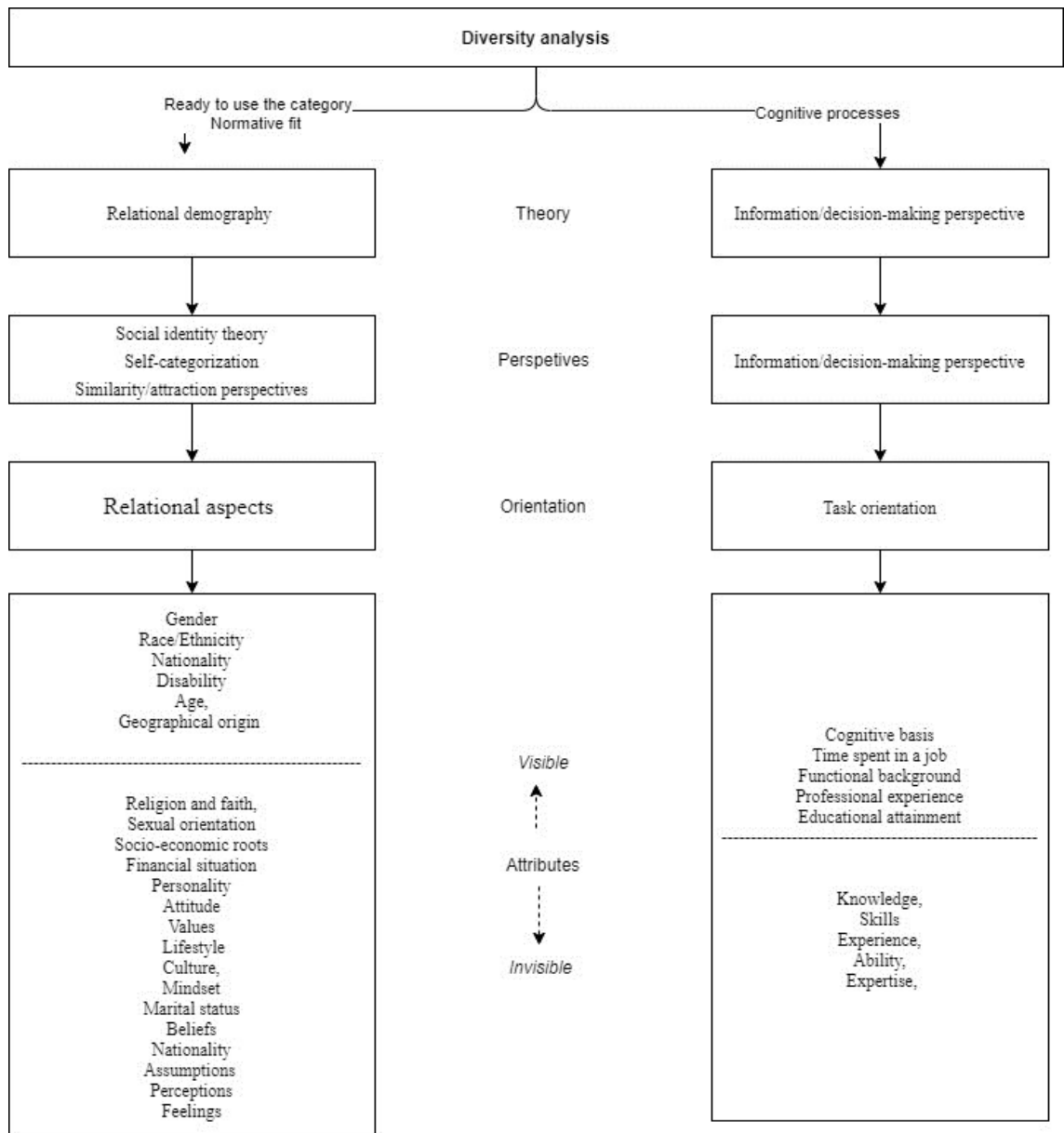


Figure 7: Division of diversity according to other theories

Source: Own editing based on Rijamampianina & Carmichael (2005); Hambrick & Mason (1984); Yadav & Lenka (2020) Tajfel & Turner (1979); Turner et al., (1987); Byrne (1971); Williams & O’Rielly (1998); van Knippenberg et al. (2004); Qin et al (2014) and van Knippenberg & Schippers (2007)

As the above shows, the basis of my research is the iceberg and UET models. In the initial stages of my research, my plan was to focus on gender, age, and cognitive diversity. At the same time, during the tests, I came into possession of such useful information and research outcomes that I certainly wanted to display them among my work. Thus, my research results regarding diversity policy are mostly limited to gender, age, and cognitive diversity. However, at the same time, I used all the information available to me through research regarding TMT diversity, organizational renewal, and

ambidexterity. Based on the above, in the following, I will only present a detailed literature presentation of gender, age, and cognitive diversity. Diversity elements include professional experience, family background, tenure, functional diversity, etc. I will elaborate on the upper echelons theory and the current section on ambidexterity.

2.7.1 Gender diversity

A recurring question in gender-related research is what could be the reason for the different situations of the two sexes. In this context, there are two distinct points of view. One emphasizes biological determination (nature), and the other emphasizes the importance of the social environment (nurture). Biological gender (sex)⁴⁵ proponents believe that the role played in reproduction and brain function determines the sexes' function, behavior, and roles in society. While according to the representatives of gender, society defines and limits the scope of opportunities for the sexes with its expectations, norms, cultural characteristics, and socialization rules (Nagy, 2014; Nagy & Primecz, 2010). Historical overviews related to gender clearly point to the validity of the latter view and prove that gender roles change according to social expectations. Namely, women's roles evolve depending on whether the given social order prioritizes the performance of maternal duties or work (Primecz & Farkas, 2019).

Based on the above, the differences between biological and social gender can be summarized as follows:

⁴⁵ Transgender people and people of different sexual orientations represent a unique transition on the binary scale (Nagy and Primecz, 2010). Transgender people perceive a contradiction between their biological sex and their gender identity. In their case, gender identity is adjusted to gender appearance in different ways and degrees. Intersex persons have gender characteristics that do not conform to the dichotomous approach of clearly distinguishing between males and females. Therefore, both phenomena are usually classified under the biological gender and social gender dimensions. In practice, however, they are hardly mentioned; in many cases, they are classified as a sexual orientation; however, since intersexuality and transgenderism are not sexual orientation, this mostly confirms their marginalized and neglected status (Köllen, 2021).

	Sex	Gender
Formation	Natural	Social and cultural formation
From what it emerged?	Biological reproduction	Social reproduction
Base	Genetic, physical, biological anatomical, physiological, hormonal, etc.	Conventional, social, cultural and political
Character	Immutable, constant, universal	Changeable, uncertain, malleable; it varies according to different ages and cultures
Viewpoint	Objective	Subjective
Individual determination	External	Internal
Approach	Sectoral	Holistic

Table 8: Difference between biological and social gender

Source: based on Peeters (2020)

In line with this are the two defining theories that attempt to explain the underrepresentation of women in the IT technology field. The essentialist perspective is based on the assumption that there are significant inherent differences between women and men. This view suggests that men have biological or psychological characteristics that make them suitable for IT work (Trauth, 2002). The second perspective focuses on the social construction of IT, according to which male dominance can be traced back to the fact that IT is incompatible with the social construction of female identity. One of the primary clues to this perspective is that IT is one of the cultures dominated and nurtured by men. Additionally, women find the cultural climate in many IT work organizations and educational programs to be "cold" or even "hostile." In this way, they either completely avoid an IT career or are entrusted with other types of work (Trauth, 2002; Nagy, 2014).

The work of Anker and his co-authors (2003) also points out that gender segregation can be traced back to social, economic, cultural, and historical reasons on the one hand and that these reasons determine the extent and patterns of occupational segregation on the other hand. The factors highlighted by researchers are 1) social norms and stereotypical perceptions of men and women, family life, family obligations, and work; 2) education and vocational training; 3) taxation and social security^{46,47}; 4) the structure of the labor market; 5) discrimination during employment and work (Anker et al., 2003: p.1). In the following, I will only cover essential elements from this

⁴⁶ Supporting initiatives and policies include social security and tax policy, which can have an encouraging effect on women (Anker et al., 2003). Based on the work of Chang (2000), the researchers illustrate the manifestations of the labor market segregation of female employees based on the strength of the relationship between formal legal efforts and support services.

⁴⁷ Chang's (2000) typology links state gender policy and gender segregation of occupations.

dissertation's point of view, so I will not cover issues related to taxation and social security in detail.

Social norms and stereotypical expectations, that dictate from childhood what kind of professional and family career path is suitable for girls and boys. On the one hand, in many cases, the stereotypes that girls encounter in childhood, during early socialization in the family and school environment, and which are responsible, among other things, for the decrease in their interest in technical fields and professions stem from these norms (Paksi, 2014; Maji & Dixit, 2020). On the other hand, in many cases, these norms reinforce the image of women and men, according to which men are responsible for ensuring the family's financial security. In contrast, women are responsible for providing for the family. These paths associate opposite characteristics with girls and boys, which also determines the direction of their interests. For example, women are associated with nature, emotion, and subjectivity, while men are associated with rationality, science, and the supernatural (Nagy & Primecz, 2010; Paksi, 2014; Maji & Dixit, 2020). Among other things, the ability to listen, care for others, the ability to express emotions at a high level, or the aesthetic sense are considered to be characteristics of feminine occupations. In contrast, masculine occupational fields are associated with masculine definitions such as assertiveness, technical skills, explaining cause-and-effect relationships, and physical strength (Nagy & Primecz, 2010).

A lack of education or vocational training hinders entry into the labor market, and advanced education and the educational qualifications obtained by women should be valued more (Anker et al., 2003). Moreover, the inequality regarding women's education reinforces gender-based occupational segregation (Anker, 1997). Actions that change the existing segregation pattern include, for example, Girls' Day, adopted from Western Europe, which gives young girls a one-day insight into scientific, technological, and technical professions to arouse their interest in these fields and occupations⁴⁸. A similar effort is a few months of parental leave encouraging men to participate more actively in child-rearing, as well as programs aimed at making the career of a teacher and kindergarten teacher more attractive (Nagy & Primecz, 2010).

The structure of the labor market also influences gender segregation. It is a worldwide phenomenon that the public sector is a significant employer for women. Although security is a sectoral feature, in this segment, the chances of advancing to

⁴⁸ <https://nokatud.hu/lanyok-napja/>

higher-paying jobs are meager (Anker et al. 2003; Geraldine, 2015). Discrimination in hiring and employment can reinforce gender segregation both indirectly and directly. For example, favoring men during recruitment, training, and promotion processes is classified as direct discrimination (Anker et al. 2003; Nagy & Primecz, 2010). Nagy and Primecz (2010) point out that although there are examples of men being excluded from work, they point out that they are not excluded from jobs with the same prestige value (e.g., waitress, hostess).

The gender dimension is closely intertwined with stereotypes, workplace discrimination, and prejudice⁴⁹ and with segregation⁵⁰ (Köllin, 2019). The "glass ceiling"⁵¹ and "glass wall" metaphors reflect this discrimination as a visual barrier, where the first represents vertical and the second represents horizontal segregation (Nagy, 2017). Vertical segregation shows the location of the sexes at different levels of the occupational and job hierarchy (Koncz, 2010). So, the proportion of women decreases exponentially at higher levels of the organizational hierarchy (Nagy & Primecz, 2010). Investigations of the phenomenon show that women have limited opportunities to appear within organizations (Nagy, 2017), and that is why it primarily arises in connection with the topic of women in management, as it clearly points out that women get stuck at one point in their careers (Nagy & Primecz, 2010). Obstacles within the organization do not always represent an external, objective barrier (Nagy & Primecz, 2010). They include how women can be victims of "self-discrimination" by turning the obstacles into well-built rules of behavior, thereby hindering their own progress (Nagy, 2017). Acker (1997) further points out that gender-based occupational segregation harms society in several ways, as it affects women's self-esteem and men's perception of women.

According to Maji and Dixit (2020), the above process determines the lack of representation of women in the labor market, which can be seen in the fields of STEM,

⁴⁹ The most significant sources of prejudice are beliefs formed about the characteristics of a group, which can be negative or positive. In most cases, its roots are based on secondary experience, on stereotypes, which are preconceived rigid ideas about a given individual or group, and in many cases, superficially overgeneralizing the characteristics. Although there are accurate stereotypes, it is a subjective, exaggerated generalization based on an individual bad experience when applied to a group. An example of this is the statement that female leaders are not good leaders (Laki, 2012).

⁵⁰ By labor market segregation we mean the general phenomenon of the separation of sectors, occupations, jobs and positions according to gender (Laki, 2012).

⁵¹ Eagly and Carli (2007) draw attention to the fact that the glass ceiling metaphor is not a sufficient description of the processes because the progress of female managers is not a linear process. However, rather they find themselves in a constant maze.

Science, Technology, Engineering, Mathematics. Nagy (2017) emphasizes that there are only two options for women in the circumstances generated by the phenomenon. On the one hand, they take on supporting background roles, taking on a kind of household role, and on the other hand, when they eventually reach the leadership role, they assume a male role within the organization.

Horizontal segregation refers to the separation of occupations according to gender (Nagy & Primecz, 2010), i.e., it measures the participation of the sexes in certain sectors, occupations, and jobs (Koncz, 2010). This type of segregation is connected to the social value judgment according to which the value and prestige of the occupations and positions held by women are lower. Thus, the earnings they can achieve are lower. In contrast, men's occupations have higher social and economic recognition, and the sectors and jobs that employ them offer higher wages and earnings (Nagy & Primecz, 2010; Koncz, 2010).

Maji and Dixit's (2020) study among software developers is consistent with the above findings. The research results show that horizontal and vertical segregation can be seen in the sample they examined. In most of the technology teams that participated in the study, the ratio of female specialists and managers was minimal, and the female manager was not included in the sample at all. The processes resulted in an increase in stereotype threat, and a decrease in expected performance and trust in the organization. The study also points out that discrimination in these organizations is also symbolic, which can appear in the form of sexist jokes, stereotypical comments, and subtle discriminatory practices used during the organization's hiring process. A study by Mishra et al. (2022) concluded that although the organizations they studied have a neutral policy regarding gender diversity, the involvement of women in IT mostly stems from social views and family traditions, which represent barriers that hold back the burgeoning careers for women in the software industry. I reached similar results while researching domestic small and medium-sized IT enterprises (Olasz, 2021).

The most common objection of those who emphasize essentialist female and male characteristics is that feminine fields, such as healthcare, teaching, and administrative activities, require female characteristics that men lack. However, on the one hand, this view greatly narrows the scope of social and psychological factors. On the other hand, it ignores the fact that fitness is much more of an individual ability than a matter of biological gender (Nagy & Primecz, 2010).

Alvesson and Billing, (2009), referring to the research of Grant (1988), also point out that female leaders can highly contribute to the creation of an environment beneficial to the organization in terms of communication, cooperation, inclusion, attachment, power, and intimacy and with caring qualities. According to Grant (1988), the majority of women are good communicators and skilled at caring for others because they have practiced these skills since childhood. From this follows the ability to behave cooperatively, which is important in terms of counseling, democratic decision-making, and the workplace atmosphere, among other things. Women experience power in a different way than men (Gino et al., 2015). While women mostly identify power with a giving and caring nature and strength, men identify it with aggression and self-assertion (Grant, 1988). Therefore, women's perception of power is more relationship-based and less purely individualistic (Alvesson & Billing, 2009).

All of this is in line with the view of Dobák and Antal (2010), according to which the management style represents the "system of relationships from which it can be determined how much the management and the subordinates have the so-called decision playing field, and what the leaders' personality traits are like." Accordingly, based on Lewin's work, we can distinguish between autocratic, democratic, and laissez-faire management styles⁵², the characteristics of which I have summarized in the following table:

⁵² There is plenty of literature dealing with the topic of leadership style. Accordingly, there are several categorizations (Dobák & Antal, 2010). As we will see later, I chose this typification because I had an interviewee who self-categorized based on his own confession

	Autocratic	Democratic	Laissez faire
The motto of style	Do this!	Are we doing this or that?	It's up to you to do this or that
Code of conduct in important matters	Manager takes action	The group decides after discussion	Complete freedom without managerial involvement
Activity perspective	Some steps are dictated by a leader	Joint design in the first discussion phase	It provides tools and resources
Task steps	Task steps after steps dictated by the manager are vague and uncertain	Common schematic design	The driver stays away and can be contacted if you have any questions
Appointment of team members and their duties	Leadership task	Nominated by group members	Driver stays away
Leadership orientation	Direct driving	Participant	I miss you
Focus	Task	Contact	Absence
Leadership praise	Personal or subjective	Objective or realistic	He is not interested in the development of employees
Leadership participation in active group activities	Only if you show something; distant	Fits in as a group member without taking on too much responsibility	He doesn't try to participate
Structure	Authoritative	Organized	It's confusing, not clear
Power	It comes from above	Everyone's opinion is important	Warm, friendly and understanding
Communication	Weak	strong horizontally and vertically	It's confusing, unclear
Organizational atmosphere	Aggressive, rigid and restrictive	Group members feel good, calm atmosphere, strong sense of security	Warm, friendly and understanding

Table 9: Lewin leadership styles

Source: Own edit based on Dobák & Antal (2010); Carlin (2019) and Houlihan (2022)

Based on the meta-analysis of Eagly and Carli (2007), it was concluded that women are more transformational⁵³ kind of leaders than men, which is manifested in the support, encouragement, and rewards of their subordinates. In contrast, the transactional style⁵⁴ in its aspects involving corrective and disciplinary measures, and men were proven to be stronger. The research of the author pair also points out that men are more likely to be laissez-faire leaders (Eagly & Carli, 2007).

It is important to point out here that although several criticisms have been made of gender theory, the focus of this study is neither the current gender theory debate related to the LGBTQI (lesbian, gay, bisexual, transgender, queer, intersexual, asexual) movement, nor is the detailed description of criticisms made.

⁵³ Transformational leadership is an influencing process in which leaders make followers aware of the important things that lead to a different understanding of the opportunities and challenges in their environment. Transformational leaders are proactive. Their goal is to optimize individual, group, and organizational development and to strengthen the need for performance and self-realization. Transformational leadership does not replace but complements and strengthens transactional leadership (Filep, 2018).

⁵⁴ A transactional leader sets expectations and drives performance to achieve goals (Filep, 2018).

2.7.2 Age diversity

The labor market tensions related to the age diversity are primarily for the younger and older age groups⁵⁵ are connected (Köllen, 2021). The value of age is a matter of social construction (Tajfel & Turner 1986), which significantly impacts the labor market success of different age groups. For example, this can manifest in the possibility of entering and remaining in the labor market, the nature and quality of the position held, the possibility of advancement, wages, work-life balance, and the nature of the employment relationship (Tardos, 2016). As a result of age-related negative stereotypes and prejudices, discrimination based on age is one of the most common types of occupational discrimination, both at the domestic and EU level, especially for those over 55 (EC, 2012a, b). As a result, compared to the working-age population, the employment rate is lower, and the unemployment rate is higher among the older and younger age groups (Tardos, 2016). Since the phenomenon also poses challenges for employment policy, the European Union has also launched programs to support young people and the elderly. EU measures to integrate young people into the labor market include the Youth Guarantee and the Youth Employment Support package. The essence of the youth guarantee measure is that the member states undertake to ensure that all young people under the age of 30 receive a job offer, an educational opportunity, or the opportunity to participate in an apprenticeship or internship program within four months of becoming unemployed or completing formal education. (EP, 2021). Based on this work, the proposal for the council recommendation entitled "Road to the world of work - Strengthening the youth guarantee" supports job-creating measures and measures related to this, such as counseling, career guidance assistance, and advocacy. In addition, the proposal addresses issues related to gender and ethnic stereotypes and people with disabilities and supports diversity and inclusion (EC, 2021e). In order to strengthen sustainable development, the Europe 2020 strategy has set an employment rate of 75% for its member states for the 20-64 age group. Based on the latest Eurostat report on the subject (2019), it can be said that: 1) the EU labor market showed positive dynamics in the period between 2010-18; 2) 73.2% of the population between the ages

⁵⁵ Specific forms of association created by members of a given age group are called age groups (Csutorás, 2020).

of 20 and 64 were employed in the examined period, which is only 1.8% short of the set employment rate.

The age dimension is dynamic, as it changes depending on the person's age (Szászvári, 2011), so it is a category of special diversity that usually goes on throughout the individual's life (Primecz et al., 2019). At the same time, the assessment of individual age groups cannot be considered universal, as Western and Eastern societies have different attitudes toward the young and the old. The origin of Western social stereotypes can be traced, among other things, to ideas about old age, the elderly, the cult of youth, and the approach that the elderly are an economic burden (Szászvári, 2011). At the same time, they forget about the waste of human capital (expertise, work experience) represented by the elderly (Tardos, 2016). In addition, demographic changes, such as the decrease in the birth rate and the increase in the share of the elderly population, have a negative impact on the composition of the workforce both internationally and domestically (Tardos, 2016). Despite this, the labor market and social exclusion of those under 25 and those over 55 can be seen in most countries (Shore et al., 2009; Tardos, 2016).

The definitions of old and young age groups differ even within the European Union, so the concepts of young and old in each country are relative. For example, in the European Union, on average, someone is considered old from the age of 64, in Hungary, from the age of 58, while in Hungary, someone is considered young until 45, compared to the European average of 42 (Tardos, 2016). Based on these, it can be said, on the one hand, that age is defined by a construction based on social agreements (Tardos, 2016; Szászvári, 2011). On the other hand, it suggests that attitudes, categorization, and perceptions related to age groups can only be changed due to very complex social processes (Tardos, 2016).

The workplace aspects of research on age stereotypes initially focused on stereotypes' content and their consequences (Warr, 1993, Tardos, 2016). For example, Hambrick and Manson (1984) found that volatility in sales and earnings is associated with young managers. Thus, a picture emerged during their research that old managers have a conservative position, while young managers look for innovation and dare to take risks. The conservative position of older managers is 1) with weaker physical and mental ability, 2) it was explained by a lower willingness to learn, and 3) by the need for financial and job security. Namely, age was thought to be negatively related to the

ability to integrate information and decision-making confidence. At the same time, they saw a positive relationship between age and thoroughness, accuracy, and longer decision-making time (Hambrick & Mason, 1984). The above positions are closely related to risk aversion, transforming the social group, spending habits, and retirement income expectations of elderly managers compared to earlier life stages. For example, it is commonly believed that CEOs take fewer risks as they approach the end of their careers. As a result, they are less likely to make large investments (Ortiz-de-Mandojana et al., 2019). Consequently, companies with young managers experience greater growth and profitability differences compared to industry averages than companies with older managers (Köllen, 2021) because strategic decisions focused on the more distant future lead to greater innovation and higher company performance (Ortiz-de-Mandojana et al., 2019). The positive perception of the older age group was formed along factors of workplace efficiency, such as conscientiousness, loyalty, reliability, wisdom, hard work, efficiency, and interpersonal skills. The young age group was evaluated more positively in the factors of adaptability. Such factors include, for example, the ability to grasp new ideas, adapt to change, learn quickly, be open to new technologies, and be interested in continuing education (Warr, 1993). Based on the above research results, age diversity was assumed to promote the formation of stereotypes and emotional conflicts between team members (Dijk et al., 2016; Richard & Shelor, 2002).

Critical studies already focus on power factors within organizations, intending to expose how employers' ideas about the ideal employee reinforce negative stereotypes and perceptions of young and older people (Primecz, 2018; Tardos, 2016). Based on the summary of Tardos (2016), the age-related stereotypes of the elderly include resistance to change, lack of creativity, slow and careful decision-making, low physical capacity, lack of interest in technological changes, and inability to train. Young people are primarily considered to have an excessive career desire and self-confidence, less reliable, and easier to hold a job.

Self-classification as a human need that satisfies the need to belong somewhere and to be distinguished is closely related to the above (Tajfel, 1981). A similar conclusion is reached by Szászvári (2012), who points out in his research that younger people judge older people unfavorably. However, as age progresses, the closer they reach the given age group, the more favorably they are judged. At the level of the individual, in addition to existential impossibility, a general phenomenon is a decrease

in self-esteem, the appearance of depression, deterioration of health, etc. (Szászvári, 2011).

2.7.3 Cognitive diversity

Cognition refers to the accumulation of knowledge and a thinking process based on experience that varies from individual to individual. There are many concepts in the literature to capture cognitive diversity. This is because they examine a wide range of mental activities based on different aspects. For example, perception, perception, categorization, conclusion, value judgment, experience, knowledge, skill and ability, cognitive style, attitudes, perspectives, and beliefs, or their combination, are classified here (Dongrey, 2020, Pandolfo, 2017). According to Nooteboom (2005), cognitive organization theory goes back to developmental psychology, according to which "intelligence is an internalized action." According to his argument, during child development, groping and prodding develop into pointing, which forms the basis of reference for the language and, turning into blocks, shapes the learning process and the metaphorical images of acquired experiences (Nooteboom, 2005). However, a serious shortcoming of this theoretical framework is that it focuses on childhood or a given cycle in time and assumes, on the one hand, that the result of the process is an adult who does not need further socialization. On the other hand, it describes the development process in a linear way (Toarniczky, 2012). Helfat and Peteraf (2015) go further and introduce the concept of managerial cognitive ability, which refers to a manager's ability to engage in the creation, retrieval, and modification of knowledge structures (i.e., "mental activities"). According to their argument, cognitive ability shapes the perception ability of managers in such a way that they can detect opportunities in the environment and take them into account. Obviously, these processes influence their decisions concerning the company, including the directions for strategic renewal.

Raising the issue to the organizational level, several studies show that cognitively diverse work groups are used more and more often to increase creativity and make better decisions (Shore et al., 2009; Pieterse et al., 2011) due to the need to renew organizations. Therefore, according to the studies' assumptions on the topic, in the case of adequate diversity management, diversity among team members, such as differences in knowledge, experience, and point of view, can have positive economic effects on

companies (Knights & Omanović, 2015). Because cognitively diverse group members facilitate information processing by confronting different ideas (Shin et al., 2012), which includes discussing differences in views, individual processing, and feedback, then discussing them and integrating them together (Homan et al., 2007). Thus, the need to reconcile conflicting viewpoints may force a diverse group to process the set of information related to the task more thoroughly, which may prevent members from reaching a consensus too easily alongside familiar patterns (Williams & O'Reilly, 1998). Consequently, this kind of processing of information results in creative solutions to overcome organizational problems (Van Knippenberg et al., 2004). As we saw earlier, the literature also points out that diverse groups have greater innovation potential (Van Knippenberg & Schippers, 2007; Williams & O'Reilly, 1998), as diversity leads to richer and more colorful ideas.

Reynolds and Lewis (2017) defined cognitive diversity as differences in information processing styles. Information processing was understood as the extent to which individuals in new situations prefer to consolidate and use existing knowledge or to create new knowledge. In their research, perspective indicates the extent to which individuals prefer to use their own expertise or the ideas and expertise of others in new situations. The researchers found that as cognitive diversity increases, so does the performance of management teams. Two barriers to cognitive diversity were identified: 1) the less visible nature of the diversity type and 2) cultural barriers. Less visible means it is difficult to notice from the outside, because it is an internal difference that we can bring to the surface at the cost of hard work. Furthermore, the cultural barrier reflects that we are attracted to those who think like us and express themselves in the same way. As a result, organizations and teams often include like-minded people, which in turn limits cognitive diversity (Reynolds & Lewis, 2017).

Khan's (2018) research analyzes the work of Reynolds and Lewis and highlights its individual elements and significance. Accordingly, the characteristics of cognitive diversity include that it is less visible, cannot be easily recognized, predicted, or controlled, and because it is an internal difference, it requires hard work to surface and exploit its benefits. Cognitively diverse groups exhibit a mix of different problem-solving behaviors such as collaboration, identifying problems, applying information, maintaining discipline, breaking the rules, and devising new approaches. For cognitively diverse groups to perform well, people must be encouraged to reveal their

different ways of thinking. This requires a sense of psychological security provided by HR, which creates the conviction in employees that they will not be punished or humiliated if they voice their ideas, questions, concerns, or if they draw attention to mistakes (Khan, 2018). Psychological safety is a key team quality and can be defined as “the shared belief that the team is safe for interpersonal risk-taking” (Edmondson, 1999, p. 354), thus describing “how an individual perceives interpersonal risk-taking consequences in a given context” (Edmondson & Lei, 2014). If the members of the group “believe that there is a chance that they will be harmed (for example, embarrassed, criticized, ridiculed), they may decide to refrain from the action (Kark & Carmeli, 2009, p. 4). Consequently, if psychological safety is not present in the organization, then the power of cognitive diversity remains unused (Khan, 2018). The research also reached the present findings carried out at Google under the name of the Aristotle Project. The results of the research group showed that in each group, even if the best-qualified professionals were selected if the norms of the group did not allow the operation based on equality, the socialization of the members, which led to weaker performance of the group (Duhigg, 2016).

Based on the work of Reynolds and Lewis, we can distinguish defensive, oppositional, generative, and uniformizing types based on the relationship between cognitive diversity and psychological security (Table 10). Low psychological safety and high cognitive diversity, for example, are associated with hierarchical, controlling, and flexible functioning and careful, considered and resistant information processing. In the case of the defensive type, psychological safety and cognitive diversity are also low. Its characteristics are hierarchical, controlling, and directing the operation, which involves resistant information processing. The uniformizer is characterized by a hierarchical, controlling environment where members are valued. Information processing of this type is considered. In the case of high psychological safety and cognitive diversity, an encouraging and nurturing environment is characteristic, where information processing is based on curiosity, experimentation, and interest (Khan, 2018). A similar result was reached by Primecz and his co-authors (2008) during their study of employee-friendly organizations. Several of their interviewees evaluated open and honest communication, clear definitions of expectations, trust, independence, and decision-making rights as positive practices. At the same time, the authors draw attention to the fact that a flexible and empathic attitude complicates work organization and requires constant

coordination. Mor Barak and his co-authors (2021) point out that creativity and innovation increase in inclusive environments. It is emphasized that the organizational climate - just like any environment around us - is perceived through internal cognitive processes. Accordingly, people's perception of the organizational climate depends on the impulses received by managers at the top and other levels of the organization and workers at lower levels of the organization.

		Psychological safety	
		Low	High
Cognitive diversity	High	OPPOSITIONAL	GENERATIVE
		Careful, controlling, flexible, hierarchical, thoughtful, resistant	Curious, encouraging, experimental, powerful, inquisitive, nurturing
	Low	DEFENSIVE	UNIFORMIZER
		Cautious, affirming, controlling, directing, hierarchical, resistant	Respect, considerate, controlling, competitive, flexible, hierarchical

Table 10: The relationship between cognitive diversity and psychological safety

Source: Khan (2018) based on Reynolds & Lewis (2018)

Simon's (1976) bounded rationality model served as the basis for many psychological studies based on the fact that judgment refers to the cognitive aspects of the decision-making process. Because in a given problem area, the individual maps the problem situation based on his own cognitive representation, which, however, leads to distortions due to biases and heuristics. Related to this, the research of Abatecola and his co-authors (2018) sought the answer to why and how cognitive distortions occur in managerial decision-making. Their heuristic diamond model shows that the effects on managers influence the weight of positive and negative outcomes within risky decisions. At the same time, its distorting power depends on the design of choices and the information available during the decision-making process. Depending on the negative or positive influence, the search strategy and the method of information gathering are also developed. As a consequence, the decision-maker may fall into the trap of confirmation bias of self-reinforcing processes. This process can result in overconfidence, which can lead to low perception, habitual schemas, and associated short-cut procedures. Lovelace et al. (2018) came to a similar conclusion because, in their view, the level of decision-making confidence increases, and the level of discretion decreases in parallel with the growth of managerial reputation.

An integral part of long-term competitive advantage is the simultaneous application of exploration and exploitation activities, which we call ambidexterity. According to March (1991), exploitation involves efficiency, refinement, and focus. And discovery includes experimentation, innovation, problem-solving, and divergent thinking. Discovery, therefore, requires the suggestion of as many ideas as possible, creativity, consideration of new aspects and methods, originality, a sense of a problem, and multi-directional thinking that takes into account many possibilities and creates cognitive conflict. Cognitive conflict creates an environment where healthy debates take place, ideas, and information can be fully evaluated, and multiple solutions can be considered (Beauregard, 2019; Reynolds & Lewis, 2017). The advantages of this are the avoidance of reflexivity and groupthink. Reflexivity in a turbulent environment helps the team learn and increases performance and innovation. By avoiding groupthink, the team eliminates overestimation and a dysfunctional cognitive trap that can lead to weakness (Beauregard, 2019). On the other hand, in an environment where it is necessary to implement routine tasks and existing knowledge, exploitation comes to the fore, the focus of which is production, efficiency, and convergent thinking (March, 1991) and homogeneous teams are a greater advantage (Beauregard, 2019). Consequently, in such situations, diverse teams are not an advantage for the organization. Moreover, it is possible that subgroups are created, which can lead to segregation in case of a lack of balance (Qi et al., 2022). However, competitive organizations and their top managers must be able to perform both activities simultaneously. Because while exploitation focuses on the present and aims for the most efficient operation, discovery focuses on the future and looks for new opportunities and innovative solutions in order to ensure long-term effective operation (March, 1991, Duncan, 1976). Based on the above, Tarody (2021) highlights that the behavioral integrity of the TMT team (Tarody, 2021), its provision of entrepreneurial, planning, and implementation skills (Hortoványi, 2012) are important for successful cooperation. The involvement of different levels of the organization's hierarchy is essential for strategic renewal processes (Schmitt et al., 2018).

2.8 Domestic and EU labor market in the light of diversity

The motto of the European Union, "United in diversity," is intended to reflect the idea that the many cultures, traditions, and languages existing in Europe represent added value for the continent and that Europeans are united in building peace and democracy. As we have seen before, the concept of diversity arrived in Europe through the subsidiaries of international organizations. Even though the concept of diversity, its concept with American roots, and the categories of diversity were new to European organizations, many European countries already had anti-discrimination legislation and affirmative measures at this time. However, despite the striving for unity, the degree of protection of the "Big Six" diversity categories varies from country to country, and the EU does not have a uniform anti-discrimination directive or regulation (Mensi-Klarbach, 2019). In the past, I have already touched on the important EU and domestic stations from the point of view of development history. However, at the same time, it is necessary to review and highlight all the measures and initiatives that are significant from the point of view of the categories of diversity in this dissertation.

2.8.1 Gender Equality

In addition to the UN World Conferences mentioned in the historical section, the EU also pays special attention to the issue of gender equality. The first manifestation of this was the 1957 Treaty of Rome, in which the principle of equal pay for equal work was recorded. Since then, many measures have been taken for economic, social, and socio-political reasons⁵⁶ was born in the EU and the EU institutions constantly draw the attention of the member states to enforce the aspects of equal opportunities between the sexes at all points of decision-making (Kiss, 2015). So, the idea of gender mainstream has become a horizontal principle. One of the important milestones of the process was

⁵⁶ For example, Article 8 of the Treaty on European Union (2012/C326/01) states that "in carrying out its activities, the Union shall endeavor to eliminate inequalities and to promote equality between men and women". Based on the provisions of Article 9, when defining and implementing the Community's policies and activities, it takes into account the requirements for promoting a high level of employment, ensuring adequate social protection, combating social exclusion, and a high level of education, training, and human health protection requirements. It was also a significant step to renew and strengthen the increased commitment to equality between women and men, and on this occasion, the Women's Charter (2010) (COM(2010)78), which aims to eliminate the existing wage gap, thereby creating equal opportunities for women and men degree of economic independence.

the development of the gender equality roadmap (Gender Roadmap)⁵⁷, which covers the approximation of the employment rate of women to the rate of men, the elimination of significant wage disproportionalities that still exist today, the social protection of women and the promotion of women becoming entrepreneurs⁵⁸ support (Kiss, 2015).

The objective of the European Union, according to which all listed companies must reach 40% of female managers (BÉT, 2021), seemed to be a significant objective even in 2020 in our country, as this ratio was only around 7 during this period⁵⁹. At the same time, the domestic reception shows a positive image. For example, the proportion of female managers on Richter's Board of Directors is currently 25%, and in the Supervisory Board, it exceeds 30%. Among the goals of the company's diversity policy is that 1) the total proportion of women among the members of the management bodies should reach at least 30%; 2) the age distribution of the members should be balanced (Richter, 2020). In the case of Magyar Telecom, the gender ratio of senior management is balanced, and in the case of company management, the proportion of women is 32 percent. Their sustainability strategy focuses on the issue of diversity. Their equal opportunity plan includes mentoring women and increasing the number of women in senior positions (Telekom, 2021). MOL's Board of Directors has no female members, and 20 percent of its supervisory board is female (MOL, 2021a). MOL Group's Enter Tomorrow Strategy aims to make MOL Hungary the first choice of employees and potential colleagues belonging to the gender, age, and nationality diversity group by 2030. In the spirit of this, identical recruitment, selection, and promotion processes have been implemented for the entire Group, which includes, among other things, ensuring that: 1) at least one female candidate must be interviewed for 50% of the positions; 2) candidate lists from recruitment agencies are only accepted if they contain at least one female candidate; 3) each interview panel must include at least one female and one male applicant - otherwise, no decision can be made; 4) colleagues in the same position receive the same salary regardless of gender (MOL, 2021b).

In Hungary, as in other socialist countries, the central emancipation imposed during the period of socialism (1948-1989) also affects the special situation of women. In the spirit of striving for full employment, all women were forced into the labor market, even those who wanted to work in the household. The development of the child

⁵⁷ COM/2006/0092

⁵⁸ At EU level, barely 10% of women can be considered self-employed (Kiss, 2015).

⁵⁹ <https://www.pwc.co.uk/services/economics/insights/women-in-work-index.html>

welfare system began at this time, so compared to other socialist countries, women's labor market situation and involvement faced fewer obstacles. The legacy of the period is twofold. On the one hand, women had the opportunity to prove that they were just as valuable workers as men. Female employees also appeared in fields such as engineering, chemistry, and architecture, which are gender-segregated occupations in other countries. As a result, there were significantly more women in leadership positions in the Eastern Bloc than in the West (Fodor, 2004). On the other hand, after the regime change, the principle of socialism received a negative connotation and delegitimized political issues and measures related to gender equality. The traditional roles of women came to the fore, the expectation of fulfilling family tasks replaced the expectations of the labor market. As a result, the employment of women in Hungary fell significantly. The process is called refamilization (Primecz et al., 2019), which has resulted in a paradoxical situation. Although more and more women are appearing in the labor market, at the same time, the rate of acceptance of traditional gender expectations is significant. Consequently, women were stuck at the career level where they could still meet the compliance structure (Nagy, 2014).

The situation in Hungary shows that the employment rate of women aged 20-64 in 2020 was 67%, and that of men was 72% (Eurostat, 2020). According to a PricewaterhouseCoopers (2017) survey of OECD countries, if female employment in Hungary were to reach the Swedish level (81%), it would result in a 9% increase in GDP. If the wage gap between men and women were to disappear, women's earnings would rise by 18% (Teow & Jain, 2017). Also, based on data for 2020, only 31% of young people aged 25-34 had a diploma, which is significantly lower than the leading Luxembourg (61%), Ireland and Cyprus (58-58%), Lithuania (56%) and the Netherlands (52%) (Eurostat, 2021a). In 2019, the proportion of women who obtained their first degree among those under 30 was 27.9%⁶⁰, men's was 18.7% (OECD, 2021, p.201), and women occupied 42% of all management positions (at all levels, in the public and private sectors) in the third quarter of 2020 (Eurostat, 2021b).

Since 2014, the European Commission has been publishing its annual reports on the Digital Economy and Society Development Index (DESI). According to the results of the report, although the proportion of ICT professionals in Hungary has increased

⁶⁰ The majority of female students has been constant since the 1990s, which is also a characteristic trend in an international level (Eger et al., 2012).

(3.8%), it is still below the EU average of 4.3%. The proportion of ICT graduates among all graduates was 4.9%, which is higher than the EU average (3.9%), but the proportion of our female ICT professionals at 12% is still deficient (EC, 2021a). Although we are behind the European average (19%), the phenomenon is common throughout Europe. The Commission's 2021 Women in Digital Industry Scoreboard shows that there is still a significant gender gap in skills. Based on data showing stagnant results in recent years, only 19% of ICT professionals and approximately one-third of science, technology, engineering, and mathematics graduates are women. The Digital Compass set the goal of employing 20 million ICT professionals in the EU by 2030 and bringing the number of women and men closer to each other (EC, 2021 b). The PwC (2019) report examined the effects of artificial intelligence (AI) on the labor market, according to which technological changes may affect 900,000 jobs in Hungary alone in the next 15 years (ITM, 2020).

In our country, several initiatives have been aimed at increasing the professions of female ICT specialists, but this field is still not attractive enough among girls. Such an initiative is, for example, Programozd a Jövőd! project⁶¹, the purpose of which is to increase the recognition and popularization of IT professions. The policy strategy of higher education aims to launch career guidance and skills development programs starting from the 6th grade as part of the creation of an education system that provides opportunities, social advancement, and broad access, with particular regard to the preparation of female students for MTMI / STEM majors⁶². Despite the initiatives of EU strategies, government policies, professional organizations, and universities, as well as "good practices", both statistics and reports show the underrepresentation of women. So hardly any significant changes occurred in the area (Paksi, 2014). Paksi (2014) points out that in the fields of natural and technical sciences, they react more slowly to social influences that have already had a positive effect on gender equality in other occupations. In his view, organizations should be made interested in the employment of women at a higher rate.

⁶¹ <https://programozdajovod.hu/>

⁶² 1359/2017. (VI. 12.) Government decision on the action plan for the 2016-2020 period on the "Medium-term political strategy for changing degrees in higher education 2016"

2.8.2 Age Equality

The basis of the regulatory environment for age-based discrimination in Hungary is laid down in the Article XV of the Basic Law § (1) – (3)⁶³, then there are separate measures⁶⁴ to protect women, families, children, the elderly, and the disabled. Based on Act V of 2013 of the Civil Code (hereinafter: the Civil Code), everyone is obliged to respect human dignity and the personal rights arising from it. Personal rights are defined in the Civil Code are under protection⁶⁵. This is followed by the naming of the catalog of personal rights, the violation of which means discrimination against the person⁶⁶. Then, as a result of the legal harmonization related to the EU accession, the Law⁶⁷ CXXV of 2003 (hereinafter: the Ebktv.), prohibiting discrimination, was created. This names age and gender among 20 protected characteristics. In the course of the legal harmonization, the requirement of equal treatment was also incorporated in the Labor Code (hereinafter: the LC) and then became more and more prominent⁶⁸.

The population of our country shows a continuous downward trend. Compared to the last ten years, we can see a loss of more than 200,000 people. Among the factors of population decline is the decrease in the number of births and natural weight loss. It is a gratifying fact that the average life expectancy at birth has shown an increasing trend in the last decade. Its value in 2019 was 72.86 years for men and 79.33 years for women⁶⁹ (Szellő, 2021). The population decline is not expected to stop. Based on statistical forecasts, the population in 2050 may be between 8 and 9 million people. Based on the forecasted data, the age composition of our country may also change significantly. Based on the basic calculation, the absolute number of the population may

⁶³ (1) Every person is equal before the law. All people have legal capacity. (2) Hungary guarantees fundamental rights to everyone without any discrimination, namely race, color, gender, disability, language, religion, or politics or other opinion, national or social origin, wealth, birth or other status. (3) Women and men have equal rights

⁶⁴ Basic Law of Hungary, Article XV. § (5)

⁶⁵ Civil Code 2:42 § (2).

⁶⁶ Civil Code 2:43 § point c)

⁶⁷ The Ebktv. it obliges the bodies performing state and public tasks and the market participants concerning a given legal relationship to comply with the requirement of equal treatment. The law pays particular attention to the punishment of direct or indirect discrimination in employment, for example.

⁶⁸ Article I of 2012 on the Labor Code prohibits direct and indirect discrimination between employees. Section 12 (1) of the law stipulates that the principle of equal treatment must be observed "especially" concerning remuneration for work.

⁶⁹ Central Statistics Office. Population and popular movement. Average life expectancy at birth. https://www.ksh.hu/docs/hun/xstadat/xstadat_hosszu/h_wdsd001b.html

fall to 70-75% of the 2011 value among the young (0-14 years old) and working-age (15-64 years old) population. In contrast, the absolute number of people older than 65 increased by one and a half times (Honvári & Lados, 2015).

In parallel with the demographic transformation, the labor market is also facing significant changes, as its structure must adapt to the increasingly aging and declining workforce. As a result of these changes, the supply-driven nature of the labor market was replaced by a demand-oriented one (Szellő, 2021). In our country, the employment rate of the aging generation is meager compared to Europe, despite the fact that a part of the older age group that has been excluded from or forced out of the labor market since the 1990s wants to return to the labor market. Their return to work was further complicated by EU accession, which required new knowledge and competencies, which the inactive have minimal or none at all (Szellő et al., 2017).

According to labor market analyses, finding employment is difficult for people over the age of 45 and almost impossible for people over the age of 50 (Szászvári, 2011). The processes are closely related to age perceptions (Tardos, 2016). According to the Eurobarometer survey, 74% of the population thinks the elderly are negatively perceived in Hungary (EC, 2012). The views related to minors reached a lower rate (27%), but this also exceeds the European average (18%) (Tardos, 2016). Also, the Eurobarometer survey shows that 21% of people have personally experienced or witnessed age discrimination (EC, 2012).

The research of Tardos (2016) found that generational awareness was in its infancy in the Hungarian companies he examined. The needs of the younger age group were mapped by 40.5%, while those of the over 50 age group by 33% only in the examined period. The average age of the employees of the examined organizations is between 36 and 45. Based on the results of the investigations, it can be said that Hungarian employers developed and introduced targeted practices for the younger generation (Tardos, 2016).

Richter (2020), mentioned in connection with gender quotas, is a positive example because, in addition to the above, among the goals of the organization's diversity policy is the balanced age distribution of senior board members, as well as the expansion of members under the age of 50 (Richter, 2020). In the case of Telekom, the Equality Plan lays down provisions for the implementation of the company group's general human rights principles, which covers employees over 50 and under 25. Career

starters are helped with an internship program, young employees with a family-friendly environment, and supportive measures such as the possibility of remote work. And for older colleagues, it provides horizontal career opportunities, which it supports with training courses and jobs advertised within the company (Telekom, 2021). MOL's Growwww program is a one-year opportunity for young graduates, during which participants get a full-time job and receive mentoring (MOL, 2021c). The target group of MOL Group's Enter Tomorrow Strategy includes age diversity, which it aims to achieve by making the company the first choice of diverse group members (MOL, 2021b).

2.9 Strategic Renewal

Throughout history, strategic renewal has perhaps never been as important for organizations as it is today. The competition intensified, and its nature became global and significantly more dynamic (Schmitt et al., 2018). As a result of these processes, market competition has become so complex that it is often unclear to market participants who the competitors are. Based on a survey conducted by IBM in 60 countries, 79% of 1,541 CEOs interviewed said that the situation would become even more complex in the near future (Tuncdogan et al., 2019).

In the globalized structure of the 21st century, on the one hand, crisis situations that have developed explosively, such as the 2008 economic crisis, the 2015 migration crisis, and the 2020 COVID-19 pandemic, can affect every country and every organization in it and force a rapid change in strategy (Wenzel et al., 2020). On the other hand, nowadays, its trends, digitalization, and innovation permeate the operational processes of organizations and the activities of managers (Csedő & Zavarkó, 2019). Therefore, organizations must strive to continuously renew themselves to survive and flourish and thus be able to adapt dynamically to the changing environment (Heyden, 2012). However, as we have seen in the case of Nokia (Bouwman et al., 2014), Kodak (Viki, 2017), and Blockbuster (Baskin, 2013), being proactive enough (Gibson & Birkinshaw, 2004) is not always obvious, what is the right direction, because the environment of companies is constantly changing: the pace of technological innovation has accelerated, customer preferences are changing rapidly (Füzes, 2021), the level of entry barriers has become lower, so the number of competitors appearing on the market

has also increased (Heyden, 2012). In other words, organizations often fail to implement breakthrough innovations despite the continuous development of their existing business activities (O'Reilly and Tushman, 2004).

As a result of the events, the strategic renewal process that ensures the survival of organizations has become the focus of researchers' attention (Füzesi, 2021), especially about the fact that it can affect not only individual companies but also the entire industry and even the entire economy (Agarwal & Helfat, 2009). However, despite the high level of attention paid to the topic, there is no universally accepted definition of strategic renewal. The reason for this can be explained, among other things, by the fact that parallel to the growth of interest in the topic, various theoretical and empirical types of research were also published (Schmitt et al., 2018), so different approaches formed different research focuses (Füzesi, 2021).

Based on the work of Schmitt and his co-authors (2018), a definition of strategic renewal based on three elements was born as a result of examining this research from different points of view and perspectives, which I will explain in detail later. Strategic renewal refers to the process that enables organizations to change path dependence by transforming strategic goals and capabilities (Schmitt et al., 2018). One vital element of this process complex is the senior management decision since, as we have seen before, large companies such as IBM, Intel, Nokia, Kodak, and Blockbuster came to be as a result of good or less favorable decisions made by senior managers to a given level. At the same time, it is also important to keep in mind that each historical period requires different renewal reactions from companies. Hence, the implementation of renewal also shows a very different picture (Heyden, 2012). At the same time, it can be said about all organizations that the chosen directions and the efforts made for strategic renewal were created due to managerial decisions. Since companies are not able to adapt by themselves (Heyne, 2012), they need guidelines, vision, quick adaptation, and individual motivations (Barakonyi, 2002). The way and how to adapt, the appropriate directions and the steps taken to eliminate path dependency are taken by decision-makers in key positions through given decision mechanisms (Garcia-Granero et al., 2018). The behavior, preferences, and choices of key decision-makers thus determine the degree of resource allocation, relationship system, prescribed forms of behavior, processes, and action patterns within the organization (Hambrick & Mason, 1984).

In the following subsections, I present the concept and perspectives of 1) strategic renewal; 2) I highlight and represent in detail the relevant parts of the literature on ambidexterity that are relevant to my topic, with particular regard to the aspects related to the framework of the upper echelons theory.

2.9.1 The concept of strategic renewal

Until the mid-1990s, in the evolution of strategic research, a number of partially competitive and partially complementary paradigms and models appeared, the attributes of which did not take into account the concept of flexibility for a long time. Their research focus was on answering the question of how companies should develop appropriate strategies using systematic forecasting, planning, and control.

The "renewal" part of the concept refers to all the activities that the company carries out in order to change the path dependence" (Volberda et al., 2001, p.160). This approach is in line with the change-related statement of Dobák (2008) that the transformation in the essential characteristics of organizations is considered a change. Still, at the same time, the definition of the elemental attribute is based on a subjective evaluation. Dobák also highlights that technology, structure, culture, behavior, and power relations have these characteristics (Dobák, 2008). The conceptual similarity is not surprising because strategic renewal can be defined as a specific type of strategic change, so strategic change can be considered an umbrella term that includes renewal (Burgelman, 1991).

And "strategic" means that organizations renew "the key ideas on which they are built" (Guth & Ginsberg 1990), so strategy denotes an evaluation and objective activity inserted between the influencing factors and the organizational structure (Dobák & Antal, 2010). However, renewal can only be considered a strategy if it affects the entire company (Burgelman, 1991).

At first glance, strategic renewal can be interpreted as an organizational change in response to environmental changes. However, if an organization reacts to a given environmental change in the usual way, it cannot be called a strategic change (Snow & Hambrick, 1980). According to March (1981), the term of organizational change develops through the processes that occur. In his work, he emphasizes that although some process elements can be standardized, the process is prolonged and often

indistinguishable. In addition, he highlights that it can often seem that the organization's response to environmental changes is strategic change. However, if an organization routinely responds to a given environmental change, it is a continuation of the strategy, not a change in it (March, 1981). A typical example is that managers who made the company successful in a previous development phase stick to the structures and processes they introduced, even if the company's development has already surpassed them (Assink, 2006). Accordingly, we can discuss strategic renewal when new solutions are applied (Snow & Hambrick, 1980).

As the above shows, several strategic renewal approaches and definitions are known (Schmitt et al. 2018). Schmitt and his co-authors (2018) point out that diverse approaches have led to a certain degree of stagnation in the field of science. The reason for this is, on the one hand, that theoretical pluralism not only led to contradictory definitions and different assumptions (Agarwal and Helfat, 2009) but also blurred the conceptual boundaries of the field (Schmitt et al. 2018). On the other hand, due to mutually exclusive and contradictory assumptions, the central focus of the concept also took different directions. There are, for example, concepts that describe strategic renewal as a purposeful process or as a search that adjusts intentions and capabilities (Schmitt et al., 2018). Moreover, innovation is an integral part of the renewal, and the issue is strategic (March, 1991), structural (Dobák, 2008; Zanoni & Janssens, 2004; Csedő, 2007), capability-based (Grant, 1996; Teece et al., 1997) and managerial (Beer & Nohria, 2000; Dobák, 2008) dilemmas can also make it difficult (Csedő & Zavarkó, 2019). Thirdly, similar to the findings of Romani (2010) regarding organizational culture and diversity - scientists in this field only partially use previous results, which significantly hinders the uniform development of the field (Schmitt et al., 2018, Garretsen et al., 2020).

Researchers often understand strategic renewal as the process, content, and results of activities carried out in order to renew, expand, and transform the basic competencies of companies (Volberda et al., 2001). This term covers the refreshing or replacing organizational characteristics and includes reconfiguring the organization's resource patterns, changing strategy, competitive approach, or product-market area (Schmitt et al., 2018). Strategic renewal therefore has two important characteristics: 1) it always involves change; 2) denotes a process, an unfolding journey, in which the organization strives to acquire and use new knowledge and innovative behavior to bring

changes in its core competencies. Strategic renewal studies typically use evolutionary perspectives to identify and examine the role and actions of those who bring about change and the different phases through which change progresses (Müller & Kunisch, 2018).

Based on the above, by strategic renewal, I understand, on the one hand, the ability of companies to make their organizational response to environmental change strategic change, which stabilizes newly emerging processes and states. On the other hand, by strategic renewal, I mean the company's exploitative and exploratory strategic renewal development path, where exploitative change used by the March conceptual system is known, and exploration means unknown change (Mintzberg et al., 1998; March, 1981).

During their research, Schmitt and his fellow researchers (2018) looked for patterns in the perspectives found in the literature to provide a conceptual framework for strategic renewal. The definition they created is process-oriented and focuses on the activities that ultimately lead to successful renewal. According to this, strategic renewal is based on three essential elements: 1) it includes the basic capabilities of the company that provides a competitive advantage, 2) it affects the entire company and affects all organizational levels, and 3) it breaks the dependency arising from the given situation, thus ensuring the long-term survival of the company (Schmitt et al., 2018, p. 85). Their definition, based on these elements, defines strategic renewal as a process that enables organizations to change their path dependence by transforming strategic goals and capabilities (Schmitt et al., 2018, p. 85). Related to this, I consider it necessary to review the perspectives that form the basis of the theoretical tensions because the basis of the top management framework is the induced perspective type.

2.9.2 Dimensions of strategic renewal

Based on the work of Schmitt and his co-authors (2018), we can distinguish three dimensions of strategic renewal, which are 1) antecedent dimension, 2) result-based dimension, and 3) process dimension. Each dimension was created from two conflicting perspectives. The antecedent dimension describes the sources of strategic

renewal, its tension is organizational learning⁷⁰, and resource-again combinational⁷¹ arises from contrasting perspectives. The result dimension captures the outputs that are achieved through strategic renewal. The basis of the tension here is cooperation⁷² vs. co-creation⁷³ dimension is even, the tension between which perspectives arises from different interpretations of the goal of strategic renewal (Schmitt et al., 2018). I will review the process dimension in the next chapter. Given that the view of my Ph.D. thesis is based on the induced flow-based dimension, I refrain from detailing the other dimensions at a deeper level.

2.9.3 Process-based Perspectives of strategic renewal

The process dimension refers to the actual manifestation of strategic renewal. The tension of the dimension comes from the point of view of who initiates and implements strategic renewal within organizations. According to one view, the process is induced, while the other votes for autonomy (Schmitt et al., 2018). The two opposing views can therefore be distinguished according to whether they see the change associated with the renewal as a top-down or bottom-up process. So, while the first dimension places the emphasis on the fact that top managers are the ones who play a key role in strategic renewal (e.g., Taródy et al., 2021; Hortovány, 2012; Hortoványi et al., 2021, the autonomist group (e.g., Rydland, 2020; Flores, 2016; Volberda, 2017; Volberda et al., 2001; Ateş et al., 2020) says that lower-level managers and employees are the driving forces of strategic renewal processes within organizations. I present the pro and con arguments for each perspective in the following, using domestic and international research.

The autonomy perspective relies primarily on the literature on strategic processes (Schmitt et al., 20018); its view is based on bottom-up social learning (Burgelman, 1991). Volberda and his co-authors (2001) and later Volberda (2017) point out that

⁷⁰ The learning perspective uses the theory of organizational learning (March, 1991) to describe the fundamental challenge of coordinating continuity and change at the organizational level (Schmitt et al., 2018).

⁷¹ Followers of this camp believe that strategic renewal requires focusing on dynamic capabilities, and the company's resource base (Schmitt et al, 2018).

⁷² Followers of this perspective rely on population ecology and institutional theory. In their view, companies are passive and powerless, so they mostly adapt to each other as a result of contextual changes (Schmitt et al, 2018).

⁷³ Researchers supporting the co-creation dimension claim that companies continuously and proactively influence industry developments to build their future competitive advantage (Schmitt et al., 2018).

successful renewal requires an active middle management layer in an extremely competitive environment. This idea is reinforced by Ateş and his co-authors (2020), who argue that even in the case of well-formulated strategies, middle managers are needed because they must interpret the strategy in the context of daily operations, identify the measures necessary for its implementation, and communicate and clarify it to the subordinates. Accordingly, the middle management layer can play an active role in strategic renewal. Moreover, through this kind of knowledge flow, senior managers also better understand the changes related to technologies, products, and markets, which can lead them to review their strategic decisions (Floyd & Lane, 2000).

The perspective also criticizes itself (Schmitt et al., 2018). For example, Floyd and Lane (2000) point out that organizations that rely primarily on bottom-up renewal initiatives risk relying on uncoordinated efforts that ultimately fail to resonate throughout the organization. The literature on the perspective also draws attention to the fact that this approach entails the risk that lower management exaggerates the importance of local errors, reacts too sensitively to fashion trends, and their corrective measures to environmental challenges may use excessive resources (Schmitt et al., 2018). As a result, an organization that is burdened with such serious problems as, for example, conflicts between powers, unclear responsibilities, inadequate control, and lack of management can be created. This increases the organization's tendency for chaos and inefficiency (Schmitt et al., 2018).

According to the top-down perspective, the competitive advantage associated with renewal can be achieved if the organization allocates resources in accordance with the market focus and then develops a defensible position (Flores, 2016). This research tradition originates from the concept that strategy and corporate behavior are driven by top managers (Cyert & March, 1963, March & Simon, 1958). Strategic choice is the totality of all formal and informal decisions that reflect decision-makers' cognitive characteristics. These cognitive characteristics include, on the one hand, the decision-maker's 1) ideas and assumptions about the future, 2) knowledge of the alternatives, and 3) knowledge of the consequences related to the alternatives. On the other hand, they reflect the leader's value system. They show the preferences on which he makes his decisions, what is important to him and what is not. Thirdly, the external and internal environmental effects of the organization continuously shape it. Fourth, they filter and

distort the decision-maker's understanding of what is happening and what to do (March & Simon, 1958).

Hambrick and Mason's (1984) research shows that the task and primary responsibility of top management is to make decisions and develop policies that affect the functioning and efficiency of the work environment. Organizational goals, vision, and values are communicated through these policies. As a result, the elements of the value system of the senior managers become the values represented by the organization through the policies, processes and reward structures that show direction and provide a protocol to the members of the organization on how to act in the organization (Mor Barak et al., 2021). In addition, Hortványi and his co-authors (2021) point out that 1) in an extremely competitive environment, the separation of the organizational structure pays off in terms of strategic renewal; 2) in the presence of strong top-down incentives, middle managers may remain passive actors in the development of the renewal strategy; 3) renewal is a "guided journey" with a highly centralized character.

Volberda and Lewin (2003) and Schmitt and his co-authors (2018) also argue for a balanced approach of the induced and autonomous renewal perspective. Attention is drawn to the fact that decisions must be made with the involvement of the hierarchy levels because the lack of this can lead to tension and a lack of information. Mor Barak and his co-authors (2021) argue similarly regarding diversity and an inclusive environment. Their research shows that the key players in the organizational climate are managers at both upper and lower levels. In their view, while top management creates and develops organizational policies based on its own values, middle managers are responsible for the daily practice and implementation of these policies. In other words, while top management communicates the organization's values through the development of structures and processes (Hambrick & Mason, 1984), middle managers communicate what these values mean for the day-to-day activities of group members through conduct, behavior, action, attitude, and words. (Mor Barak et al., 2021; Tatli & Özbilgin, 2009).

2.10 Ambidexterity

Today, it is critical for organizations to create a competitive advantage to be able to simultaneously perform exploratory and exploitative activities, which we call ambidexterity (Duncan, 1976; March, 1991). The concept was introduced into the scientific literature by Duncan, which is used in the English literature as the term "ambidexterity", which comes from the Latin words 'ambi' (both) and 'dexter' (ability, skill) (Chermack et al., 2010). Activities such as research, risk-taking, discovery, flexibility, and innovation can be connected to exploration. Thus, it includes experimentation, flexibility, decentralized structure, autonomy, risk-taking culture, and divergent thinking (March, 1991; Reeves et al., 2013). Activities related to exploitation are efficiency, implementation, execution, and fine-tuning, which are associated with efficiency, sophistication, short-term goals, centralization, standardization, execution discipline, and focus (March, 1991; Reeves et al., 2013). From a managerial point of view, ambidexterity can be defined as moving quickly toward new opportunities, adapting to competitive markets, and avoiding comfort zones. These elements form the basis of the ability to adapt to the environment and its development (Gibson & Birkinshaw, 2004).

March (1991) examined exploitation and exploration activities in the context of organizational learning. On the one hand, the epoch-making study points to the fact that adaptation processes help exploitation more than reconnaissance. On the other hand, he emphasizes that although adaptation processes can be effective in the short term, they have a destructive effect on the organization's future in the long term (March, 1991). At the same time, managers tend to emphasize what was successful yesterday (Reeves et al., 2013), and because of path dependence, they tend to follow exploitative routines (Sydow et. al., 2009; Burgelman, 1991). Moreover, the implementation of strategic ambidexterity is complicated by the fact that exploration and exploitation compete for the same resources and require opposing practices (Gibson & Birkinshaw, 2004). On the other hand, the two activities involve managing fundamentally different strategies, architectures, and competencies (García-Granero et al., 2018). Related to this, Füzesi (2021) emphasizes that if detection is not present in the organization, it can lead to its bankruptcy. Consequently, a compromise must be found between exploration and exploitation so that organizations must pursue both activities in parallel to maximize

their performance (Kostopoulos & Bozionelos, 2011). At the same time, they must operate efficiently in their current business areas and look for new business areas focusing on the future (Duncan, 1976; March, 1991). The opposite of discovery and exploitation is summarized in the table below:

	Exploitation	Discovery
Strategic goal	Cost, profit	Innovation, growth
Critical tasks	Activities related to operation, efficiency	Adaptability, new products
Competencies	Related to surgery	Entrepreneurs
Structure	Formal, mechanistic	Adaptive, relaxed
Control, rewards	Margins, productivity	Milestones, growth
Culture	Efficiency, low risk, quality, customers	Risk-taking, speed, flexibility, experimentation
Leadership role	Authoritative, top-down	Visionary, involvement
Organizational result	Increasing operational efficiency in current business areas	Renewal, entry into new business areas
Time horizon	Present	Future
Innovation	Incremental	Radical (or disruptive)
Number of problem solvers	Many, usually in extensive networks	Few, often single innovators
A way to find a solution	Extensive cooperation	Strategic foresight, curiosity, unique idea
Focus of knowledge search	Known business areas	Unknown business areas
Knowledge base	Homogeneous	Heterogeneous
Connection to external knowledge sources	Few	Many

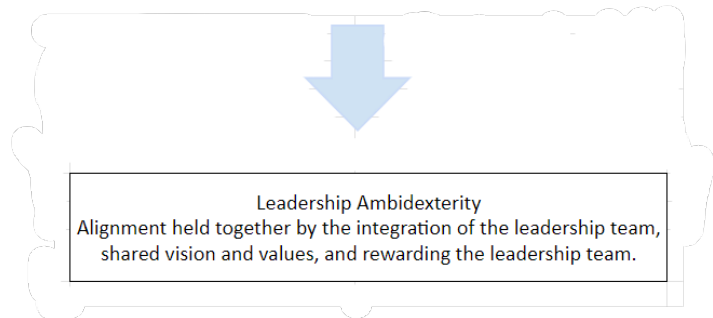


Figure 8: The opposite of exploitation and discovery

Source: Own editing based on O'Reilly & Tushman, 2004; Csedő & Zavarkó, 2019

In the literature, the two most deeply discussed and researched areas of ambidexterity are organizational and contextual ambidexterity (Taródy, 2016), which I present below.

2.10.1 Organizational ambidexterity

Organizational ambidexterity (Tushman & O'Reilly, 1996) refers to the organization's ability to develop both exploratory and exploitative capabilities (Blarr, 2012). Thus, it shows how the balance and simultaneity between a culture based on exploration and exploitation can be realized (Park et al., 2020). Accordingly, its goal is

to increase the organization's performance by simultaneously working on gradual qualitative progress and looking for new ways and opportunities for innovative developments (Khan & Mir, 2019; Martínez-Climen et al., 2019).

Market changes force organizations to implement strategies aimed at efficiency and flexibility (Blarr, 2012). Nevertheless, the dilemmas of resource distribution, finding a balance, and the need for adaptability represent a new challenge for organizations, since the two processes require different structures, competencies, solution methods, processes and cultures (O' Reilly & Tushman, 2004).

Mihalache et al. (2014) identified leadership as a fundamental quality that can manage the trade-offs that organizational ambidexterity requires. Since the decisions regarding the organization's strategic directions and resource allocation are made by the top management, TMT is attributed as the main actor in resolving the tensions between the exploratory and exploitative activities. However, these processes can lead to conflicts among senior managers, as they belong to different functional units with different priorities and objectives. Accordingly, in order to support the processes of ambidexterity, senior managers must manage both functional biases and perceived conflicts of interest (Deveaux, 2021).

Park and his co-authors (2020) examined the role of digitalization in reaching structural ambidexterity, starting from the perspective of configuration theory⁷⁴. Their research shows that cooperation within the organization is essential to achieve ambidexterity. This requires the establishment of an appropriate organizational culture, which is defined by basic beliefs, norms and values that provide a basis for the organization's management system and the policies that present, strengthen and support these values. The concept of organizational culture highlights the occasional, interactive part of the organizational context and completes the organizational systems and processes, because with its help, organizations become able to deal with the double problem of control and flexibility, to adapt to the external environment and to integrate internally (Warrick, 2017). Its essential components are diversity and a common vision, which mutually reinforce each other, on the one hand, they provide the skills necessary for short-term success focusing on the present, and on the other hand, they give the

⁷⁴ During the structural ambidexterity (Tushman & O'Reilly, 1996), the organization implements the exploration and exploitation activities in a different organizational unit.

direction of what new skills should be sought for long-term success (Gibson & Birkinshaw, 2004).

2.10.2 Contextual ambidexterity

Contextual ambidexterity indicates (Gibson & Birkinshaw, 2004) that exploitative and exploratory activities can be carried out at the individual level with conciliatory behavior. Thus, it "denotes the construction of processes or systems that enable and encourage managers to make their own decisions about how to allocate their time between the competing demands of coordination and adaptability" (Gibson & Birkinshaw, 2004, p. 211). Namely, if the managers are able to create the context of the organization with the appropriate unity of performance management and social sustainability, then the contextual ambidexterity is created. The literature also highlights that the existence of a performance management context and social support creates an organizational context that increases company performance (Gibson & Birkinshaw, 2004). However, the two processes are context-dependent, which organizations must control, manage and manage. In this way, they can overcome structural inertia and realize that they move in the direction of change by considering the effects and benefits on the organization (Levinthal & March, 1993). In this regard, contextual ambidexterity is a multidimensional construct with exploratory and exploitative activities as separate but interrelated and non-substitutable components (Gibson & Birkinshaw, 2004).

Based on the above, it can be concluded that TMT has an important role in forming the organizational context, which is realized through the actions and decision mechanisms of the activity chain. The biggest challenge is creating and supporting contexts that enable the best possible results to be achieved. Management plays a marginal role in this because they determine the directions, values, and guidelines that shape the perception and behavior of organizational members regarding work activities (Levinthal & March, 1993). In order to achieve this, managers set behavioral patterns and convey beliefs and value systems through their behavior and expressions, which employees, after perception, implement as their own, which shapes their perception and behavior (Deveaux, 2021).

Recent studies (Khan & Mir, 2019; Martínez-Climen et al., 2019) indicate that the key components of contextual ambidexterity are decentralization and continuous innovation. Accordingly, organizations should strive for their members to make

independent decisions, which helps in exploring new paths and opportunities and increases creativity, team cohesion, information processing, and multitasking abilities (Gibson & Birkinshaw, 2004). Similar conclusions were reached by Martínez-Climent and his co-authors (2019), who point out that, on the one hand, the combination of discovery and exploitation increases innovation, and on the other hand, management practices based on ambidexterity support and encourage employees' innovative and exploratory activities.

2.11 Diversity and ambidexterity

Due to unexpected events, the different regeneration paths in a turbulent environment are suitable for increasing the survival probability of the organism in different ways. The top management's task is to prepare for individual contingencies and make appropriate decisions regarding renewal. Among other things, these decisions can refer to organizational and process structures, recombining existing knowledge elements, and refining market approaches (Burgelman, 1991; Heyden, 2012). Accordingly, the top management team has a major role in helping team members reconcile paradoxical requirements and manage the challenges of integration and differentiation (Smith & Tushman, 2005) as TMT implements these potentially conflicting strategic agendas (O'Reilly & Tushman, 2004). Quigley and Hambrick (2015) go further. In their research, they argue that the different picture of organizations' performance can be explained much more by the influence of managers than by contextual, i.e., external, factors. In their opinion, although many company-specific characteristics have an impact on the life of the organization, the biggest impact is an inexplicable residue, which they called the "CEO effect".

García-Granero et al. (2018) point out that not only do we need to examine the different types of diversity within TMTs, but to more fully understand ambidexterity, we also need to consider important contingencies that may influence a diverse TMT's ability to embrace paradoxical tensions of continued exploration and exploitation rather than avoid these. During their research, two factors - the shared responsibility of the TMT⁷⁵ and the cognitive trust of the CEO⁷⁶ - were identified that can shape the

⁷⁵ It refers to the extent of TMT's joint decision-making and responsibility for them. So, it represents the distribution of leadership influence among team members (Mihalache et al., 2014).

relationship between the diversity of the TMT and the organization's ambidexterity. In their view, the two components can support the effects of diversity in such a way that they strengthen the TMT's ability to reconcile paradoxical demands. Accordingly, the two driving forces enable the TMT to reduce conflicts by creating synergistic value from diversity, and simultaneously perform exploration and exploitation. Their results show that age diversity has a negative effect on the ambidexterity of the TMT, the extent of which decreases in parallel with the strengthening of the division of decision-making responsibilities. The research also points out that functional diversity increases TMT ambidexterity only when CEO cognitive trust is present (García-Granero et al., 2018). The latter result is consistent with the results of the literature (Reynolds & Lewis, 2017, Kostopoulos & Bozionelos, 2011, Edmondson, 1999, Kark & Carmeli, 2009), according to which, if there is a lack of psychological safety within the organization, the power of diversity is underutilized stays. According to Edmondson's (1999) research, psychological safety enhances discovery-oriented learning activities, as it creates an organizational environment that provides opportunities for critical thinking and open discussion of issues without fear of sanction or punishment. Accordingly, psychological safety creates an environment where members are encouraged to develop existing knowledge jointly and establish assumptions (Reynolds & Lewis, 2017). Kostopoulos and Bozionelos (2011) raised the issue at the organizational level and reached similar conclusions. Li (2014) argues similarly, pointing out that the diversity of the TMT has a positive effect on the organization's ambidexterity, as it improves the strategic planning processes but also presents difficulties through the conflicts that arise. In his view, organizational ambidexterity enables the building of social capital through TMT. It positively affects management teams' information sharing and knowledge integration, which is based on trust and a shared vision (Li 2013). The discussions related to this and the feeling of belonging to the team create a connection between the diversity of the TMT and the organizational ambidexterity, which results in innovation and effective focus (Li, 2014). Consequently, TMT diversity improves the team's problem-solving, judgment, and decision-making abilities through task-related information and conflict elaboration (Van Knippenberg et al., 2004; Van Knippenberg & Schippers, 2007). The conflict related to the task is especially beneficial if the work includes complex, non-routine tasks without standard solutions, requiring exploratory

⁷⁶ It covers the extent to which CEOs trust their team (Ensley et al., 2003).

activity. Because in these situations, the conflicts related to the task encourage the conscious discussion and processing of information relevant to the task, which promotes learning and new insights. In the case of routine tasks, however, exploitation processes are necessary that comply with standard operating procedures and require a narrow focus of attention. Therefore, task-related conflict is most likely to interfere with these procedures (Koryak et al., 2017).

In order for the organizational ambidexterity to develop, senior management must participate in differentiation and integration with the team (Smith & Tushman, 2005). Possible ways to achieve differentiation are assigning TMT members with specific tasks (Floyd & Lane, 2000; Jansen et al., 2008) and assigning them based on their different demographic characteristics and leadership style (Håkansson et al., 2012). And integration is related to the TMT's ability to build paradoxical mental models or cognitive frameworks that enable the exchange of information and knowledge (O'Reilly & Tushman, 2004). According to Mihalache and his co-authors (2014), if a TMT makes decisions together, it has a greater potential for generating strategic alternatives and reconciling the existing contradictions. The division of responsibilities between TMT members means that the members can perform their tasks autonomously and handle heterogeneous needs. This is associated with increased quantity, quality, and speed of the acquired information (Jansen et al., 2012). Consequently, senior managers have the opportunity to develop their information-processing capacity and problem-solving ability (Carson et al., 2007; Netemeyer et al., 1997).

Regarding age and tenure diversity, while Wiersema and Bird (1993) and Bantel and Jackson (1989) concluded that they do not affect organizational changes, according to the research of García-Granero and his co-authors (2018), they negatively affect the ambidexterity of TMT. At the same time, Yuan et al. (2014) found a positive relationship between functional diversity and innovativeness. However, based on the results of García-Granero et al. (2018), functional diversity increases TMT ambidexterity only when CEO cognitive trust is present (García-Granero et al., 2018). The literature also points out that contemporary diversity mitigates the risk of decisions characterized by bias and avoidance of innovation. In addition, as previously explained, age diversity provides organizations with a broader pool of information and resources

than age-homogeneous teams (Backes-Gellner & Veen, 2013; Wiersema & Bantel, 1992).

According to the research of Campbell and Mínguez-Vera (2008), the gender diversity of the TMT offers better alternatives and solutions to unexpected changes, which increases the organization's adaptability and means a better adaptation for organizations. According to their findings, the gender diversity of managers also has a positive effect on monitoring activities, thus improving the quality of financial statements, as women tend to adhere better to standards to comply with regulations than men. Furthermore, they make more deliberate decisions in order to avoid mistakes and reckless decisions. At the same time, as I pointed out earlier, women have to face several factors in the world of work, which become more and more powerful as they progress through the ranks.

3 Systematization of diversity research

In the theoretical part, I have already explained the basic assumptions of my research regarding diversity, renewal, and ambidexterity. Still, at the same time, before defining the research questions, I see it as necessary to interpret the theoretical lens according to my perspective as a researcher. Therefore, I present the following chapter with the findings and definitions from the literature: 1) the conceptual frameworks used in the thesis, 2) my main interpretation processes, 3) their connection and expansion, and 4) their impact mechanisms. The personal insights, concepts, and findings necessarily return in my systematization, with which my goal is to connect the individual points and articles in the literature.

3.1 Own interpretation of basic assumptions

I build my research on a gap determined by literature reviews: Lo et al. (2020) drew our attention to the fact that we still need to learn more about the role and importance of diversity management based on and in connection with the foundations of top management theory. Regarding the neglected area, we need more data on what information, cognitive processes, and demographic characteristics top managers use to navigate the individual decision processes related to diversity and its management.

Therefore, investigating the meaning-making and understanding of diversity as a process can still be classified as a relevant research area.

I interpret the concept of diversity partly based on the work of Rijamampianina and Carmichael (2005) (Chapter 2.7). This view determines my view and understanding of diversity. I consider all categories of diversity to be part of human nature. Still, at the same time, when implementing the issue in the workplace environment, it is vital to highlight and emphasize the individual categories. In accordance with this, I agree with the literature found that the extent of this is determined by time, space, context, situation, and environment (Nagy & Primecz, 2010; Mazur, 2010; Rijamampianina & Carmichael, 2005). I presented the fundamental and tangible evidence of this in the presentation of the historical part.

My approach to the information/decision-making perspective and the upper echelons theory is based on optimism. Consequently, according to my basic idea, diversity - especially in a turbulent environment - is a potential advantage for organizations (Yadav & Lenka, 2020), which is realized by the fact that heterogeneous members integrate different points of view during information sharing and when making complex decisions (Manata, 2021). At the same time, similarly to Van Knippenberg and his co-authors (2014), I believe that in order to get a complete picture and eliminate the contradictions arising in connection with workplace diversity, in addition to information/decision-making perspectives, we also need to use the insights of social identity, similarity/attraction, and self-categorization approaches. I share the opinion of Van Knippenberg and his co-authors, according to which the individual processes take place in parallel or sequentially, taking this into account to eliminate the contradictory pattern of diversity. Accordingly, according to my approach, we can segment diversity's visible and invisible elements into relational demographic and informational diversity by implementing them in the workplace environment. As a result - in addition to taking into account the division of European traditions into the Big Six (Claes, 2019) and integrating the literature presented so far with the work of Rijamampianina and Carmichael (2005), Van Knippenberg and his co-authors (2014), as well as Hambrick and Mason (1984), and Yadav and Lenka (2020), we arrive at the following breakdown of workplace diversity (Figure 14).

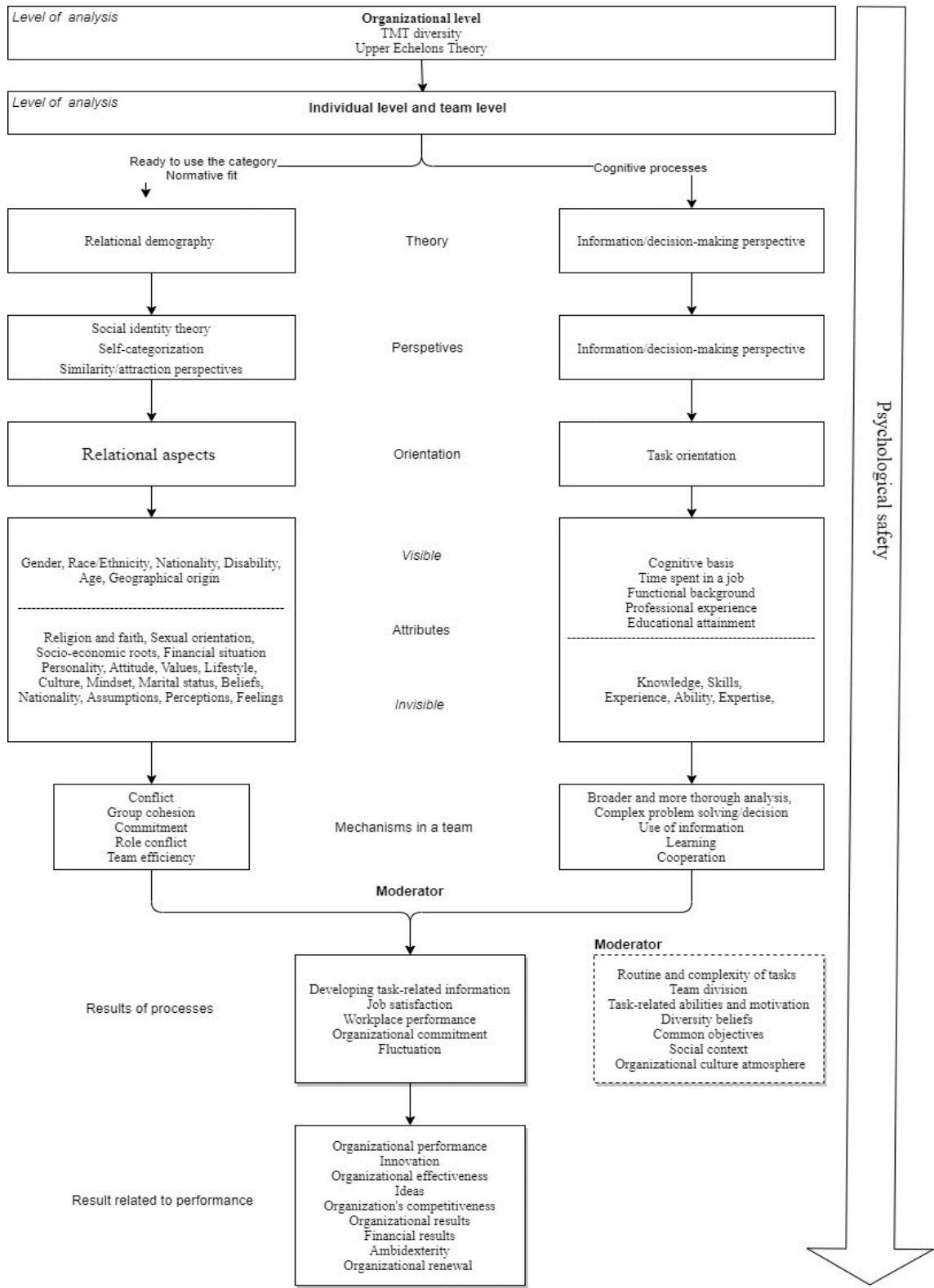


Figure 9: Dimensions and perspectives of diversity

Source: Own editing based on Carmichael (2005); Hambrick & Mason (1984); Yadav & Lenka (2020) Tajfel & Turner (1979); Turner et al., (1987); Byrne (1971); Williams & O’Rielly (1998); van Knippenberg et al. (2004); Qin et al (2014), van Knippenberg & Schippers (2007) and Edmondson (1999)

3.2 Conceptual frameworks

I agree with Beauregard's (2019) statement that exploring mediating effects can help understand the processes taking place within teams, for which I call diversity management practices to help. At the same time, in terms of diversity management, it is important to supplement the content and practical part of the term with the elements of inclusion. This is important because, in my opinion - very simply - while diversity management is business, inclusion makes organizations interested in implementing practices from a social point of view. Taking a closer look at the issue, the literature clearly points out that diversity and inclusion are built on two levels, where the first level, as diversity, refers to superficial and unobservable differences, and the second level, as inclusion, refers to the work environment (Mor Barak et al., 2021). As a result, an organization is created that supports and accepts differences (Rijamampianina & Carmichael, 2005). Based on this, the basis of an inclusive environment is an organizational culture, management practices, and interpersonal relationships that support a diverse workplace based on both functional and structural aspects. It is characterized by the respect and appreciation of the workforce (Shore et al., 2011).

It is necessary to expand the previous ones with two more new concepts:

One of these concepts is psychological safety, which I consider a key quality of an organization. Similarly to Edmondson (1999), I define it as the fact that in a psychologically safe environment, members do not refrain from actions, expressions of opinion, and ideas. However, unlike Reynolds and Lewis (2017), based on the research of Williams and O'Reilly (1998), I believe that in the absence of cognitive diversity, not only the power of all types of diversity remains unused. This leads to reduced creativity and innovation, and ultimately the organization can lead to failure of regeneration and ambidexterity. Because in my opinion, cognitive processes and behavioral patterns are significantly influenced by an individual's affiliation, which can affect their level of trust, sense of security, experiences, insights, and behavior to different extents and in different ways, and thus ultimately also the activities within the organization. I base this view on the pessimistic perspective, in which the individual categorizes his environment based on physical and deep-level features during his social and cognitive self-

determination, during which he classifies himself in a specific group. As a result, it creates "us" and "them" subgroups. "We" strengthens the sense of belonging, while "they" can strengthen stereotypes resulting in implicit or actual discrimination. Consequently, when psychological safety is present in an organization, it supports diversity, which creates an inclusive environment. And in a welcoming environment, members are encouraged and dare to express their opinions, voice their questions and concerns, and share ideas.

Related to this is the other concept, which is based on the definition of Dobák and Antal (2010) and the theory of Hambrick and Mason (1984). On the one hand, management style also means a system of relationships "from which it can be determined how much the management and subordinates so-called decision playing field, and what the leaders' personality traits are like" (Dobák & Antal, 2010). Accordingly, in my opinion, the relationship system and the decision playing field - as we have seen with Lewin's management styles - influence, among other things, the structures, relevant issues, activity perspectives, task steps, and culture affecting the organization, which is based on the characteristics of the senior manager. Consequently, in agreement with Hambrick and Mason's (1984) top management theory, I see the organization as a reflection of the leaders. An essential feature of this is that the leader makes his decisions based on his personal interpretation of reality, based on the leader's demographic diversity, cognitive processes, beliefs, personality traits, experiences, and behavioral norms. Since the top management's primary tasks include decision-making, the operation of the work environment, as well as the determination of the main directions of organizational policies, and the creation of an organization demonstrating the related inclusion, it is, therefore, through these measures that it communicates and illustrates the values of the organization, which to a large extent also reflects its own value system (Hambrick & Mason, 1984, Mor Barak et al., 2021). I consider middle management as the practical implementer (Mor Barak et al., 2021; Tatli & Özbilgin, 2009). Thus, if the TMT - especially the CEO - considers diversity an essential organizational characteristic and supports its realization with its system of tools, then this applies to other organization methods and creates an inclusive organization. The inclusive climate created in this way ensures the conviction of the members that they can dare to express their opinions, voice their questions and concerns, and share ideas

during information processing. The process ultimately strengthens the organization's renewal and ambidexterity.

Consequently, in a turbulent environment, the degree of organizational renewal and the organization ambidexterity can be increased by companies:

- they create diverse teams, so they support diversity;
- they create an inclusive organizational climate, which ensures that individuals believe that they can voice their opinions, questions, and concerns and dare to share ideas without negative consequences;
- they effectively manage organizational members by sharing information and decisions based on search preferences, accompanied by cognitive trust.

Based on the above, psychological safety is ultimately the foundation of the company's efficient operation and long-term success.

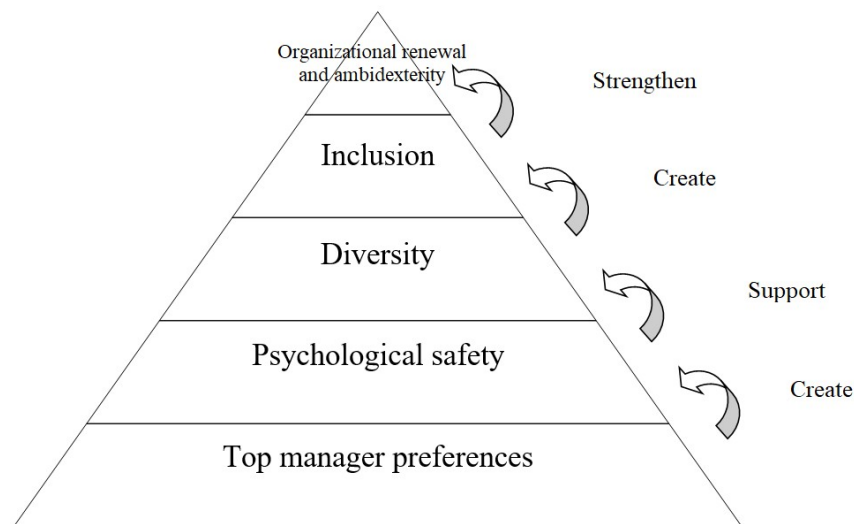


Figure 10: The relationship between manager preferences, psychological safety, diversity, inclusion, renewal, and ambidexterity
My own editing

My research, extended to top management theory, diversity, renewal, and ambidexterity, is based on the literature findings that

- 1) organizational diversity and inclusion, as well as its management, appear in the organization based on cognitive and demographic diversity and formed beliefs of the top management. Managers communicate organizational values according to their value system by developing their vision, structures, and processes. The practical realization and implementation of this is the task of

the middle managers, who communicate the meaning of the values through behavior, behavior, actions, and words within each group.

2) during the operations of each decision mechanism, managers actively search for and process information. Search is an adaptive problem-solving behavior activated by stimuli during the perception process and combined with a sequential approach. Stimuli can come from outside and inside the organization, encouraging renewal and parallel implementation of ambidexterity.

3) if psychological safety is present in an organization, the management treats diversity as a value, which creates an inclusive organization, then it increases the organization's renewal and ambidexterity. Because in this environment, members dare to voice their opinions and innovate.

As I indicated earlier, since organizational behavior theory is a broad concept, in my dissertation, I focus on a slice of it, the search component. This process plays a significant role in the mechanism of intervention because it creates a connection between top management and strategic renewal methods, as well as ambidexterity. Based on Cyert and March (1963) and Heyden (2012), I define search as adaptive problem solving that is guided by the behavior, preferences, and biases of the TMT, which is activated by stimuli during the perception process and is coupled with a sequential approach (Hambrick & Mason, 1984). These stimuli can be manifested as a result of external and internal factors (Dobák, 2008), which encourage organizations to simultaneously perform exploitative and exploratory activities (Csedő & Zavarkó, 2019). Accordingly, I consider strategic renewal as a process (Schmitt et al. 2018) and interpret it as a corporate capability that determines the organization's ability to respond to current and distant changes in the environment by simultaneously performing exploitative and exploratory activities (Csedő & Zavarkó, 2019). Accordingly, under exploitation and exploration, I use March's conceptual system, where the first unit represents known to change and the second element represents unknown change (March, 1981). During my research, I did not deeply investigate the entire spectrum of the renewal process; I only focused on the search aspect. I chose this component because, in my opinion, the cognitive processes and demographic characteristics of the TMT provide the basis of the organization, which determines the path of strategic

choice, the organizational goals, shared vision, interest, and evaluation systems, including the management of diversity itself. has an effect. Accordingly, on the one hand, I see that the diversity of the TMT team alone is not enough for organizational renewal, and the provision of ambidexterity, proper management, and inclusion of diversity and diversity implemented throughout the organization are also necessary.

After the literature review, I found that only one research in the TMT literature examined the underlying mechanisms, meaning, and operation of diversity management. The qualitative research examined how 1) the cultural diversity of the TMT affects the performance of the organization; 2) how diversity management mechanisms affect the organization's performance. The research results showed that socialization plays an important role in strengthening the positive effect of cultural diversity on performance. In contrast, no relationship was found between organizational performance and time spent at work (Lo et al., 2020).

It is expected that my research will contribute to the further understanding of diversity management by examining it in a different context - examining organizational renewal, ambidexterity, and TMT theory - which can bring new aspects of diversity to the fore by providing information on the TMT diversity management process and cognitive and demographic-based information search. I put the emphasis on his patterns. In my research, it becomes possible to explore senior management information processing patterns from multiple perspectives (mechanisms, orientations, schemes) and identify the process and the underlying cognitive processes, demographic characteristics, and decision mechanisms. My research is expected to provide information regarding additional characteristics of diversity management that have yet to be identified so far. In order to further establish the process approach of my dissertation, I considered it worthwhile to process the literature on the meanings, effects, and processes of diversity. Based on this, I identified the investigation methodology and the applied research framework, which proved suitable for analyzing diversity-related direct and indirect questions.

4 The research framework

In this chapter, I present my research strategy and model, which founded and guided the content and technical preparation of my empirical research, the empirical data collection, and then the data analysis. I will introduce you. Furthermore, I present my applied methods, as well as describe the validity, reliability and the steps I took to improve generalizability.

4.1 Elements influencing the creation of a research strategy

The most critical factors determining my research strategy are the following:

- 1) Based on my primary position in organizational theory, I want to support functionalist goals with interpretative tools.
- 2) Due to the fact that my goal is to understand the processes and events taking place in the present - what the "What...?" and "How...?" type of questions - the choice of qualitative methodology is justified (Yin, 2003).
- 3) My research questions are partly general
 - a. they focus on a single sector, IT solution providers;
 - b. they also aim to understand local meanings;
 - c. they serve the purpose of a deep exploration of diversity management, to achieve which I rely on qualitative tools. It is partially or entirely possible to implement this theoretically with qualitative data analysis, case study method, and qualitative content analysis research strategy (Pataki, 2000). Accordingly, I incorporate qualitative content analysis and case study methods into my qualitative methodology;
 - d. my research goal is to understand complex interactions, processes, and cause-and-effect relationships, to achieve a desirable approach through case studies because positivist methods are less suitable for achieving this (Pataki, 2000).

In this chapter, I will touch on the questions with the help of which I can present the path that I followed during the research, from the condition of the research question to the collection and analysis of the data to the giving of the answers. Although this path

appears straight, unobstructed, and linear, it is far from being so (Maxwell, 1996, p. 7). When presenting the execution of my research, I rely on Maxwell's (1996) research model, detailed below, because this concept vividly presents the interactive dynamics of qualitative research. I structure the individual chapters accordingly.

4.2 Carrying out the research

To formulate my research focus and questions and develop my research plan, I used Maxwell's (1996) model, which consists of five main components: Research objectives, Conceptual environment, Research questions, Methodologies, and Validity. In this interactive model, the above components form an integrated, interacting whole where the research questions are central. The elements of the model are closely related and interact with each other. So their connection is not linear or cyclical. Its purpose is that the definitions, concepts, and partial results that are clarified along the way can be integrated into another research phase. Accordingly, it enables 1) the research questions to be modified based on the results and experiences of the individual steps and intervals; 2) the conclusions of the research stages running simultaneously and in parallel can be used by another research period; and 3) the controlled utilization of new points of view and information that arose along the way. I illustrate the relationship between the individual components in the figure below (Maxwell, 1996, p. 5).

To present the implementation of my research, I follow Maxwell's (1996) interactive qualitative research model because - as I will present later - my understanding of the investigated reports deepened and consequently changed during my work. As a result, the conceptual environment of the research changed, and my priorities changed in terms of what is important and less important to me, as well as the methodology I chose. This process can be considered natural during qualitative research because, at the beginning of qualitative research, the researcher still needs concrete clues as to what kind of data he will actually get during the data collection (Gelei, 2006). A relevant characteristic of qualitative research is this interactive dynamic, which Maxwell's model perfectly represents. The structure of the individual additional chapters and subsections is done accordingly.

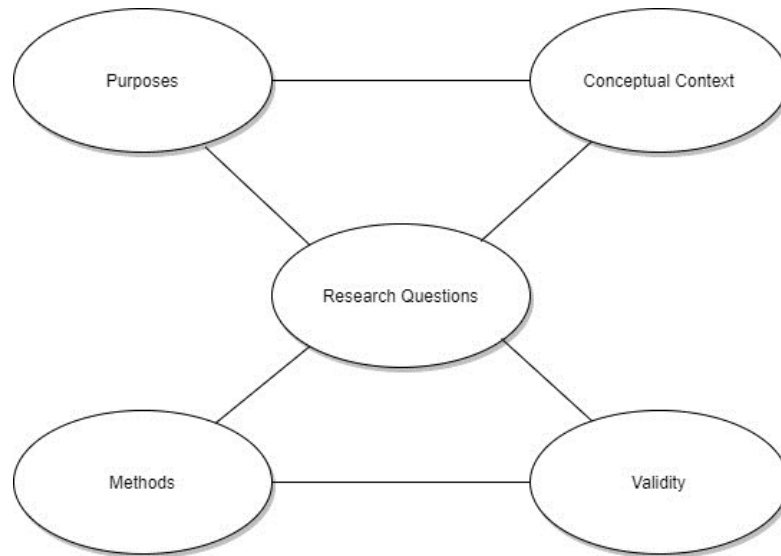


Figure 11: Interactive model of qualitative research implementation

Source: Maxwell, 1996, p.5

4.3 Research objectives

According to Maxwell (1996), three goals can be distinguished: personal, practical, and research. In the following, I will present these goals for my PhD research.

4.3.1 Personal goals

Topic selection.

For the past 20 years, I have worked in a domestic and international environment. I spent 8 years at domestic IT companies, initially as a business analyst and later in middle management positions. During the years spent in the sector, it was possible to closely observe and get to know the defining technological solutions, market trends, company strategies, decisions and the necessary skills, the companies' diversity policy, and the actual diversity of the workplace.

As a middle manager, I repeatedly experienced the challenge of adapting to radical changes in the external environment through the support of managers and the development projects I managed. Thus, in the course of my work, on the one hand, I gained experience during successful and less successful strategic renewal attempts, the appropriate or insufficient choice of the search patterns that form their basis, as well as the destructive and disruptive effects of diversity and inclusion, which supports and thus

encourages, as well as the destructive and disruptive effects of a toxic environment. My positions at medium-sized organizations operating in the domestic market allowed me to observe and compare these companies with different perspectives and demographic and cognitive diversity. On the other hand, in many cases, as a woman in the minority in the development team, I faced challenges several times in the field known to be dominated by men.

Choice of methodology.

I have always been attracted to learning about cultures and communities with individual characteristics, which form a relatively independent unit through their values, ideological systems, operations, and activities. The most appropriate tool for this is the ethnographic methodology, which enables learning about cultures, subcultures, organizations, and organizational units. At the same time, on the one hand, my opportunities became limited due to the situation that arose in connection with COVID-19. On the other hand, I did not properly assess the potential and limitations of the methodology, so instead, I chose a case study methodology based on qualitative interviews, which, in my opinion, fits better with my research questions (I will write about this later).

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Sample selection.

In the latter part of my career, I worked as a project manager and consultant at domestic and international IT organizations. Accordingly, the field of IT is at the center of my interest as a specialist field. During these years spent in an environment with a similar profile but with a different structure and culture, I had the opportunity to learn about the decision-making mechanisms of individual organizations, the management of diversity, the process of building it into a strategy, and how to implement it in the organizational environment. Through my experience in an international environment, I had the opportunity to observe and compare these phenomena with representatives of countries with different cultures. Over the past few years, I have developed the need to use scientific methods and methods to investigate how and what causes the responses to changes, and the differences in diversity policies can be traced back to the fact that we are talking about a local market. This personal interest and motivation served as the guiding thread for the topic selection of my dissertation.

4.3.2 Practical goals

My Ph.D. research also served practical purposes; my motivation is twofold: on the one hand, I want to draw the attention of domestic small and medium-sized IT companies to the contribution to long-term sustainability goals supplemented by other enlightened practices and concepts. All of this is important for IT organizations - as for all businesses - because they must simultaneously be able to operate as efficiently as possible in the present (exploitation) and to look for and innovate new opportunities (exploration), which ensure successful long-term operation (Duncan, 1976; March, 1991). Stability is required for effective operation; flexibility is required for exploration, as it generates organizational change (Csedő, 2006). Accordingly, the goal of change management is organizational renewal (Csedő & Zavarkó, 2019). Successful change management requires an inclusive atmosphere, supportive leadership, and respect for diversity. Without this, organizational renewal fails and has harmful consequences (Vito & Sethi, 2020). On the other hand, although the literature on top management theory pays a lot of attention to TMT diversity, a deeper level analysis of the management, role, and significance of diversity and inclusion is an area that has been less researched so far (Lo et al., 2020).

4.3.3 Research objectives

My research goal, with the thesis, is to reveal 1) the importance of diversity in the value system of IT organizations and their senior managers and to what extent their (demographic and psychological) diversity influences this; 2) how workplace diversity (which includes the managerial layer's conception and understanding of diversity) influences the organizational information search patterns within the organization, which are part of the strategic renewal and ambidexterity, and according to which patterns these effects can be grasped. In this way, a deeper understanding of senior management work, the management of diversity, renewal, and ambidexterity in organizations, as well as the underlying processes.

Due to its wide-ranging nature and diversity, the topics are investigated by many scientific fields. I examine the issue primarily through the lens of management science, particularly its concepts, and tools. Since management science researchers, including senior management theories and diversity research specialists, pay little attention to the issue, I am trying to build a bridge between the scientific fields from this direction as well.

With my dissertation, I would like to enrich the dialogue about the diversity of organizations. My goal is to help find "win-win" solutions that benefit everyone. Because I believe in a kind of world where people mutually recognize each other's abilities and human qualities, are free of stereotypes, accept each other's differences at the organizational and group level, regardless of affiliation, have equal opportunities for appointment and promotion, and management teams based on mutual benefits they work together. However, as we will see, despite the initiatives, we still have room for improvement in terms of the diversity categories I examined, age, and gender diversity. That is why I consider it necessary to investigate the managers' perception of diversity and its organizational implementation.

The research so far mainly focuses on how the diversity of managers is related to the company's performance, renewal path, and ambidexterity. However, with the exception of one research, I did not find any literature that examined the opinion of top management on diversity management and its implementing elements.

Based on the above, I will present the conceptual framework of my dissertation, my research questions, the methodologies used, and the validity based on Maxwell's (1996) model.

4.4 Research questions and assumptions

In this chapter, based on Maxwell's (1996) model, I review my assumptions of the conceptual framework presented above, thus, its effects on my dissertation and the topic of my research questions. The characteristic of qualitative research is that it starts with an open question with a loose theoretical framework, which is not directly linked to a specific assumption. These assumptions are formed, shaped, and formulated during the process of research work. It is characterized by progressive focusing, during which the focus of the research is continuously clarified, thanks to the fact that the questions related to the research problem are formulated on the fly. That is why, although planning plays an important role in this type of research, it does not determine the research steps (Szokolszky, 2004). In the literature, many qualitative researchers formulate propositions during theorizing and analysis, the role of which is similar to the assumptions of qualitative research (Maxwell, 1996, Miles & Huberman, 1994).

4.4.1 Formulation and clarification of the research question

When formulating the research plan, after reviewing the literature, I found that the literature examining the upper echelons theory examined less diversity management, top management's views on diversity, and its effects on organizational renewal and ambidexterity. Basically, I turned to all three topics with great interest, the foundations of which - as I mentioned earlier - were provided by my supervisors' research, professor Emeritus Dr. Miklós Dobák and Professor Dr. Henriett Primecz, in these topics or closely related to these topics.

When planning the research, my starting research questions were the following:

KK 1: How is the diversity of managers related to strategic renewal and ambidexterity?

KK2: How is the diversity of top managers related to the search patterns that form the basis of decision-making processes?

KK3: How does diversity as an organizational value affect strategic renewal and ambidexterity?

Each question aims to examine the role and significance of diversity, focusing on organizational diversity, its management, renewal, and ambidexterity.

The goal is to explore the relationship between individual research areas, to increase the evaluation and appreciation of diversity, with particular regard to gender and age diversity, the role of women in IT as software developers and managers, and to reduce the negative beliefs, emotions, and prejudices associated with them. I hope that during my research, I will be able to uncover factors that will serve as the building blocks of the topic. Overall, therefore, I examine the existing organizational and social reality from an objectivist scientific-philosophical standpoint, but at the same time, my research also includes an effort to understand. Accordingly, my research work is of an exploratory nature, as I not only aim for a mere description but also investigate why the investigated phenomena exist.

I have broken down the three main questions of my research into additional questions as follows, which we can see are closely connected⁷⁷:

Partial questions of KK1:

- How does management (TMT) diversity (demographic and cognitive) affect organizational renewal and ambidexterity?
- How does the diversity of managers at different hierarchical levels affect organizational renewal?
- What is the relationship between the direction of renewal of each organization (bottom-up/top-down) and the profile of the examined individuals?

⁷⁷ In accordance with the topic of my dissertation, all my questions refer to a domestic medium-sized organization operating in the IT sector - in a dynamic environment - which, due to the preliminary foundation of the topic, I did not consider necessary to highlight for each question.

Partial questions of KK2:

- How does the CEO's individual profile affect search?
- What effect does the diversity of TMT members have on the search?
- What is the impact of search on organizational renewal?

Partial questions of KK3:

- What is the meaning and significance of diversity for the examined individuals?
- What are the means by which diversity is implemented in the examined organization?
- What is the impact of the TMT members' diversity policy on the ambidexterity and renewal of organizations?
- What is the relationship between the renewal direction of each organization (bottom-up/top-down) and the individual diversity policy of the examined individuals/the diversity policy of the organization?

Based on the above, I created the following model related to my research question:

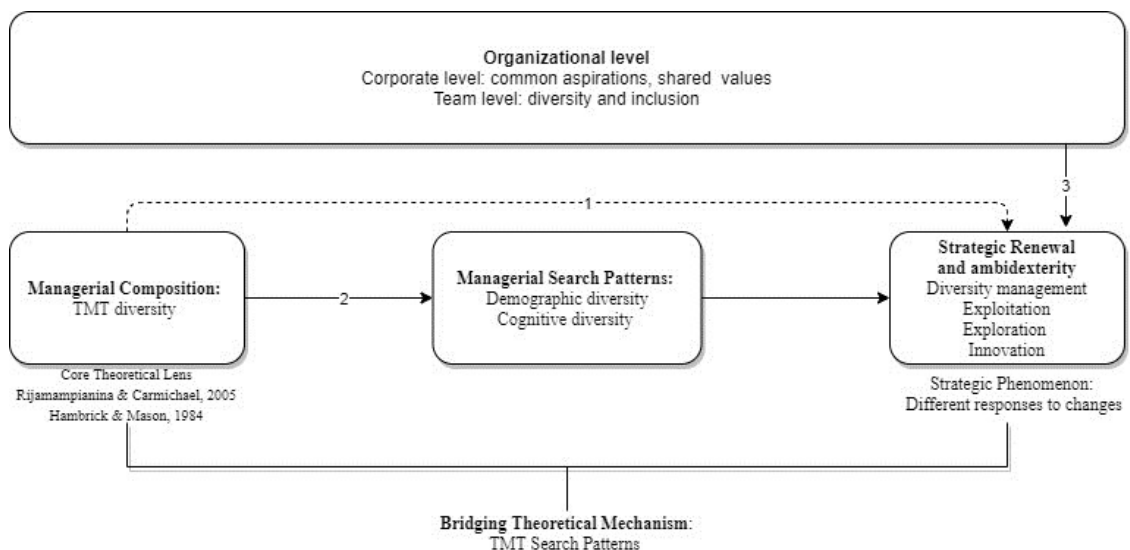


Figure 12: Research model

Source: My own editing

4.5 Methodological choice and its justification

In accordance with my research goals and questions, my research is primarily based on a case study methodology based on qualitative interviews. According to the recommendation of Yin (2003), I chose several organizations as the subject of the case studies since the literature considers studies based on several cases to be more grounded. The advantage of qualitative research over quantitative research is the inductive approach. Instead of numbers, it focuses on characteristic situations, individual people, and words (Maxwell, 1996:17). The aim of the qualitative methodology is to explore and describe the experience, and unfold and interpret the reports, which provide a deeper insight into the processes and contexts examined (Yin, 2011). With its help, research subjects can make their voices heard. Based on Maxwell (1996, p. 17), the qualitative methodology is suitable for: 1) causal knowledge of the world of meaning, perspective, and behavior of the participants; 2) understanding a given context and, related to this, exploring how this environment affects the actions of the participants; 3) to identify unexpected phenomena and effects and create a grounded theory based on the latter; 4) to understand the processes behind events and actions; 5) to explain causal explanations (Maxwell, 1996, p. 17-20). Based on the above, it can be concluded that qualitative research is the appropriate methodological choice for the main topic of my research.

A case study is "empirical research that examines a given phenomenon embedded in its real environment, especially in cases where the boundary between the phenomenon and the context is blurred" (Yin, 2003, p. 12-14). The case study is a popular qualitative methodology, the purpose of which can be the construction and testing of theory and the in-depth understanding and processing of the local context (Yin, 2003, Szokolszky, 2004). This is due to the fact that the case study presents special cases, which gives the opportunity to explore and take into account the relationships and interactions between the cases and their context (Yin, 2011).

Case selection is a process in which the researcher makes a sampling decision, namely choosing when and where to conduct the research, who to talk to, and what sources of information to focus on (Maxwell, 1996). Consequently, the case selection indicates what the researcher considers interesting and important and what kind of case he can use to answer his research questions. The case can represent a unit of

investigation, which can be a location, program, behavior, act, or specific individuals (Beck-Bíró, 2009), which results in single-focus data collection and analysis. This is in contrast to multi-focused, nested data collection and analysis, where several units of analysis can be defined within a case. In this case, the main focus is represented by the overall whole, within which several mini-focuses are defined. Based on the above criteria, a matrix containing four cell plan types is created: 1) unified, holistic plan; 2) multi-case holistic plan; 3) single embedded plan; 4) multiple nested plans. (Szokolszky, 2004). Yin (2011) also draws attention to the fact that a case study that includes several cases enables a more grounded procedure and conclusions that can be drawn.

Based on the above, the behavior, the action, the specific individuals, and their underlying decision-making mechanisms are considered cases for my Ph.D. research. Accordingly, on the one hand, IT organizations are the main focus, which includes several embedded analysis units - information collection of TMT members, diversity, diversity management methods, renewal paths, and ambidexterity. On the other hand, my case study includes several cases in order to achieve more comprehensive research goals. So, based on Szokolszky's (2004) grouping, I need to follow the multi-case nested plan.

The methodology used in my research is the case study methodology based on qualitative interviews. At the beginning of my work, my original idea was to conduct an ethnographic investigation with conversation analysis and field diary writing. Both external and internal factors deviated from the realization of my plans. During the beginning of the research, COVID-19 started, which completely prevented me from conducting research based on direct observation and active participation. Moreover, after recording the data, the processing of the data with coding in the analysis phase brought the expected success because the patterns and my understanding of the investigated phenomenon also crystallized. Atlas.ti helped me identify the individual patterns and explore the relationships between the codes because it effectively shed light on the correlations between the elements. Thanks to this, I was able to run several comparisons and reports.

Due to my original methodological commitment, I find it necessary to say a few words about the difference between ethnographic research, conversation analysis, and other qualitative methods. Organizational ethnography is based on the search for

socially shared and acquired local knowledge, which is why it is a valuable methodology from the point of view of management and organizational research because it enables entry into the researched organization and access to the experiences of managers and other organizational members (Vesa & Vaara, 2014). Overall, it is the embodiment of the hermeneutic paradigm, the essential element of which is the participant observation method, which enables the researcher to become a part of the investigated culture and its processes, to know and understand them from the inside. The method of data collection is field notes, which the publication presents in a selective and interpretive manner (Szokolszky, 2004). Conversation analysis and field diaries are closely related to this. The essence of the first is the recording and qualitative analysis of everyday conversations. Its purpose is to identify the patterns found in the dialogues, then explain and prove them explicitly. And the field diary enables continuous analysis (Szokolszky, 2004). One of the roots of the case study leads to the social sciences, including ethnography, because, as we saw above, ethnography focuses on cases and complex phenomena. However, in the case of ethnographic research, the case is usually not related to the individual but to the level of culture and society, which must be explored in detail (Szokolszky, 2004).

Qualitative research is characterized by interactivity, an inductive approach, flexibility, and reflexivity, and the following findings:

- its starting points are broader research questions;
- the direction of the conclusions is inductive or abductive;
- the role of measurement is not important;
- sampling is non-probability type;
- the purpose of sampling and research is deeper knowledge and understanding;
- the number of elements in the sample is small;
- the research is value-driven and biased;
- the research process is flexible;
- the standardization of research is low;
- the essence of the analysis is the description and understanding of the phenomena embedded in context, preserving their uniqueness;
- during its presentation, stories are presented with quotes;

- the assessment of quality is based on credibility (Mitev, 2015, p. 35).

Based on all of this, considering the researcher's findings, I classify my research as qualitative research.

4.5.1 The researcher role

Considering the nature of my research, in accordance with the methodological requirements, one of my key goals was to constantly make myself aware of my role as a researcher during the processes, the interpretation of the data, and the formulation of the results. Based on Maxwell (1996), throughout my work, I paid attention to formulating the question, "How do I influence the process and the results?" During this process, I formulated my thoughts at several steps of the research: 1) I presented in detail the personal aspects of my research decisions (see, for example, chapter 4.3 Research objectives); 2) during the work process, I kept a research diary, with the aim of articulating the thoughts and presuppositions that formed in me related to the investigated phenomenon, and 3) when formulating my research results, I strove to display my thoughts explicitly.

In connection with my role as a researcher during my work, especially in the initial stages, establishing a trusting and open relationship with the interviewees was a challenge at several points, as this was a key role in obtaining information, its reliability, and validity. Part of my role as a researcher was that, like the interviewees, I myself work in an IT organization in a middle management position, which significantly justified my interest in the topic. As a result, there were parts of the interview when I put myself in the situation told by my interviewee, or I had an individual perspective on the given situation based on my past experiences. The above processes significantly facilitated my analysis work. I believe that in several cases, neither a single context nor a single situation was unfamiliar to me. At the same time, on a professional level, I no longer had a connection to the field, which as a common background, would have adversely affected my analysis or the interviews.

4.5.2 Data collection

In the following chapters, I will describe the data collection and data processing process related to my dissertation, which I wanted to implement with the help of a case study methodology based on qualitative interviews and qualitative content analysis.

4.5.2.1 Research field and sample selection

My research goal is to explore diversity in domestic IT organizations and, related to this, organizational renewal and ambidexterity, and to examine the meaning of diversity. In order to explore the possible background mechanisms, I chose the CEOs, top managers - where I had the opportunity - and middle managers of domestic IT organizations as the field. According to Hambrick and Mason (1984), organizations are a reflection of their top managers, as the TMT determines the company's development trajectory through the preferences, behaviors, and abilities embodied in their strategic decisions (Cyert & March, 1963; Hambrick, 2007; Heyne, 2012). Mor Barak and his co-authors (2021) and Tatli and Özbilgin (2009) highlighted that the attitudes of middle management regarding diversity and equality are just as important as those of senior managers, as they play a significant role in the practical implementation of this approach (Mor Barak et al., 2021). Regarding organizational renewal and ambidexterity, the literature places great emphasis on cooperation, the behavioral integrity of the TMT team (Tarody, 2021), its entrepreneurial, planning, and implementation skills (Hortoványi, 2012), as well as the involvement of different levels of the organization's hierarchy in the into processes of strategic renewal (Schmitt et al., 2018).

Based on the above, senior managers play a key role in understanding the phenomena I am examining since their chosen directions and decision-making paths determine the organization's behavioral patterns and development trajectory. Accordingly, in agreement with Hambrick and Mason (1984), I see organizations as a reflection of top managers. In my opinion, the demographic and cognitive diversity and personal profile of each manager impact the decision-making mechanism of each manager. In addition, like Mor Barak and his co-authors (2021), I believe that middle management has an important role in implementing individual views.

Overall, I tried to include different levels of the corporate hierarchy in my research, as diversity and its organizational management and evaluation typically appear differently in individual units. Consequently, my research focus included both low and high levels, as my goal was to explore how the individual strategic and management, i.e., top-level decision paths, issues related to diversity are validated and realized in practice, i.e., how they are implemented and enforced in senior management and trickle down to lower levels. My latter endeavor failed due to the lack of management support for the lower levels, a small sample size for the middle management level, and the lack of time at my disposal, which is why the corporate TMT is found in my research.

4.5.2.2 Information technology market background

The previous operation of information technology (IT) systems was characterized by the "buy it and build it yourself" principle. Hardware and software had to be procured to run the business applications that supported the company's operations. In most cases, the hardware elements, i.e., the server and storage, were installed at the company's premises, and they provided and operated the necessary environment. The requirements for software such as operating systems, security solutions, and database managers at this time were ease of use and simplicity. The organizational unit responsible for IT carried out their installation, system maintenance, maintenance, and necessary repairs, as well as the procurement of the necessary solutions. As a result, these sections had their own budgets. This model of using information technology is called on-premise. The disadvantage of the model is that companies have to bear the additional costs of building and maintaining the IT system, which requires significant financial and personal investment. On-prem providers included, for example, Microsoft, SAP, and IBM.

At the beginning of the XXI century, Amazon introduced its web-based retail services. It was the first major store to target 10% capacity utilization. The Cloud Computing Infrastructure Model made it possible to increase the efficiency of computer capacity, and the cloud-based service introduced in 2006 gave birth to a new model of IT solutions. In the following years, Google, Microsoft, IBM, Apple, etc., became followers of the new direction. Thanks to the new solution, companies had the opportunity to use IT solutions remotely. Hence, they no longer had to store data or run

applications on their own systems but could simply access them as part of a service available via the Internet. This model is called cloud computing (Mell & Grance, 2011; Furht & Escalante, 2010).

One of the advantages of cloud-based computing is that the user does not have to manage his own system, so he does not have to take care of the entire infrastructure. The customer uses the service based on the analogy of electricity use, and the service provider takes care of building and managing the data center, the necessary software and hardware devices, and security (Marston et al., 2011).

The popularity of cloud-based models is growing exponentially, and new services such as Salesforce, ServiceNow, Neptun, Prezi, Dropbox, and Google have appeared on the market. At the same time, former on-prem computing providers such as IBM, Microsoft, and SAP recognized the potential of cloud-based services and began repositioning themselves as cloud providers.

The examined companies

According to my original idea, I also wanted to include small businesses in my research. However, during my research on small businesses, it became clear that the everyday struggles of small businesses distract company managers' attention and financial resources to such an extent that we cannot talk about diversity goals at all.

Company A It was founded in 2016 as part of a group of companies. The Zrt deals with the development, parameterization, and support of the Administration system. The organization structure can be considered flat; there are 5 directors under the CEO, of which 3 are supporting, and 2 of them deal with the development of the product universe and customer support. The organization consists of 110 people. Its seat is located in Budapest. A significant part of its clients consists of state institutions. The company also formulates goals related to social responsibility among its goals, within the framework of which they implement functions in their system that provide more learning opportunities for children belonging to the poorer strata of society. According to Céinformation, the company's sales revenue in the previous year exceeded EUR 32.5 million.

Company B Founded in 2003, its activities range from consulting through development and testing to complete project management. As part of this, supporting

customers in the digital transformation is a corporate goal. For this, a team of 170 experts provides the necessary professional knowledge, which, due to the specific nature of the company, also includes subcontractors. According to the data of the Company Information, the number of employees of the Ltd. in August 2022 is 83 people. The organization has three offices, its central office is in Budapest, and the other two outsourced sites are located in the countryside and abroad. The organization is represented by a team of seven people in the countryside and two people abroad. Basically, the company divides its activities into three industry streams. Norbert, the owner, leads the areas related to production and foreign markets, which mainly are organizations operating in the financial field, mostly insurance companies and banks. The other two areas belong to the area called enterprise by the company, which includes other large companies. The third sector includes utility and media companies. Based on Norbert's presentation, the company has four types of competence: development, testing, business intelligence, and consulting. A significant part of the sales revenue, 85%, comes from Hungary, the amount of which, according to the company information, is nearly HUF 2 billion. The organization's strategic goal is to boost exports in the long term. An important element of the company's strategy is that they strive to be able to offer innovative IT solutions to their partners every year, which is why the company pays special attention to automation and various areas of robotization, including the automation of the process and software testing, which they also support you with an in-house developed product.

Company C Founded in 2000, the company primarily deals with software development. Still, they mostly define themselves as digital product developers, which, according to the company, means that they not only develop software but also validate the needs of customers and the product idea with the aim of making it marketable and viable. create a product. The company's portfolio also includes complex business planning and consulting. The company is headquartered in Budapest and has two smaller outsourced offices, one of which is located in the countryside and the other abroad. The team of the rural office consists of 25 people, and the organizational unit abroad consists of 15 people, the expansion of which is planned in the near future. On the websites of the group of companies, the statement of the goal, according to which they want to make the web a better place, appears on several occasions, to which a

declaration of faith related to the product is attached. Based on the data of the Company Information, the company's sales revenue in 2021 exceeded HUF 1.5 billion.

Company D was established in 2014 and is headquartered in Budapest. Its activities range from application development to architecture design to IT security and consulting. In connection with this, the company has set a goal that customers can use their developed applications in the shortest possible time. The Company Group has a team of 190 professionals who carry out their activities in one of the three core areas of the organization. One of the areas is labor hire, which includes roughly 60 people, mostly IT specialists, project managers, and business analysts. The other big area is the development of unique software. The third area deals with the development of contact centers, which include network engineers and software developers. According to data from the Company Information Database, the company realized net sales of more than HUF 3.5 billion in the business year ending last year.

4.5.2.3 Sample size, and composition

After defining the organizational levels and industry that served as the research field, the next important step was to compile the sample. Due to the nature of qualitative research, the sample selection is theoretically motivated, which means a small-sample, context-embedded investigation (Miles & Huberman, 1994; Bokor, 2000; Gelei, 2002). At the beginning of my work, also guided by a personal driving force - strengthening the position of women in the IT sector - my goal when compiling my research sample was to enforce similarity along company characteristics and diversity in terms of personal characteristics.

I defined three company characteristics, in terms of which I strove for similarity:

- examined sector: suppliers of IT solutions; (The characteristic of the industry is the turbulent environment, which proves to be a suitable field for examining ambidexterity and organizational renewal as well.)
- company ownership: Hungarian;
- company size: medium size.

For the sampling, on the one hand, I sent an introductory e-mail to 37 companies using data obtained from the OPTEN database. I pre-filtered the data extracted from the

OPTEN database in accordance with my research plans and carefully checked that the enterprise category of the organizations selected for the sample was a medium-sized enterprise. This was ensured in accordance with legal regulations. According to this, medium-sized enterprises are those enterprises that "employ fewer than 250 people and whose annual turnover does not exceed EUR 50 million, or whose annual balance sheet total is HUF equivalent to a maximum of EUR 43 million"⁷⁸. In the introductory e-mail, in addition to a short professional introduction, I explained the topic, purpose and research framework of my doctoral research, and I also requested a personal meeting, in the framework of which I can present my research in more detail. Most of the e-mails on the websites were assigned to one center, but at the same time, the reply messages already came from company managers, office and HR managers, and specialists. 9 companies responded to my request, 6 of which were not open to joint work, and 3 organizations asked for a detailed scenario and description of my topic before accepting the meeting. After sending it, they were open to a personal conversation. The invitations were sent out in the spring of 2019, and the meetings were scheduled for May 2019. However, in the meantime, face-to-face meetings could not occur due to COVID-19, so the introduction and interview took place online. Based on the request of my interviewees, we conducted the interview on the Microsoft Teams communication platform in all cases.

On the other hand, I used the snowball method for sampling, the essence of which is that we reach the next person through a targeted person, who recommends the next one and so on. The word snowball refers to the gradual accumulation, as individuals already reached suggest additional individuals. Primarily suitable for exploration purposes and can be used in difficult-to-access layers (Szokolszky, 2004). This was done using my network of contacts. At the time of sampling (summer of 2020), I worked as a senior product manager at a Hungarian-owned IT development organization. The company belongs to a company group whose main activities include IT development and the delivery of IT solutions. Thanks to the intervention of my director at the time, I was able to send an introductory e-mail to the organizations dealing with IT development within the company group, which included a brief description of the topic of my doctoral research, its purpose, and the research framework. Within the company group, the CEO of one of the organizations was open to a personal meeting and

⁷⁸ XXXIV of 2004 Act § 3 (1)

interview. With his help, I was also able to interview the other top managers of the organization on Teams.

In connection with the above, I defined five additional characteristics along which I sought diversity:

- Gender: female versus male; I only managed to partially achieve my original goal in this regard because I only managed to find women working in the HR field from the top management circle;

- Classification according to age: 34 and under versus 34-40 versus 40-50 versus 50 and over – according to a construction developed along social units, behind which on the one hand that category of diversity, on the other hand, the range of lived experiences, and on the third hand changing career goals may appear as age progresses. My original goal was not achieved in this regard, as I could not find any professionals, middle or senior managers working in the IT field under the age of 30, so I slightly raised the age limit of the young category;

- Clientele: public versus market player (in terms of the market player, we can talk about SMEs, large companies and multinational organizations) - according to my assumption, the significance and meaning of diversity can be influenced by the characteristics of the partner companies;

- Position in the organizational hierarchy: CEO versus senior managers versus middle managers - I assume there is a correlation between the leadership level in the organizational hierarchy and diversity and ambidexterity⁷⁹.

- Number of subordinates: -10 versus 11-20 versus 21-40 versus over 40 – according to my assumption, there may be a connection between diversity, its meaning and management, and the position's responsibility.

- Education: college, university, postgraduate, Ph.D. versus graduate; since all my interviewees studied in higher education institutions, I was mostly curious about who was not employed in their profession.

The pattern was as follows:

⁷⁹ All of the organizations are flat organizations with a maximum of 3 management levels, where the third level does not represent a group, but professional management. During my investigations, I did not examine the matrix organizations operating in connection with project work.

Company name	Clientele	Interview subjects	Age	Position	Management level	No. of subordinates
Company A	State and corporate	Bernát	50-	CEO	Upper	41-
		Kristóf	-34	Project	Upper	21-40
		Julia	40-50	Director of Organizational Development	Upper	-20
		Zoltán	40-50	Purchasing and Economic Director	Upper	-20
		Antal	50-	Business Development Director	Upper	21-40
		Lajos	50-	Director of Product Support	Upper	-20
Company B	Corporation	Norbert	40-50	CEO	Upper	60-
		Anett	-34	HR generalist	Middle	-20
Company C	Large company, large SME, multinational	Ákos	34-40	Business manager	Upper	41-
		Ágota	-34	HR manager	Upper	-20
		Dávid	34-40	Development manager	Middle	-20
Company D	Corporate	Ádám	34-40	HR manager	Upper	-20
		Gábor	50-	CEO	Upper	41-
		Levente	34-40	Project	Middle	-20

Table 11: Sample composition

My own editing

In my research, I performed a case-oriented analysis: I examined diversity (in terms of individual and organizational politics), ambidexterity, organizational renewal, and decision-making, as well as their impact on each other. Based on the interviews with my sample of fourteen people, I was able to identify 127 cases, of which twenty-five cases are related to the individual's profile, forty-two to diversity policy, fifteen to renewal, eleven to ambidexterity, and thirty-four to decision-making.

Cases														
Personal profile	Bernát	5	Opinion on diversity, diversity policy	Bernát	7	Renewal	Bernát	4	Ambidexterity	Bernát	5	Decision - search	Bernát	9
	Kristóf	5		Ágota	7		Kristóf	1		Lajos	1		Lajos	7
	Julia	4		Júlia	4		Anett	1		Norbert	2		Antal	3
	Zoltán	1		Kristóf	2		Zoltán	2		Levente	1		Dávid	1
	Antal	2		Antal	2		Antal	1		Kristóf	1		Ádám	1
	Lajos	2		Lajos	1		Lajos	2		Gábor	1		Ákos	5
	Norbert	3		Norbert	5		Norbert	2		Total	11		Júlia	3
	Ákos	2		Anatt	5		Ákos	1		Total	15		Kristóf	1
	Gábor	1		Ákos	3		Gábor	1					Gábor	2
	Total	25		Dávid	2		Total	15					Ágota	1
		Ádám	2			Zoltán	1							
		Gábor	2			Total		34						
		Total	42											

Table 12: Processed cases by subjects

My own editing

As shown in the table above, an interviewee is associated with a minimum of one and a maximum of nine.

4.5.2.4 The process of data collection

The main data collection tool of my dissertation was the qualitative interview (Kvale, 1996), which can be used to identify the events related to the important events identified by the individual, and also gives the opportunity to formulate the thoughts and feelings of the interviewee. The interviews mainly consisted of four main focuses: on the one hand, the elaboration of what diversity means to the subject. On the other hand, the collection of situations and cases that show the appearance within the organization - negatively or positively. Thirdly, in the case of senior managers, what is the effect of diversity on the search for information? Fourthly, the exploration of the impact of the above on the organization's ambidexterity and renewal through the cognitive diversity of its members. In terms of content, my chosen interview's second focus strongly approached the ethnographic interview. However, at the same time, the entire interview was still closer to the thematic interview (Szokolszky, 2004). The characteristic of these interviews is that they collect data on personal experiences and views related to a specific topic. The interviews revolved around two specific, limited topics: 1) the meaning of diversity and its individual and organizational interpretation and individual experiences related to it; 2) experiences and views experienced in connection with organizational renewal and ambidexterity and their impact on the organization. The interviews I conducted were based on a previously compiled interview plan. At the same time, the individual interviews showed significant differences depending on the role and work experience of the subjects in the organizational hierarchy. I conducted interviews with the subjects of my research sample, which I recorded on a dictaphone. The transcription of audio materials I prepared was based on Szokolszky's (2004) instructions, which, in addition to the verbatim recording, included, for example, the recording of pauses, emphasis, and the marking of prolonged sounds. After that, I read the transcript while listening to the interview recordings again, checked the reliability of the transcript, and then analyzed it: I searched for similar samples and coded them, for which I used the content analysis software Atlas.ti.

Due to the semi-structured nature, not every question came up in every interview. For this reason, one code has more interviews, and the other has fewer interviews. At the same time, the value of the codes belonging to fewer interviews will not be lower because, in many cases, they shed light on significant factors and contexts. I did all this with the help of the content analysis software, where the coding was done in relation to the current sections of the typed materials. My analytical work was greatly supported by the fact that the passages classified into the same codes were placed in a group, a "subfolder," where they could be read back later.

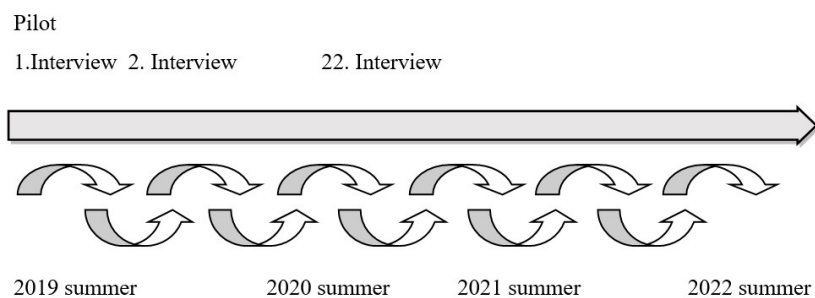
I built my analysis around four main issues: the exploration of the demographic and psychological diversity of the interviewees, thus the widest possible identification of upper and lower-level diversity elements. Closely related to this, I tried to assess the organizational management of diversity, meaning creation and understanding as a process exploration within each company. Thirdly, the effect of managerial cognition on organizational renewal and also on ambidexterity.

Qualitative research is characterized by data collection and the analysis process taking place in a parallel, iterative manner (Huberman & Miles, 1994; Maxwell, 1996). During the process of data analysis, my content focus was constantly formed and transformed. I included several concepts and diverse perspectives in the study: 1) psychological safety, inclusion, and search; 2) in addition to information/decision-making perspectives, the inclusion of relational demography approaches in the analysis also seemed necessary. At the beginning of my research, I set myself the goal of conducting 8-10 interviews. In the end, I conducted 14 interviews (of which, during an interview with a subject, my recorder did not work properly, the recorded audio became unintelligible, so no transcript was made, and the subject was not open to re-recording the interview; I interviewed one subject twice; And 2 subjects did not have senior management authority. Although my initial plans included involving people at the lower levels of the organizational hierarchy in the research, I was not able to do this due to the lack of management support and the time available to me). During my work, I tried to take into account the points formulated by Neely and his co-authors (2020) in their critique of top management theory: 1) exploring a more direct and deeper examination of cognitive processes, with which I can reveal the relationship between managerial cognition and the company's actions; 2) mitigating the distorting effects based on self-evaluation and uncovering deeper personality traits, which I tried to achieve - where I

had the opportunity - by exploring the insights and feelings of the TMT members about the CEO.

Glaser and Strauss (1967) pointed out that data collection and data analysis is a circular process that lasts until theoretical saturation is reached, i.e., until the point after which additional data and cases no longer contribute significantly to the understanding of the given phenomenon. They enrich the theoretical concepts and framework. In my opinion, I have reached theoretical saturation in terms of the examination of domestic IT organizations related to diversity. At the same time, on the one hand, I paid no attention at all to the examination of several diversity categories (e.g., race, disability, sexual orientation, religion and belief, citizenship, and marital status). There were several reasons behind this (I will write about them in more detail later): 1) my interviewees mostly highlighted the gender and age diversity categories during the interviews. Insights and social responsibility related to the disabled were mentioned in only one case. Neither the Roma nor those with a different sexual orientation were singled out as a target group or mentioned category by any of the subjects. That is why, as a continuation of my research, the research can be extended to another sample - extended diversity categories, not a managerial sample; 2) the analysis of all highlighted categories significantly exceeds the scope of my dissertation, but at the same time it can provide additional interesting information about the perception and nature of the meaning of diversity in Hungary.

Interviews and Analysis



Researching the literature

Figure 13: The process of data collection

My own editing

At the beginning of my research, I was aware that my interviewees could provide me with a limited time frame due to their position. Therefore, I planned to conduct pilot research with one interviewee, ensuring that there was no need for additional rounds or the use of managers. The interview with the requested subject was completed, and after analyzing it, I clarified and supplemented some of my questions while modifying others. After that, I returned to my interviewee for the second round of interviews.

4.5.2.5 Qualitative interview

The semi-structured interview is based on a pre-developed interview plan. In this genre, the interviewer allows space for the interviewee's thoughts, and answers according to his own discretion, knowledge, and insights related to a given topic to be explicitly explored. At the same time, in addition to the strong control of the interviewer, mixing open and more limited questions makes it possible to map the implicit part of knowledge (emotions, motivations, interpretations). In the case of semi-structured interviews, if new topics are formulated during the interview process that seems important to the researcher, the researcher can return to the interviewee with the aim of collecting the missing information or data (Szokolszky, 2004).

During the data collection process, I used a semi-structured interview. The duration of each conversation ranged from 45 to 60 minutes. Before starting the interviews, I briefly introduced myself and verbally explained my research goals, the course, the process, and the processing of the research. After that, the interview began, in the first part of which I asked each of my research subjects for demographic data and the names of the main stages of their career path. I kept the names of my interviewees and their organizations confidential and did not make them identifiable to others. In later chapters, I will refer to them with the pseudonyms indicated in Table 15 with the aim of establishing reliability with subsequent retrievability.

Initially, the interviews focused on the subject's insights related to diversity, renewal, and ambidexterity: how it appears in the organization, what measures were taken for its successful implementation, what memorable event is related to it, and what effects it had. I started my research with a pilot interview, during which it became clear

that the set of questions compiled earlier was insufficient to achieve my goals, so I had to supplement them with additional questions. I found that a significant part of the subjects approached the issue of diversity very cautiously; in fact, they did not explicitly talk about their relationship and experiences related to diversity. Therefore, with the aim of exploring this, I included the following question in my questions: "What does diversity mean to you?". Thanks to my pilot interview, diversity is the main topic of my dissertation, which we returned to several times during the interviews.

My research is based on a – expanded during the research as described in the steps above – I continued with a question outline, which can be found in the Appendix of the dissertation. I saw my questions as a kind of compass, which my current interviewee could supplement based on what he had to say and his insights. The questions used during interviews can be divided into several groups:

- contacting, clarifying frameworks,
- regarding demographic data,
- regarding the personal and organizational definition of the meaning of diversity,
- on organizational renewal, and the organizational appearance of ambidexterity, with particular regard to search.
- checking and clarifying questions,
- closing questions.

At the end of the interviews, almost all of the interviewees indicated their interest in the finished thesis, which I will make available to them after submitting the thesis. Due to time constraints, it was no longer possible to comment on the cases, so I had to refrain from including this in the dissertation. In the interview texts based on the instructions of Szokolszky (2004) a verbatim transcript was made in all cases. I asked for help in preparing the transcripts, and then compared each transcript with the audio materials before starting the analysis.

4.5.3 Data analysis

Huberman and Miles (1994) separated the processes of data management and data analysis, but at the same time drew attention to the fact that the two processes are

closely and iteratively connected to each other, which is illustrated with the help of the figure below.

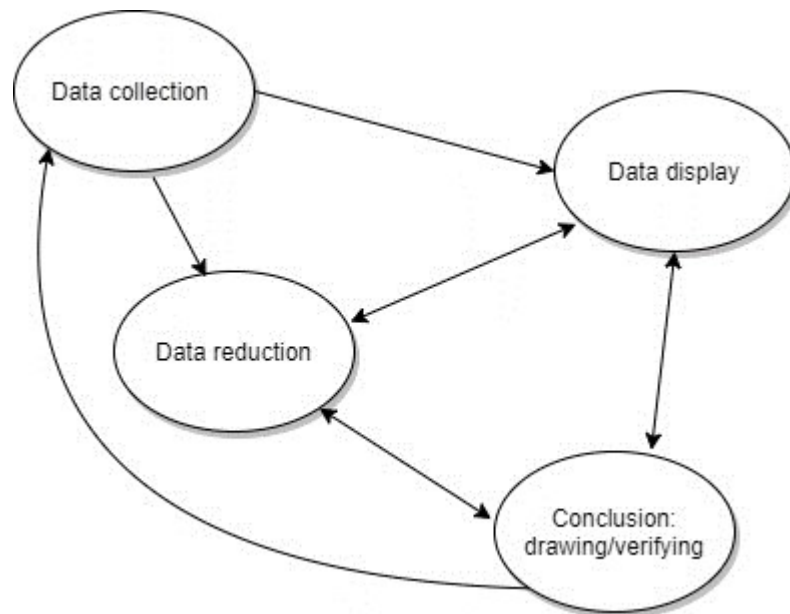


Figure 14: Elements of data analysis: interactive model

Source: Huberman & Miles, 1994, p. 429

The process of data analysis includes three main tasks: data reduction, data display, and drawing and verifying conclusions. The implementation of these tasks is present during the research before, during, and after the data collection work (Huberman & Miles, 1994).

Data reduction: "Summarizing and coding the data in some form, identifying, highlighting and grouping the most important content threads, shaping them into a story are all possible forms of content compression of the data" (Huberman & Miles, 1994). In other words, it means the reduction of the available set of information, on the one hand, by choosing the conceptual framework and questions of the research and on the other hand, the methodology. In my research, I used the meaning categorization perspective (Kvale, 1996), during this process, I grouped the interview texts, organized them into categories, and then analyzed relationships and correlations. In the first round, for each subject, I examined the relationships between the individual categories and codes separately, and then I grouped the connected categories into different sets. Based on the analysis of the interview texts and the literature, my categories and groups were created, and then I also analyzed the relationships between them. This is how the

different category groups of individual diversity, diversity policy, renewal, ambidexterity, and decision-making were created.

Data display: its essence is the presentation of data in an organized, compressed form, which helps in drawing a conclusion (Szokolszky, 2004). With the help of the Atlas.ti program, I structured the codes, organized them into groups, and organized them into a network by graphically representing the strongly connected codes, which I mainly used to explore the connections between diversity, renewal, and ambidexterity. During this entire process, the program made my work significantly easier because, with the help of the query option, I could call up the relevant text passages for each category or group.

In order to understand the processes related to the individual topics, i.e., diversity (individual and diversity policy), ambidexterity, renewal, and decision-making, I prepared a case description for each case. These cases contained the individual codes, the related quotes, and the case-level analysis, which I placed in the Appendix. This case processing helped me a lot in being able to compare and group the cases and see the connections between them better.

Deduction and verification of conclusions refer to formulating and interpreting the displayed, compressed data (Szokolszky, 2004). At the beginning of my research work, I classified the meanings related to diversity, organizational renewal, ambidexterity, and decision-making into different in vivo codes, which I identified based on the texts available to me: first, I proceeded case by case, then when comparing the codes I already performed an analysis between the cases. When analyzing the relationship between the codes, I already considered the perspectives, levels, categories, and dimensions of diversity according to the literature. I linked the developed codes to them if I thought it was relevant. I extended my studies to the analysis of similarities and differences between the codes and, accordingly, combined several codes, breaking them down into individual subjects and other aspects (e.g., Can I intervene; My operating model; My self-image; I represent a definite opinion; How can I help the next me; In the workplace I don't make friends; I understand everything better than the average) based on his examination.

In the initial phase of my work, I first filtered out those pieces of information, cases, and personal information that: 1) the interviewees shared with me confidentially and specifically asked not to be included in the analysis; 2) the interviewee did not share

it, but by a colleague. I treated the latter in such a way that the relevant interviewee did not want to share them with me, and out of respect for this, I left them out of the analysis. Thus, on the one hand, in respect of the subjects' requests and their private sphere, I do not display this information in my thesis, and on the other hand, in those cases where although they did not ask to be excluded from the analysis, I felt that the given story was very sensitive and personal, the story I have rewritten the names of the actors, completely excluding the possibility of identification. After that, I created codes for each subject, and during the comparative work, I examined the differences, overlaps, and similarities between the codes. As a result, I could combine several codes, divide them into subcategories, or break them apart (e.g., my functioning, my ars poetica). I grouped the individual interviews according to the subject's gender, age, position (CEO, TMT, middle manager), education, organization, and number of subordinates.

I created code groups linked to several codes and case study parts. During my work, the content analysis software Atlas.ti helped me: I represented the relationship between the codes using the code groups (I built the hierarchy using numbers). In addition, I created separate memes in connection with the codes and code groups, the number of which continuously increased during the analysis. During the analysis process, I gained a more profound and deeper understanding of the relationship between the individual codes, which I continuously incorporated into the analysis of the content of the codes and their formation. With the help of this, I managed to identify patterns and correlations, which I summarized in a summary table with the help of Atlas.ti. The table also provides an opportunity to identify the frequency of cases: which and how many cases belong to a given group (e.g., Demographic diversity vs. Cognitive diversity, etc.).

During the analysis process, I used comparison and the search for differences many times as a conclusion-drawing strategy. I paid particular attention to examining those cases that, for some reason, could not be included in any group during the first round of analyses or represented a completely separate entity during the grouping. My first such memorable case was the case of Bernát: I did not code trust and security during the first round of coding, while in all the other cases, I found trust and security codes. Therefore, I re-examined this case and found that the level of innovation activity is low for those individuals who lack trust and security. Then I examined at what level this appears in the organization: does it affect a team/organizational unit or the entire

organization? After my further investigation, I found that if trust and security are lacking at the CEO level, the absence or low level of innovation activity is typical at the organizational level. If trust and security appear at the TMT or middle management level, then innovation activity appears at the team or organizational unit level. My recent analyses led me to conclude that trust and security can be linked to inclusion, which is organically linked to diversity. Accordingly, the impact mechanism can be seen in action between trust and safety, inclusion, innovation activity, and diversity.

4.5.4 Validity: quality criteria of the research

When conducting scientific research, it is necessary to ensure the quality of the research. Therefore, during my research, I pay special attention to the validity, reliability, and generalizability of the research. Still, at the same time, the meaning and method of reaching these criteria in qualitative research trends are different from those of traditional research. In the case of the traditional approach, the point is to check the endpoint. In qualitative research, the emphasis is on the process of ensuring and checking validity and reliability is integrated into every research stage. (Kvale, 1996), (Bokor et al., 2000). However, the method of creating a predetermined sample and established measurement tools and analysis methods can be less formalized using a quantitative approach in research.

In my dissertation, I paid special attention to the detailed presentation of my research methodology: with the help of what steps and what tactical and methodological tools I used to reach a conclusion. In the points below, I summarize the steps I followed during my research. These exercises improved the validity, reliability, and generalizability of my research, which I built on the works of Miles and Haberman (1994), Maxwell (1996), Kvale (1996), Bokor (2000), and Gelei (2002).

Self-reflective attention and awareness

- Before the data analysis, I recorded my understandings and presuppositions. With this, I could make my previous patterns explicit, with which I could handle the data in a more advanced way: to understand my interviewees' feelings, insights, and world. Later on, I realized that at the beginning of my research, I inappropriately approached the issue, because I was too open-minded: my conceptual framework was

not sufficiently solid (the concept of diversity I defined was not defined). Therefore, I decided to start with trust and security, which I opened to inclusion, and then also to the cleaned-up concept of diversity, as I thought was necessary to analyze what my subjects said.

- During the interviews, I paid close and very conscious attention to how and in what way I influenced the interviewees (each time I flexibly adapted to the interviewee's question - apart from the occasion, the interview took place on Teams, and on four occasions without the use of a camera; furthermore, what I said, did or how I got dressed).

- I also recorded my understandings and realizations gained during the process. However, I treated them as assumptions and not as facts, and I continued with the data analysis along this line.

- Tracking surprises. My research provided me with many surprises, thanks to the exploratory methodology. For example, it was a surprise to me that after the data collection and initial analysis, I could not move forward with my concept of diversity; my analytical frameworks led to an infinite number of branches. Therefore, I started the analysis with confidence and security. In the later stages of the analyses, it became clear to me that the category, i.e., the concept, does not properly follow the organizational processes, so I looked for a new variable to fine-tune the process-based approach: my existing data and codes led to the inclusion. After that, another surprise followed: innovation activity appeared as a new category, which opened up a completely new path and, thus, a new approach for me. Overall, these were all changes affecting my conceptual framework.

Transparency

- I include the structured data and the processing of the cases in the appendix. On the one hand, the cases include raw data and quotes, on the other hand, they ensure the protection of my interviewees. In this way, the raw data can be retrieved in the original text context when reading any section of the research conclusions.

- During the entire research process, my goal was to document the research as well as possible and make it more transparent: how my research focus changed, the concept of diversity, and its understanding.

- In case of contradictions and contradictory cases, I highlighted the contradictions and then detailed how I handled them.

Triangulation

- When conducting the interviews, I used a dictaphone, for which I asked the subjects' prior consent. I did not prepare the interview transcripts, but I listened to all of them and supplemented the relevant passages while listening to the text.

- I kept a research diary, in which I processed in chronological order the direct experiences and knowledge gained during the interviews and the interview transcripts, and then the further experiences and insights gained during the various stages of analysis. In addition to the interviews, I also relied on biographical data.

- I carried out continuous self-checking in addition to searching for rival interpretations and explanations. I tried to find cases that contradicted the theories or my own assumptions. Such was the case of Bernát presented above, the unfolding of the unfolding system of interpretation and process between trust and security, as well as innovation activity, inclusion, and diversity. For a long time, I did not attribute a big role to inclusion, and even looking back at the initial stage of writing the dissertation, I did not even consider it an integral part of diversity, even though the literature repeatedly points out and proves its importance. Then I examined the cases from the point of view of inclusion: that's when I realized that inclusion and diversity are closely related.

- When I examined the reception in the cases, it became clear to me that Kristóf's case is an exception because, with him, reception, security, and trust have much deeper roots. That's why I re-examined his case and realized that the leadership role represents for him the possibility of accepting others, and providing security and trust to others. With his help, and new ways of analysis opened up for me: in examining the diversity of the TMT - where I could - I also included the analysis of the family background. Thanks to this, with my understanding of the individual cases, the investigated phenomena, and their context was continuously enriched.

- During my research, I asked my colleagues and other specialists for feedback regarding my conclusions, analysis, and identification of texts according to schemes. I paid special attention to the conflicting opinions of the experts.

Generalizability

- When compiling my research sample, I tried to choose as many different subjects as possible, according to the selected selection criteria (based on age, gender, type of organization, position, etc., which criteria can be read in detail in chapter 4.5.2.3). I tried to find cases so that I could compile a base of as rich a diversity as possible. For example, the previous work experiences of my interviewees turned out to be extremely diverse. Several of them went through major career changes and followed special and exceptional life paths so that many aspects could influence their decision-making mechanisms, their sources of information related to renewal and strategy (who considers what important), and their attitudes related to diversity (inclusion) (for example, Kristóf). I also managed to talk to leaders who were very young and were appointed leaders. In a typical way - but in my view, not in all cases related to age - they handled the issue of diversity and inclusion differently than those who have been active as leaders for 20-30 years (like Bernát, for example). One of my goals was to include individuals with experience in different segments (state sector, large company, international environment, etc.) in the sample and have the proportion of subordinates follow a more colorful distribution as possible.

- In Maxwell's work, he distinguishes between internal and external generalizability. In the case of internal generalizability, the conclusions are limited to the area or group under investigation. At the same time, the external one, on the other hand, is valid beyond the area of investigation (Maxwell, 1996). In his view, there are three possible levels of generalizability: 1) from the sample to a population, 2) from a given practical context to the level of theory, 3) from one test case to another. In qualitative research, the latter two levels can primarily be realized. Theoretical generalizability means the real question of external validity, while the level of test cases is given greater emphasis within the framework of the research. According to Bokor, generalizability means that we set up a theoretical framework that can be applied in other contexts, which can be interpreted if appropriate boundary conditions are met (Bokor, 2000).

- In my research, I aim for internal generalizability and theoretical generalizability through further development of the conceptual system. I can strengthen the generalizability of my research with the following aspects (Bokor, 2000):

- The careful identification and description of the characteristics of the sample, which I presented in a separate chapter;
- Adequate dispersion and width of the sample. During the sampling, I strove for diversity, to select as many different subjects as possible (based on age, gender, number of years spent at work and at a given organization, professional experience, family background, clientele, etc.).
- Sufficient, dense description in order to ensure that the reader can identify with his own situation. I intend to achieve this by developing quotes and cases in detail. I include the cases in the dissertation's appendix to ensure the conclusions' verifiability.
- It was my constant endeavor to constantly compare with previous theories and existing literature, to examine the fit and connection constantly. To ensure this, I highlight and explain the comparisons with the existing literature and new and different findings in a separate chapter.
- I also aimed to provide a general description of the processes and their results, which the summary chapters serve to achieve.
- Making the generalizable theory explicit, which is what the summary chapters serve.

5 Research results

During my work, on the one hand, relying on the model of Rijamampianina and Carmichael (2005), I started from the assumption that an individual's profile is made up of visible and invisible elements and that these, interwoven into a unit, give the unique synthesis of the human profile. This forms the basis of my first analysis unit, which we have to divide into two groups based on the subject of the investigation: one unit contains the cases and demographic characteristics linked to the individuals' profiles. With their help, we can map the individual shape of the interviewees. The other part contains the cases that include the opinion of the interviewees on diversity.

In agreement with Hambrick and Mason's (1984) theory of TMT, TMT determines the path and development trajectory of the organization through its own preferences, behavior, patterns, and capabilities. Accordingly, I believe TMT mainly

impacts the third and fourth groups I have chosen, organizational renewal and ambidexterity.

Accordingly, in the first group, we can classify those cases describing and presenting relational demographic characteristics and cognitive processes, which the subjects characterized as follows: **(Case of Bernát1 – Individual profile)** *"I am a gentleman from Buda, I come from a noble family, and I have always lived in Buda."* **(Case of Kristófi1 - Individual profile):** *"I started studying electrical engineering, and I stopped it because we got into such a financial situation."* **(Case of Júlia1 - Individual profile)** *"I am a woman because I was born a woman because I am completely like that and yes, I always bring all my feminine features, thoughts, everything into [view]."* **(Case of Bernát2 – Individual profile)** *"I learned from my father that privacy is privacy..."* **(Case of Lajos1 – Individual profile)** *"I am sure of the top three specialists in the country in this regard. So I draw on those experiences a lot."* **(Ákos1 case – Individual profile)** *"I grew up in Serbia, in Vojvodina. When I was born, it was still Yugoslavia, then it became Serbia, and I finished high school there..."*

The second group includes the individual's opinion on diversity and diversity policy: **(Case of Bernát1 - Diversity policy)** *"I graduated in 1997[BME]...we started with five girls, of which two graduated. But those two were always in the top five, and we recognized them, and we never looked at their girlhood."* **(Case of Anett5 - Diversity policy)** *"We encourage everyone to do these[ideas] share it"* **(Case of Norbert1 - Diversity policy)** *"...there was a lady [computer scientist colleague], we always paid attention to her."*

In the third group, we can classify those cases that are related to organizational renewal⁸⁰ are related to:**(Case of Norbert1 - Renewal):** *"Zalán decided to step back, and this is the root cause that created the opportunity for renewal, and we started running the company with a slightly different mindset."* **(Case of Antal1 - Renewal):** *"...the minute he got a big load[the system]... a lot of his childhood mistakes came out. Then a decision was made that yes, let's see which system has which advantage and what we will switch to. Because this stuff we hand-crafted didn't stand up to such a load test, didn't it? And then it's nice gradually, but we have to move on".*

⁸⁰ As I mentioned before, my main focus in terms of renewal is decision-making. For this reason, I took these cases separately. Still, at the same time, I came across a lot of valuable information about the renewal, which I thought was important to include in my dissertation.

The fourth group includes cases related to ambidexterity, which the subjects described as follows: **(Bernát1's case - Ambidexterity)**: „I make a lot of strange decisions in HR. Because I am not interested in the fact that the wage demand of the given person does not fit into our wage structure but in how many orders we have and have to fulfill them. And suppose we can generate even more profit with the person's appearance. In that case, the question is not whether he fits into the company's wage structure, but whether we can generate even more profit." **(Case of Norbert1 - Ambidexterity)**: „On the one hand, abroad is an important channel for us; we primarily want to grow there, and on the other hand, we are also trying to increase the added value, which means that we have started new services that we have not dealt with before..."

Basically, I followed the analysis process in the presentation of my results, in which I also addressed the contextual aspects separately. While looking for answers to the research questions, I found that a significant part of them are closely connected and challenging to answer individually. Therefore, thanks to the latest analyses, I condensed the four topics of my dissertation (profile of the individual, diversity policy, ambidexterity, renewal, which includes decision-making) into two large units: 1) profile of the individual; 2) diversity policy. In the following paragraph, I present which sub-chapter is related to a given research question because I treat my closely related research questions in one category.

Reason for my selection strategy:

1) Profile of an individual

I chose the individual's profile as one of the analysis units because many branches of the research questions are related to the individual's profile (KK1-KK2), so I have to create a basis for answering the questions by a deeper analysis of this topic. After that, I will examine the impact of the individual profile of the subjects who participated in the research on organizational renewal and ambidexterity (Figure 14).

KK 1: How is the diversity of managers related to strategic renewal and ambidexterity?

Partial questions of KK1:

- How does management (TMT) diversity (demographic and cognitive) affect organizational renewal and ambidexterity?
- How does the diversity of managers at different hierarchical levels affect organizational renewal?
- What is the relationship between the direction of renewal of each organization (bottom-up/top-down) and the profile of the examined individuals?

KK2: How is the diversity of top managers related to the search patterns that form the basis of decision-making processes?

How does the CEO's individual profile affect search?

What effect does the diversity of TMT members have on the search?

What is the impact of search on organizational renewal?

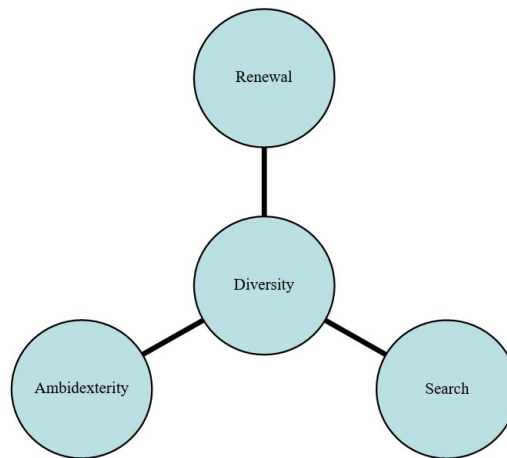


Figure 15: Network of research questions (KK1-KK2)

My own editing

2) Diversity policy

My decision in favor of this analysis block can be traced back to reasons similar to the previous point: in order to answer the sub-questions of KK3, I first need to examine the diversity policy of the interviewees and their organizations, and then its impact on ambidexterity, renewal and the direction of renewal (Figure 15).

KK3: How does diversity as an organizational value affect strategic renewal and ambidexterity?

Partial questions of KK3:

- What is the meaning and significance of diversity for the examined individuals?
- What are the means by which diversity is implemented in the examined organization?
- What is the impact of the TMT members' diversity policy on the ambidexterity and renewal of organizations?
- What is the relationship between the renewal direction of each organization (bottom-up/top-down) and the individual diversity policy of the examined individuals/the diversity policy of the organization?

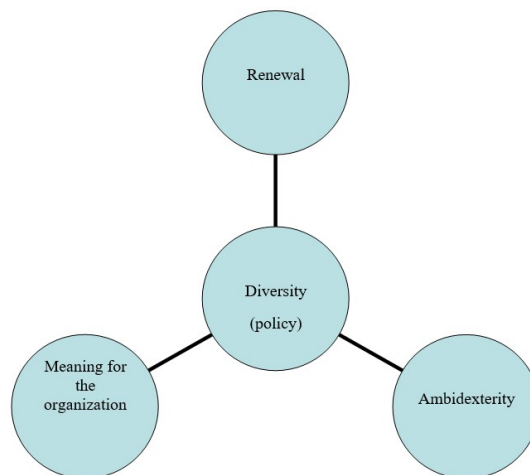


Figure 16: Network of research questions (KK3)

My own editing

5.1 Organizations that participated in the research

Before presenting my research results in detail, I consider it important to present the market background of each organization, as well as the views expressed by my interviewees regarding the domestic IT industry and their own market position. For this, I use the information collected during the interviews and related to the clientele on the websites of the organizations collected in the table below.

Company name	Clientele
Company A	State institutions (national level)
Company B	Large company, large SME
Company C	Large corporate, multinational organizations
Company D	Large company, large SME

Table 13: Clientele of the organizations that participated in the research

My own editing

Company A differs in several respects from the other organizations included in my dissertation. These differences also have an impact on its organizational renewal and ambidexterity:

- 1) Company A is in a monopoly position, which results in it being able to dictate market trends in the absence of competitors:

"... then I said we were going for free. ... The fact that we would have received twenty million forints annually from two thousand forints and the several million would never have been repaid is one thing, but the question here is whether we should give it away for free. And we decided to go free because it was another position of market acquisition." **(Case of Bernát3 – Decision search)**

- 2) Its clients come from the public sector, which requires a wider knowledge of legislation and the role of a legislator and legislative adviser. Lajos also confirmed this view of mine:

"The interpretation of individual legislation and related practice may change. Compliance with this is the task and function of our customers. So how a legislative change in the System should be implemented is told by the clients, as they are the practical executors. Our task is to try to refine the client's request and make it more viable."

- 3) Its main activity is the creation of products related to various topics of education. Therefore, during development work, they should not only focus on meeting current needs, but also on *"by the time they specify,*

describe, and do it, neither the legal environment nor the customer's needs should change"(**Case of Antal1 - Renewal**)

The systems developed by Company A and Company C are characterized by robustness and complexity, which requires the ambidexterity of the TMT. Because during the strategic planning of current developments, they must create the plans so that they can be further developed with as few modifications as possible during future developments. *"For example, I told you yesterday at the management meeting that it is imperative to take into account that we may have now come up with a solution that is quick, simple, and easy to implement, but it may, in the long term, hinder further development and therefore in a few years we will suffer. So it is vital that we make long-term decisions and not short-term decisions and examine the long-term effects of our decisions."*(**The case of Lajos4 – Decision search**)

The customer base of Company B, Company C, and Company D consists of market players. In the case of all three companies, it can be said that their clientele consists of large companies and multinational organizations. In my view, the preference of the three companies is determined not only by money but rather by the well-oiled cooperation and the maturity and IT education of the partner organization. My view on this is Ákos(**Ákos2 – Decision search**) case is supported by:

"We want to work for educated large SMEs or multinational companies because these companies are more digitally mature. They understand why user research is important. They understand why prototyping is important. They don't need to be told this eighty-six times, and in the end, they take it out of the price, but they understand the importance of this because they also think in terms of strategy and look to the future, and want to minimize costs. It's no use telling an SME that you will spend two million forints with the prototype, but with that, we exclude that you will spend twenty unnecessarily during the development. He can't think about it because he sees him for the next month. (...) And he doesn't want to believe it and prefers to pull it out and then suck it up during development. But that's his problem. I can't do anything. I'm trying to convince him of that. With a multi, this can happen much less often. That's why we

prefer to work with them. That's why we love Telenor and RTL because they don't even ask if it's necessary but say yes, of course, we'll do it."

In addition to the above - as we will see later - the clientele and the scope of the organization's activities also significantly impact the attitudes of businesses related to diversity categories. At the same time, all senior executives who took part in interviews expressed similar insights regarding the domestic characteristics of the IT industry. They unanimously believed that having professional experience is important for making more far-reaching decisions and for satisfying and understanding customer needs and requests because *"there are no miracles in IT. Anyone who thinks so is wrong"*(Bernát). Correspondingly, in the case of businesses with market clients, it can be clearly said that in terms of their own fields of activity, they have serious consulting knowledge, experience, and market knowledge, rather than legislative proposers.

The turbulent, rapidly changing environment forces managers to make decisions in which they must make momentary financial sacrifices to gain long-term profits and win the market.

(The case of Ákos4 – Decision search):

"Strategically, we wanted to get in, so we lowered the prices a lot to get in somehow. In this case, my business took on the project at its own cost, and we did not make a single penny of profit, and we will even make a loss. But we see strategically that this will backfire in the long term."

(Bernát3 case – Decision search):

"... then I said we were going for free. ... And we decided to go free because it was another position of market acquisition."

There was also a characteristic feature of each driver:

- market monitoring;
- at the organizational level, careful attention to the needs of customers, which is integrated into their organizational and development strategies;
- Efforts to carry out exploitative and exploratory activities in parallel.

The above is supported by the case of Norbert, Lajos, and Ákos. Based on the market analysis, Norbert's organization decided to expand its activities into the field of robotics and production automation (**Case of Norbert1 - Ambidexterity**). Lajos (**Case of Lajos1, Lajos2 - Renewal**) and Ákos (**Akos3 case - Decision - search**) considered it very important to understand the customer's actual needs, to "lead by the hand" of the customers.

5.2 Profile of an individual

As I indicated earlier, my studies related to diversity is based on the models of Rijamampianina and Carmichael (2005) and Hambrick and Mason (1984). At the same time, it is important to note here that in contrast to my approach to the concept of diversity - that all diversity categories are part of human nature - I could only present a limited amount of diversity categories within the framework of the research.

In the first round, I analyzed the answers given by the interviewees to the questions related to biographical and demographic diversity, which related to the family circumstances of the interviewees, where they grew up, and what schools they graduated from. Due to the topic's sensitivity, I left it up to my interviewees to decide what and in what depth they wanted to share with me. During the interviews, it also happened that the interviewees repeatedly reached back to their family roots, their youth, and their previous professional experiences. The reason for this was that according to their insights, *"past events, based on professional experience and experiences, maximally influence present decisions and directions (Case of Bernát5 – Decision search).*" In the case of Bernát, for example, family and youth roots were a recurring motif: *"I learned that from my father" (Bernát2 – Individual profile), "I learned that in the racing stable[Fazekas High School] (The case of Bernát4 and Bernát5 - Profile of an individual)".*

To Kristóf (**Case of Kristóf1, Kristóf1 - Individual profile**), he had to stop his higher education due to modest financial circumstances. After leaving college, he had to work immediately, and he received no help from his colleagues then. This event determined his leadership views so that after his first appointment, *"I started to think that I am already in another chair, and I have to think about what I can do to help the next Kristóf (Case of Kristóf3 - Individual profile)".*

An interesting surprise for me was the realization that arose in connection with the interview between Kristóf and Ákos. Both interviewees are young (under 34) men in senior positions. Apart from that, I didn't find any other similarities between them at first sight. At the same time, compared to the other men of a similar age in the sample, their idea of work, their attitude to work, and their desire to do it were much more consistent. During the analysis, I found that both of them had roots across the border (Kristóf's uncle lives in Transylvania, and their relationship is very active; Ákos grew up in Vojvodina and completed his university studies in Budapest). In the words of Ákos (**case of Ákos1**), *[about Hungarians across the border] it can generally be said that the people of Vojvodina, Transylvania, and Highlands go with this kind of mindset and that they have an X[factor]*" (**Akos1 case - Individual profile**).

Moving on to the interpretive reading, the self-focused interpretations draw attention to the fact that, according to the two men in the sample, they both have serious diligence, a desire to do something and a solution-oriented view. Elevating the issue to a general level, based on their experience, they see that this type of attitude can be attributed to Hungarians across the border separated from their home (Transylvania, Highlands, Vojvodina). That is a hard, persistent, and diligent work ethic. It is a striking display of this "with this mindset" in "they have an X in them[factor]," which perfectly expresses how much extra the interviewees put into their work.

An important factor from the point of view of the external, structural analysis is that when Kristóf and Ákos were children (mid-1980s), we were still living in the age of socialism, and the minority situation across the border entailed automatic disadvantages. One of the ways out of this situation, both financially and in terms of well-being, was to create foundations through hard work in the mother country (Ablonczy & Bárdi, 2010). The phenomenon also applies to Ákos and Kristóf.

Regarding the basic assumptions, the demographic theory prevails here in several ways. For example, on the one hand, both interviewees internalized the roots beyond the border as a relevant aspect of the self-concept. Accordingly, it is specific within work units' "mindset" their characteristics influence their behavior and attitudes, which they similarly expect from their team members. This suggests that, according to their perception, team members with similar attitudes will produce metrics related to better performance. This is what they refer to as "let's not see the problems, but the solution"

(**The case of Ákos2 - Individual profile**), and the *"We will fix the problem as soon as possible"* (**Case of Kristóf5 - Individual profile**) statements.

Based on my research, I concluded that the family roots, the patterns seen and learned in the family, and the events of my youth significantly influenced the attitude of individual leaders toward their teammates.

Case of Antal1:

"I learned this at home. That's why I'm not a fan of this kind of driving with friends; we go to parties, concerts, and pubs together"(**Antal1 case - Individual profile**).

The case of Bernát2:

"I learned from my father that privacy is privacy... as we do not live our private lives with the company's employees. So I don't go out for beer or wine with people. I have my own group of friends with whom I discuss the big things in life; you don't have to discuss this with the people inside" (**Bernát2 – Individual profile**).

Júlia also confirmed the above:

"If we hire another senior colleague within the organization. Let's say, Antal, Lajos, or Bernát will never, ever ask their colleague what they saw last night at the Vígszínház. Because they are not these types, never. In fact, if they accidentally brought up that I saw this and that last night at the Vígszínház and this and that is my opinion about it, let's say they somehow got involved during a project discussion, they would still say, fine, okay, let's get to the point."

On the other hand, in the case of Company B and Company D, the organizational members participate in common after-work programs and often party together (**Case of Levente1 – Ambidexterity and Anett1 – Ambidexterity**). During the examination of the differences between the phenomena, I found that Company B and Company D are characterized by an *"open door policy,"* high-level involvement of organizational members in business processes, and organizational culture that provides opportunities for teams to self-organize (**Case of Norbert2 - Ambidexterity; Case of Gábor1 - Ambidexterity**). In my view, the phenomenon can be explained by the proper implementation of the agile methodology, the rise of the information/decision-making perspective, and the organizational culture that wants to follow the needs of young

people, which in my opinion, is closely related to the organization's activities (I will explain this later in chapter 5.2), so its diversity categories-related with his relationship.

In the case of Company A, I also managed to reveal findings consistent with the theory of relational demography and the theories of the information/decision-making perspective. The difference also gave rise to disagreements or contradictions with regard to my research (Risberg et al., 2019, Yadav & Lenka, 2020). However, in the examined case, we cannot talk about the negative or positive effects on the group's performance, since the actors in the case are not in a specific organization. Still, there are senior managers within the company group.

My investigations showed that diversity led to conflict in cases where, on the one hand, the members of the given group held equal power and functional roles, and on the other hand, the heterogeneity of the CEOs of the company group did not affect the metrics in this regard, and it has no significance. how much group members are attracted to other members within the group (Qin et al., 2014).

In this case, the reference base is a comparison process between the company group members, which depends on the comparison with others and the perception of differences (Harrison & Klein, 2007). Based on the owner's decision, the managers of the company group received a Skoda Superb as their company car. The owner did not change this preference despite the CEO's request. Consequently, everyone in the company group's CEO group drives a Skoda. Except for Bernát, who used a vehicle like the company's owner. Because in his case, during the self-categorization process, he asserted his individual preference and bought himself a Lexus and thus categorizing himself in a group not with the other CEOs but with the owner (Oakes et al., 1991).

"I've had enough with Skoda when I worked as a manager in the state administration; I will never go with Skoda again. That's why I went to the store and bought myself a Lexus because that's what I wanted... Within the company group, only the owner has a Lexus, and I, everyone else, has a Skoda. Therefore, it is a constant problem in the company group; why do I have a Lexus? So there are principles: Skoda is a company car, if you want to deviate from this, you should, but pay for it yourself, you don't have to wait for anyone here"(**Case of Bernát3 - Individual profile**).

5.2.1 Values

In the case of all organizations, respect, and recognition of knowledge arose. At the same time, although in a different form, the separation theories are also manifested in Company A and Company C. Within Company A, the manifestation of this - as Júlia's thought shows - is characteristic of Antal, Lajos, and Bernát among the TMT members. In these three cases, the separation from the members at the lower levels of the organization is typical, the basis of which, in my view, is not related to the power resulting from the position but to the knowledge acquired through study and professional experience. In the case of Company D, the separation theory manifests itself in the case of less educated customers (**Ákos1 case – Decision search**).

In the case of Company A, the categorization is based on professional experience and knowledge, which leads the members to use the category on a daily basis due to their position and environmental factors (Turner et al., 1987). The perceived difference influences the TMT's self-categorization process in knowledge (Oakes et al., 1991). Thus, self-categorization depends on the perceiver and obviously depends on the context and changes dynamically, i.e., adapting to other people's knowledge and professional experience (Hornsey, 2008). (**Case of Bernát4 - Opinion on diversity, diversity policy; Case of Bernát5 - Opinion on diversity, diversity policy; Case of Lajos1 - Individual profile; Case of Antal1 - Individual profile; Case of Antal2 - Individual profile**). Based on the above, it is obvious (I will explain this in more detail later) that only the information/decision-making perspective prevails in the case of Company A. So, for them, the basis of judgment is knowledge. Clear evidence of this is, for example, "*let the profession decide*", "*there is no point in arguing with those who have not learned these things*", "is in "*I would never dare argue with the most prepared negotiator*" statements, thoughts.

In the case of Kristóf a 1) readiness to use the category, 2) comparative, and 3) normative fit develop in a much more flexible way (Turner et al., 1987). Because he also has the need to "*understand as many things as possible, a little better than average*" at the same time, he has a different attitude towards his team precisely because of his previous, youthful professional experiences (**Case of Kristóf4 - Individual profile**).

However, the knowledge-based categorization of "us" and "them" arises within the organization and between Company A and the other companies within the company group. Consequently, in this case, Company A represents the "we" group, and the other organizations within the company group represent "them" (Reimer et al., 2020), (**Case of Antal2 - Opinion on diversity, diversity policy**). With this, we practically returned to Bernát's case (**Bernát3's case - Individual profile**). However, in this case, we are already discussing gaining a competitive advantage within the company group. Accordingly, according to the view of the TMT of Company A, compared to the other company group members, they have a greater accumulated cognitive base and cognitive ability at the managerial and organizational levels. As a consequence, they can apply the assumptions about future events, the knowledge of alternatives, and the consequences related to alternatives in a more adaptive way in the most appropriate way for the organization (Volberda & Lewin, 2003) (**Case of Bernát7 - Opinion on diversity, diversity policy**).

5.2.2 Education, work experience

My next analysis unit concerned the interviewees' education level (Figure 17).

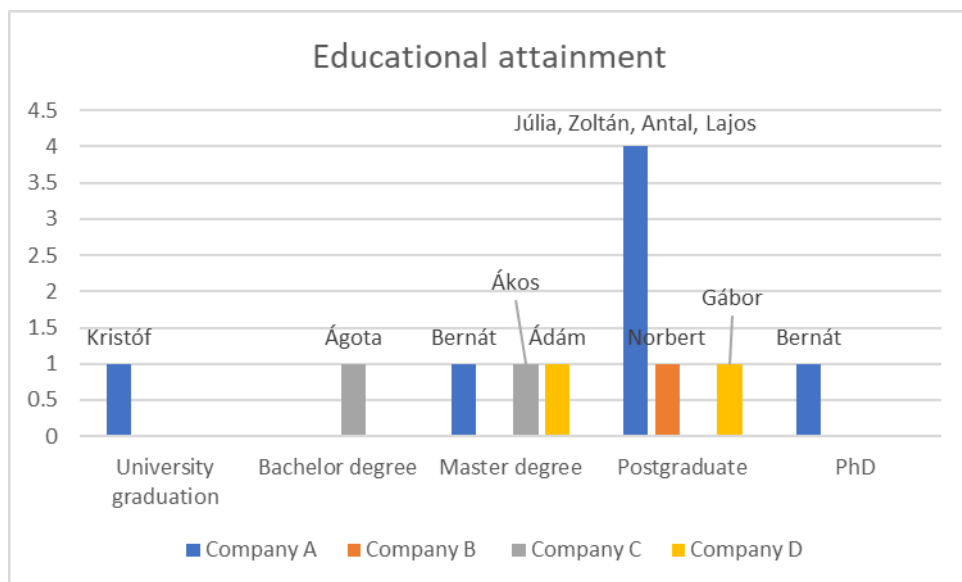


Figure 17: Educational level of the TMT who participated in the research by the level of training

My own editing

In the case of Company A's TMT, Bernát obtained his scientific degree at the GTK faculty of the BME and also completed his IT engineering studies at the

University of Technology. He has several years of managerial experience. He worked in both the public and private sectors. As a manager, he gained experience in managing several IT projects on the customer and supplier side. Kristóf continued his chemical engineering studies at ELTE, which he had to stop due to the family's financial situation. He obtained his high school diploma, but he did not complete his university studies due to a lack of money in the first period and a lack of time later. After leaving the university, he started working in the financial field. Thanks to his hard work, he initially worked in the position of the group and then as branch manager. After that, he got a job at a commercial company, where he and his team were responsible for organizing and designing an IT system. He then joined Company A as a business analyst, where he was appointed project director after one year of employment. Júlia graduated from the College of Public Administration as an administrative organizer and later obtained a degree in economics from the University of Economics. He reflects on a rich professional history in both the public and private sectors. In the public sector, he dealt with, among other things, the modeling and regulation of active instruments in the labor market. In the private sector, he worked as an HR controller at a multinational pharmaceutical company, then became a controlling director at a telecommunications company. This was followed by large companies such as Malév and Magyar Közút, where he also held leading positions. Antal and Lajos are both computer scientists with a master's degree, which in the case of Antal is accompanied by a teacher's qualification in physics and computer technology, and in the case of Lajos, an IT teacher's qualification. Antal taught computer science in a secondary school for a longer period of time and then held the position of deputy director in a vocational secondary school for several years. After that, he dealt with IT solution delivery within the framework of his own business, including developer and team leader tasks. Lajos taught IT subjects - programming, database management, project management - in vocational training, mainly to technicians after graduation, for approximately twenty years. He has been developing educational software since 1997. From 2003, he participated in developing and designing the e-diary within the framework of his own company. After that, he joined Company A. Zoltán also has a teaching degree, which he obtained in mathematics and computer technology. Later, this was accompanied by the diploma of economist obtained at the University of Economics. He also has experience in the public and private sectors. He has more than ten years of experience as a management

consultant, which includes IT strategy consulting and project management. After that, he held the project manager position at the MNV Zrt subsidiary for several years.

In the case of Company B, the senior manager who took part in the research, Mr. Norbert, obtained a degree in IT economics and completed a bachelor's degree in finance and accounting at the College of Finance and Accounting. After university, he worked as an IT consultant for Ernst & Young for five years, then founded his own company. He contacted and worked with Zalán's company several times concerning a Pannon GSM assignment. After several years of fruitful cooperation, Zalán and Norbert decided to join forces and create Company B. Later, Zalán stepped back and handed over the company's management to Norbert.

In the case of Company C, Ákos graduated as a GIS. After graduating from university, he worked for a municipality, dealing with urban planning and statistics. After that, I turned to project management and, since then, started managing IT projects. Within three years, he became the operational director of the 20-person organization. He also worked for large Hungarian companies and multinational organizations. He held a leadership position each time. Ágota completed her higher education in HR. Initially, he worked as an IT recruiter at a Hungarian SME. Then he held the position of group leader at Grafton. After that, he joined Company C.

In Company D, Ádám completed his studies at ELTE, majoring in psychology and MBA, and then obtained a diploma at the University of Applied Sciences' work and organizational psychologist training. He also gained professional experience in the public and private sectors, where he held positions such as HR assistant, HR generalist, and then group leader and director. Gábor is an IT economist and holds an MBA degree. He has several years of management experience in a multinational organization. He spent several years abroad as a consultant. Company D was created with his university classmates. I illustrate the above in the figure below:

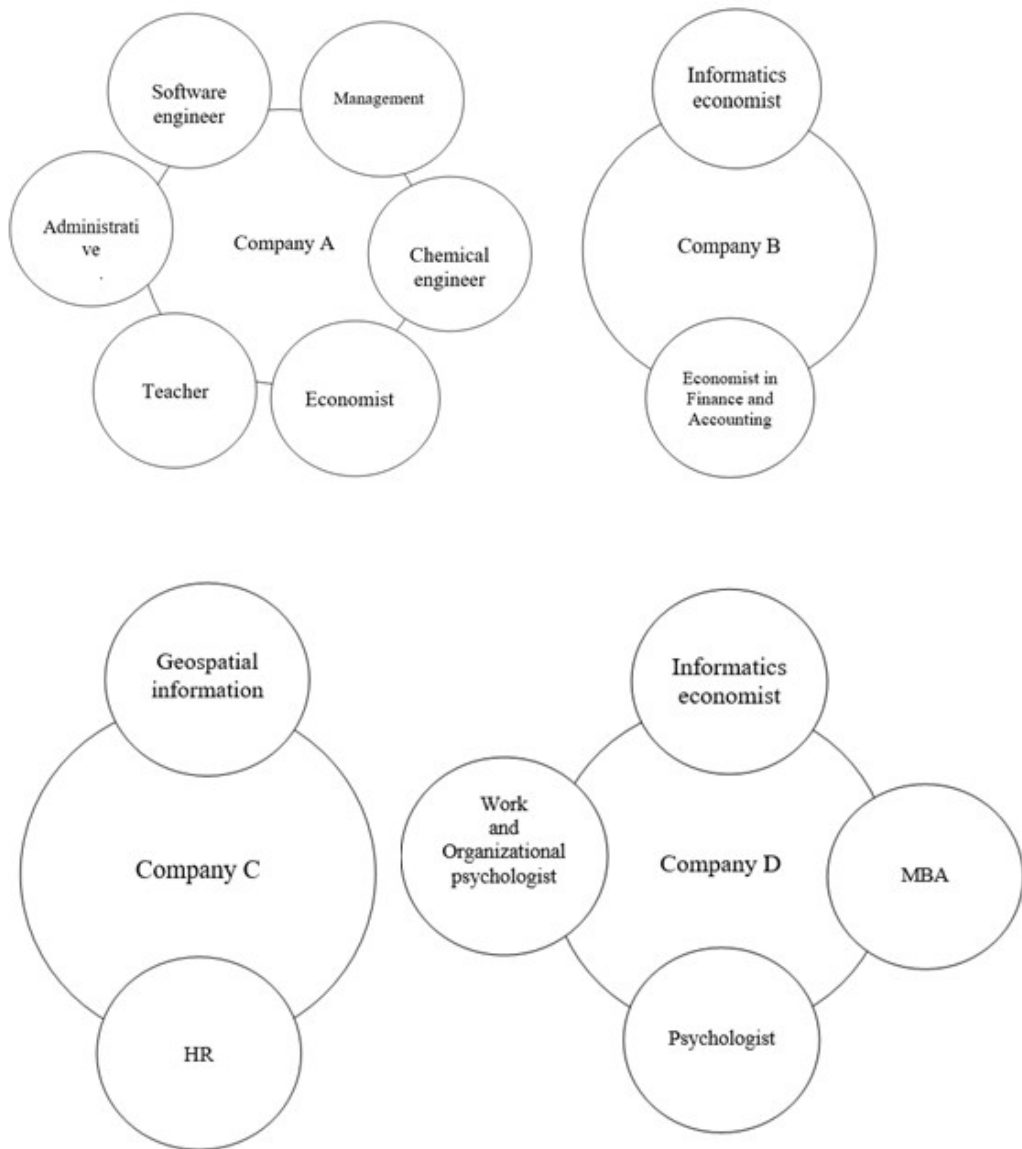


Figure 18: The educational level of the TMT who participated in the research by field of specialization

My own editing

As the above shows, it is typical for all of the organizations that participated in the research that TMT has a diverse educational background. Consequently, according to the literature, managers of organizations benefited from a diverse curriculum background during their studies (Hambrick et al., 1996). During my investigations, I found that the curricular background of senior managers shapes managerial cognition, which impacts strategic situations and the interpretation of the environment (Eggers & Kaplan, 2013).

My research showed that the interviewees regularly apply the methodologies learned in higher education. Their educational background affects their structural thinking and mental templates, which also influence what is important to them and what is not. As a consequence, it affects how the TMT processes information (Finkelstein & Hambrick, 1996; Hambrick & Mason, 1984) and what kind of mental map and information it uses when making individual decisions.

As shown in Figure 17, the TMT members in each organization that participated in the research have diverse educational backgrounds. During my investigations, I reached a result similar to the findings in the literature: the TMT's school background increased the TMT's collective information search and processing capacity because the TMT members approach a given issue from different points of view based on their school background. During joint brainstorming, everyone adds their thoughts based on their mental model and structural view of strategic plans and renewal.

In the case of Bernát, the racing stable is a recurring metaphor. Emphasis is placed on the repeated "target rational solutions" approach, the roots of which can be traced back to the school environment. That is why he sees that "*those who couldn't stand it left*" since the university has strict requirements that "*students were bred to be able to make decisions*". This mental model echoes the practice of searching for information and in the decision-making mechanism. This is what they refer to as "*numbers don't lie*" and the "*there are rational solutions; it's not about whether we love someone or not; we have to move forward*" thoughts.

In the course of the investigation, I sought to explore the impact of the diversity of the CEO's educational background on the TMT's decision-making mechanism, organizational renewal, and ambidexterity. During my investigations, I concluded that in the case of Bernát, we could talk about operational and strategic tasks. In contrast, in

the case of Norbert and Gábor, we can talk about strategy and vision creation tasks. However, in my view, this is closely related to the diversity of the CEO's education and his functional and work experience.

He refers to this, among other things, in **the case of Bernát4 - Opinion on diversity, diversity policy:**

"They [women with professional qualifications] are professionally accepted, you can't argue with that. At that meeting, there was a religious debate about whether solution a) or b) or c) should be made, and I said that it should not be a religious debate, but that the profession should decide [the BME lady and Bernát] which religion for which we cast our vote."

The case of Norbert1 - Individual profile:

"He makes every decision with me. He is much more operative than I am. I'm more strategic and dreamy. He's not. I won't go into the last number of the budget, and he does. And this should complement each other."

The case of Norbert3 - Profile of an individual:

"I used my experiences from the local community. It is not formalized to the same extent as at a multinational company because I also worked in such a company and started my profession there. It was very formalized there, but it looked more or less the same as here. We are obviously a smaller organization."

The case of Gábor1 - Profile of an individual:

"Yes, we pretty much transferred my experiences there to our environment. They're not as formalized as that multi, but they look similar."

Therefore, I came to the conclusion that CEOs' decisions and the mapping of their mental maps according to strategic directions are determined not only by the school background of the CEOs but also by their professional history, the sectors in which they worked, and how many years of managerial experience they have. In Bernát's case, I discovered the simultaneous existence of operative and strategic thinking. On the other hand, in the case of Gábor and Norbert, I found strategic thinking to be more dominant. So, in Bernát's case, the engineering degree brought with it an

extra, positive return, which created not only structural advantages for him but also professional details. These refer to *"I would never dare argue with the most prepared negotiator"* and the *"And then it became what we [Bernát and his team] said because there is no point in arguing with those who have not learned these things."*

Norbert and Gábor completed their studies in economics and management, and both worked as consultants in a multinational environment. Some of the experiences gained there were incorporated into their organizational operations. In the case of TMT, my test results were similar. The professional experience, school, functional background, and work experience of the interviewees both influence the professional decisions and information search patterns of the TMT.

Accordingly, in the case of the organizations that participated in my investigation, the functional diversity of the CEO impacts the operation of the TMT. In the case of Bernát, for example, we can talk about single-person decision-making mechanisms. Based on his education and professional background, he can be considered a generalist, dampening TMT's functional diversity. Similar to Dobák and Antal (2010), I believe that the CEO's personality has an impact on the organization's internal, including TMT group dynamics, as well as on the organization's performance and innovation skills (Manata, 2021), as well as its strategic decisions (Ortiz-de-Mandojana et al. ., 2019). I will elaborate on this later.

Based on the above, I considered it necessary to examine how the information search strategy was implemented in the case of Company A until the point when Company A's competition existed. Based on my investigations, I came to the conclusion that Company A, Company B, and Company D⁸¹ The CEO's information-seeking pattern develops in the following way in terms of strategic renewal and ambidexterity:

In the first round, every CEO examined what the competition knows. Monitoring of the competition also arose in the case of TMT (**The case of Ágota1 - Decision search, The case of Júlia3 - Decision - search**) because they also consider it important to have up-to-date market knowledge in their own professional field. In addition to the existence of competition, the question arose in the case of two CEOs regarding how the given market share could be acquired. Norbert with the merger (**Case of Norbert2 - Renewal**), Bernát (**Case of Bernát1 – Decision search; Bernát3 – Decision search**)

⁸¹ The CEO of Company C did not take part in my research, and therefore was not included in the analysis unit of my thesis for the relevant parts.

and solved the issue with a purchase and a free pricing strategy for customers. In all cases, the strategic move served a dual purpose. On the one hand, characteristics related to discovery, such as growth, entrepreneurial competence, flexibility, and experimentation, focus on the future, and strategic foresight, can both be found in the decisions of Bernát and Norbert. On the other hand, in connection with the exploitation, both organizations kept the activities related to their operation. The strategic goal related to growth was not only innovation, but also increasing market share and, ultimately, profits. Ákos' strategic steps (**The case of Ákos3 and Ákos4 - Decision - search**) were based on similar principles.

Risk-taking can be said for all CEOs. They are uniformly characterized by the fact that they like to make quick decisions. In their view, this type of decision-making mechanism is more efficient for the company since a bad decision can be corrected within a day or two. Still, with a long-term decision, the processes and workforce are at a standstill, which results in greater losses.

The case of Bernát7 - Renewal:

"...decisions within the company are very rapid, I follow the principle of making decisions very quickly, thereby not slowing down work processes. And if I'm wrong or someone questions my decision - in the positive sense of the word- how can I be sure I made the right decision? - then I can reconsider my decision a day later. But I made the decision, and it's not that people are waiting for the fried pigeon to fly into their mouths, but there is a decision that allows you to move forward."

Case of Norbert2 - Decision - search:

"If we didn't think it through, we will approach the decision and make changes to it"

Case of Gábor2 - Decision - search:

"We are human, we make mistakes. But let's make mistakes rather than not work."

My results above are the same as the findings in the literature. In a turbulent environment, environmental changes impose such time constraints on organizations that they are forced to decide between winning and losing (Eisenhardt, 1989; Prasad & Junni, 2017; Yoon et al., 2016). As a result of the complex decision-making processes of IT organizations and turbulent environmental influences, the TMT is forced to quickly process real-time information and solve problems (Parola et al., 2015; Prasad & Junni, 2017).

The above also hides the attitude that the CEOs who participated in the study are supporters of immediate intervention, which applies not only to decisions, but also to the correction of errors. I experienced the need for control over the processes in the case of each manager. How does this happen for individual CEOs? Regarding Bernát, it must be on all e-mails of the second and third levels of the organizational hierarchy (**Bernát2 – Decision search**):

"...that's how I have an idea about matters, and I don't have to ask things a lot. And if there is still uncertainty, I ask questions to colleagues, to which I expect quick answers. This means 4-500 emails per day. My colleagues are shocked, but I really read every letter. If a letter is very long, I write back that I have not read it because it is too long, please make it shorter."

Norbert (**Case of Norbert1 - Individual profile**) and David (**Case of Ádám1 – Decision search**) and in the case that the two leaders are involved in all decisions. Accordingly, I considered it important to examine the effect of the trust of individual managers, or the lack thereof, on the decision-making mechanism of the TMT and on the innovativeness of the lower levels of the organization. I will detail this in the next chapter.

Like Heyden, I did my research with companies operating in a turbulent environment. However, my results were partially different from the developments in Heyden's (2012) dissertation. There was a difference in the fact that the organizations that participated in the research use external professional help in cases where they supported the collection of information related to the processes supporting the operational functioning of the given organization or supporting a decision. My results were similar to those of Heyden (2012) for Company A and Company C: using external

consultants indicates problem-solving behavior aimed at clarifying the organizations' judgments.

The case of Antal3 - Decision search:

"We had an idea and an idea of what the system should be that we wanted to integrate into our systems, but we wanted more information. At that time, we asked an external company to find tools for us, and we also told them one or two that they should include in the analysis and compare the advantages and disadvantages from both a business and a professional point of view. And then we got this complex analysis."

The case of Norbert1 – Decision search:

"We worked with a training company, and they had a methodology for this, which they adapted for us. Colleagues were delighted with him."

The case of Gábor1 – Decision search:

"We have a very detailed satisfaction measurement, which we do with an external HR company. The survey also measures how well we, the members of the organization, comply with the organizational values."

The case of Ágota1 - Decision search:

When looking for new employees, Company C uses the services of recruitment headhunters in addition to the LinkedIn search, as well as: *"There are competitors that we monitor and, if we see that the situation there is not so good, we use direct inquiries."*

Here, however, another difference emerged between Company A, Company C and Company B, Company D. Because in the practice of Company A and Company C, the involvement of an external expert related to the business process is typical. In both cases, we can talk about solutions in which the business or partner is so valuable to the organization that it is able to involve third parties in the service. Company A and Company C directly or indirectly seek out well-known organizations and professionals in order to acquire a business or retain customers and integrate them into their own organization to ensure business continuity.

The case of Zoltán1 - Decision - search:

"And then, of course, in the first round, I'll check what kind of experts we have, I'll ask the HR people if there are any? If there is none, then another company or separate independent experts must be involved. There were also times when we brought in independent experts because we needed someone with a special certificate. At that point I said that someone would have to be involved here and obviously this had to be discussed with Bernát. Obviously, in the first round, we try to involve an expert within the company group or from a company with which we have a relationship, that we know, etc. If not, then we will search through it at some level, but usually this issue is resolved in these circles."

The case of Bernát1 - Ambidexterity

"if we can generate even more profit with the appearance of the person, then the question is not whether he fits into the company's wage structure, but whether we can generate even more profit."

Ákos2 case - Decision - search:

"In no-go cases, we pass the lead on to our partners for a certain sales commission. This is an important decision because the client is valuable, that is why we contract with them, but we absolutely outsource the task, and we do not deal with it."

5.3 Diversity policy

At the beginning of the interviews, I asked each manager to define what diversity means to them. During the definitions, the most frequently encountered dimensions were: age, gender, and people with disabilities. In the case of Ágota (Company C), this was followed by professional experience in organizations of different sizes, education, and nationality. However, for the other managers, the concept of diversity was limited to the above three categories. Consequently, during the interviews, no leader mentioned the other three categories of the Big Six (Primecz, 2019): religion and belief, sexual orientation, and racial and ethnic groups. In my opinion, the category of religious and faith diversity is not of great importance from an organizational point of view in our country, as it is classified in the category of private life. All of this can be connected to historical elements and processes such as the

freedom of religion characteristic of Western culture, the separation of religion and state, as well as the spread and acceptance of atheism, which led to the fact that workplaces - which are not explicitly linked to religion - are considered fundamentally secular. In my view, sexual orientation was left out of the list because, ideally, the personal actions related to it do not occur in the workplace. As a result, employees classify it as a matter of private life. The third missing element of diversity was race and ethnicity, which includes the largest domestic minority, the Roma. In my opinion, the reason for this phenomenon is twofold. The fate of the Roma has merged with poverty, stereotypes, social exclusion, disadvantage, and problems in education and employment. As a result, on the one hand, in most cases, the first-generation educated Roma do not admit their origin, fearing that they will not be able to assert themselves in the labor market due to the lack of role models, help, and relationship capital in front of them. Consequently, even if they enter the domestic labor market, including the bloodstream of SMEs, they do not admit their origin, fearing exclusion. In this way, the stereotype about Roma formed in the actors of the enterprises cannot be formed in a positive direction either. On the other hand, as my previous research shows, there is strong discrimination against Roma workers (Olasz, 2020). They often do not even make it to the interview process because their origin is evident from their CV. In my view, the social responsibility of organizations is urgent in this matter. Introducing Roma graduates into market circulation and positions at companies would positively affect their social status and reduce selection mechanisms. Further and deeper detailing of this, however, is beyond the scope of this paper.

In none of the medium-sized organizations can we talk about the existence of a diversity policy or an active effort towards it, but at the same time, the category I call inactive openness is typical in all cases. This is indicated, for example, in the following cases:

Case of Anett1 - Opinion on diversity, diversity policy:

"he confronted me [disabled, visually impaired], and we examined it [the situation] ... we looked at how we can solve the problems we are facing", respectively

The case of Ágota4 and Ágota6 – Opinion on diversity, diversity policy:

"...random, we are also open if they come."

"There is no conscious. We did not particularly focus on increasing the proportion of women in the company, for example, but it was a natural process as more and more people are interested. Obviously, we are also more open. We never had to deal with this, because we never turned away from anyone."

The case of Gábor1 - Opinion on diversity, diversity policy:

"We used to use diversity for the diversity of projects, not for internal proportions. We consciously don't have a strategy like Google or these Facebook, big companies."

The case of Norbert4 – Opinion on diversity, diversity policy:

"We don't have any diversity strategy. We also want to expand internationally, so we must tap into multiculturalism. But we don't consciously deal with that."

Consequently, in the first round of analyses, none of the organizations appeared to be taking steps to support any diversity category. At the same time, if the given diversity category presents itself to them, it "comes in front of them," and then they handle it openly. In the next stages of the analysis, I will present the results of my investigations related to age, gender, and cognitive diversity, and I will refine the ideas of the organizations about diversity.

5.3.1 Age diversity

Before the interviews, I reviewed the content of the websites and Facebook pages of the 4 companies and, based on the initial investigations, I divided the investigated organizations into two groups:

The website of Company B, Company C, and Company D is characterized by the fact that 1) it contains detailed information about the objectives of the organization; 2) reflects the image of an organizational culture where team members are supported and encouraged, and individual differences are valued; 3) the goal of the organization is to create a "company-life feeling" and attract the attention of candidates. Company B does this with the visual presentation of "Our shared experiences" and "Why is it good to

work here?" sections, it is achieved by listing arguments given by colleagues, such as "Flexible working hours, Home Office option," "Opportunity to develop professional and other competences during work" and "We work as a team with my direct colleagues." Company C's website emphasizes openness, and cooperation based on mutual respect and understanding at the organizational and team level, as well as the agile approach and lean approach. In the case of Company D, the homely work environment, joint leisure programs, "quarterly think out of the box workshop," company pizza parties, and other programs. In contrast, Company A's website contains 1) only minimal information about the organization; 2) there is no information about the culture, events, or life of the company; 3) its content is limited to customer guidelines, videos, and video library.

None of the companies uploaded a document on equality and commitment to diversity to their website, and based on the interviews, only one organization has a document on diversity and acceptance⁸². At the same time, in the case of Company B, Company C, and Company D, the presentation of objectives and the presentation of organizational culture indicate the importance and support of diversity principles. Also, based on the information on the website, it can be established that Company B, Company C, and Company D have a diverse clientele, which shows that these organizations must understand and reflect the diversity of their customers (see Table 14).

The information in the mouths of Companies B, C, and D, as well as on their Facebook page, shows that the purpose of these businesses is to present the "Company life feeling," which indicates that, in addition to the narrow labor market framework, the goal was to attract talent and - as soon as it was also highlighted during the interviews - maintaining it with means of well-being (shared pizza, punching bags, foosball, table tennis, weekly soccer, etc.). Consequently, organizations aim to present themselves positively in the eyes of the client and the employee (candidate). This view of mine was supported by the thoughts and comments made during the interviews: **(The case of Ágota2 – Opinion on diversity, diversity policy)** *"our goal is that... our Company is attractive on the market, both in terms of clients and candidates."*

⁸² Although, during the interviews, I received from Ágota (Company C) an organizational policy on a commitment to diversity called "Our Values" (I did not receive permission to include this in my thesis). The document has not been uploaded to date, however, one or two thoughts are echoed on the homepage of the organization's website.

In the case of Company A, the website and Facebook page contain detailed descriptions of the use of the System, a knowledge base, a video library and important information for customers. Behind this form of appearance is the organization's strategic decision: *"Our principle is that we do not communicate via Facebook, or more precisely, we only express ourselves."* In my opinion, Company A's decision is made up on the range of its customers because the public sector is a much more sensitive and formalized area than the private sector.

During a deeper analysis of the interviews, I found a close correlation between the preference for employee seniority and the activities of the examined companies. Those organizations that developed their own products (Company A and Company C) insisted on employing senior candidates when selecting new colleagues. In my opinion, the development of one's own product means more responsibility in that the brand of the organization is given exclusively by this and by the activities built around it, such as consulting. In order to continuously ensure and increase the user experience, you need specialists who can add value to the product using their previous management and professional experience.

On the other hand, I experienced a different kind of image and an organizational message sent to the outside world at those organizations that primarily focused on service (Company B and Company C). My preliminary investigations showed that the target employees of the two organizations were colleagues with less or no experience. In this regard, the term junior can refer to age and professional experience alike, as both organizations are open to accepting junior colleagues transferred from retraining centers. According to their confession, it is characteristic of both organizations that - quoting *Ádám - "their only tool is attention,"* which manifests itself in the organization of joint programs, the creation of a familiar, friendly atmosphere, the construction of a foosball room and a PlayStation corner. Company B and Company D do not develop their own systems regarding activities. Compared to Company A and Company C, its range of services covers a much wider area, which includes many types of outsourcing at both team and individual levels (Figure 18).

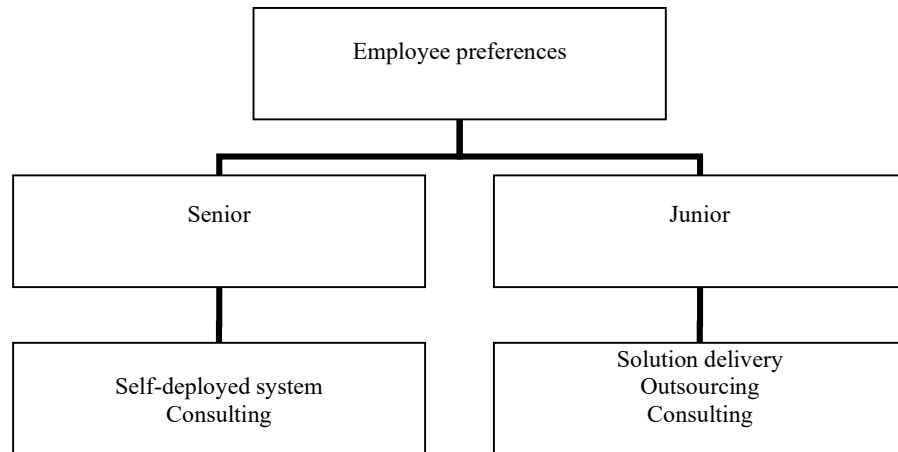


Figure 19: Employee preference

My own editing

The following cases indicate this:

The case of Ádám1 - Opinion on diversity, diversity policy: *„A significant proportion of our employees are young.“*

The case of Anett3 – Opinion on diversity, diversity policy: *"We hired such developers with a break-even point and zero kilometers, and we are even open to such retraining centers. We don't only accept university graduates."*

In relation to seniority, in the case of Company A, the TMT emphasized that they rely largely on their direct colleagues, the senior professionals, in their decisions, from a professional point of view.

This view is supported by Lajos's thought process **(The case of Lajos 1 – – Opinion on diversity, diversity policy):**

„The choice of my colleagues was very conscious. My colleagues represent the age group of mid-thirties to mid-fifties, so they are mainly former teachers, they were deputy principals at school, so they are professionals with a pedagogical background“.

(The case of Ákos1 - Opinion on diversity, diversity policy):

"our team consists almost exclusively of seniors, we believe in working with seniors."

Based on the above, Company A's practice differs from the national and European average (EC, 2012a, b) for the age group because the age-related employee

preference of individual managers is the older, experienced age group due to the requirements related to professional experience. At the same time, the average age of Kristóf's team of developers ranges from 20 to 40, which Kristóf received when he was appointed.

In the case of Company C, according to Ágota, the age of the employees varies widely, between 19 and 50. However, in Ákos's interpretation, seniority has a different meaning than in the case of Company A. **The case of Ákos1** shows he considers soft skills such as mentoring, people management, and business approach to be necessary competencies in addition to experience. The existence of this excludes fresh graduate beginners, but at the same time, the average age of developers does not exceed thirty-two.

During the interview with Ákos, the proposition of self-classification of the relational demographic theory (Tajfel, 1981) echoes several times, which includes the need to belong somewhere and to be distinguished on the other. Similar to Szászvári (2012), the present research also resulted in Ákos' management that the young manager judged the seniors unfavorably. Ákos was 34 years old at the time of the interviews, so he judged the age category far away from him unfavorably (Szászvári, 2012). It refers to **the case of Ákos2 - Opinion on diversity, diversity policy:** *"We are now interviewing a forty-five plus old fox... maybe we won't make him an offer because he's just so out of it, and we don't know what this decision will do to our young, ambitious, strong designers."* The case above shows that, according to the manager's assumption, the cooperation between old and young colleagues would not be fruitful, would cause emotional conflicts among team members, and would even lead to turnover (Dijk et al., 2016; Richard & Shelor, 2002). So, Ákos' view reflects that the difference in age-related diversity within the work unit would have a negative effect on the behavior and attitude of individuals (Yadav & Lenka, 2020).

Considering contextual issues, examining what the above means for a medium-sized IT company is important. All of the organizations that participated in the research, including Company C, are flat organizations. This means that there are few, maximum 3 hierarchy levels within the given organization. Both Ákos and Ágota are on the second level of the organizational structure within the TMT. There are professional and non-group managers at the middle management levels below. As a result, TMT members are

the direct implementers of senior management's instructions and plans compared to a large company or multinational environment.

Although Company C, similarly to other organizations, does not have a diversity policy, at the same time, based on the formulation of the HR manager (**The case of Ágota4 – Opinion on diversity, diversity policy**), „*there was never any turning away from anyone*“, which is supported by the presence of various members within the organization (**Ágota6 case – Opinion on diversity, diversity policy**): „*there are 19 - he hasn't even finished university - and around 50 Spanish, Croatian, Ukrainian colleagues, as well as 98% visually impaired colleagues. Some came from multinational companies, and many of them work part-time because they have babies.*“ Organizational practice, therefore, clearly indicates that Company C is open to different diversities. It can also be observed that Ákos shapes his board of directors based on his own preferences (Hambrick & Mason, 1984) (**The case of Ákos1 and Ákos3 - Opinion on diversity, diversity policy**) and determine its developmental trajectory through the preferences, behaviors, and abilities embedded in their strategic decisions (Cyert & March 1963; Hambrick, 2007; Heyne, 2012).

I came to a conclusion similar to the literature results regarding middle management. The "old fox," as an experienced and highly knowledgeable but elderly professional, also greets Dávid in connection with an interview/selection case (**The case of Dávid1 - Opinion on diversity, diversity policy**). Consequently, Dávid, who performs middle management duties on the board, has a similar opinion to senior professionals and has the same attitude regarding diversity (and, as I explained earlier, values) (Tatli & Özbilgin, 2009). The negative application decision made in view of the candidate's age was a practical implementation of the approach (Mor Barak et al., 2021)

Overall, it can be said that the manager on the board of Company C assumes that age-homogeneous teams produce better performance and better metrics. Based on his assumption, group members would not feel comfortable in the company of members with different characteristics/characteristics (Qin et al., 2014). The middle manager also implemented his insights during his work. Consequently, Ákos and Dávid's reference sheet in this regard is the age of the employees on the board. Applicants to them were judged based on the level at which they perceived age differences and associated stereotypes with them (Harrison & Klein, 2007).

So, on the one hand, age-related prejudice and discrimination prevailed in one of the boards of Company C at a much lower age than the EU average (EC, 2012a, b). In this case, "forty-five plus" professionals were rejected based on their age, which was the same as the results of domestic surveys, according to which someone up to 45 is considered young (Tardos, 2016). At the same time, it is also important to see that the leader voted for the principles of the separation theory and that cognitive diversity, which focuses on the information/decision-making perspective, was less important to him. According to his assumption, differences give rise to disagreements and contradictions (Risberg et al., 2019), which would have a bad effect on the team functioning that has worked well so far. At the same time, Ákos forgot about the waste of professional knowledge and work experience (Tardos, 2016).

During the comparison, I found that IT organizations' preference for co-diversity is significantly influenced by their product portfolio and scope of activities. For organizations working on their own products, the goal is to employ senior colleagues because they want to gain as many profiles as possible by maximizing customer needs and the user experience associated with using our system. On the other hand, professional experience is less important for IT outsourcing organizations. In my opinion, in this case, the quantitative characteristics are more decisive since the more labor they can outsource, the more profitable it is for the company. At the same time, it is important to emphasize that these organizations greatly emphasize quality. As a guarantee of this, they pay great attention to education, the integration of the members, their vision for the future, and their motivation. Consequently, they directly and indirectly affect the performance of the group or organization (Rijamampianina & Carmichael, 2005).

5.3.2 Cognitive diversity

My further investigations showed that in the case of Company B, Company C, and Company D, the autonomy of strategic renewal prevails, which is characterized by a bottom-up process (Flores, 2016; Volberda, 2017; Volberda et al., 2001; Ateş et al., 2020). My results were similar to those of Volberda (2017). As soon as that **Levente1-Ambidexterity, Dávid1 - Opinion on diversity, diversity policy and Anett1 - Renewal** case shows that middle management and employees play a significant role in

the successful renewal processes of Company B, Company C, and Company D. In my opinion, what Dávid said best describes the related processes: *"Being in a good community and feeling good about yourself means that you deliver a good product"* (**Case of Dávid1 – Opinion on diversity, diversity policy**).

In connection with the above findings, I extended my investigation framework to Company A, where Kristóf's case came as a surprise (**Kristóf1 – Ambidexterity**):

"So I think that we clearly have the innovation and the intention but above all the intention because unfortunately quite a lot of things are blocked by the company management. And I feel that there are quite a few topics in which we cannot make much progress due to circumstances. For example, even if we wanted Teams to be the corporate (...) communication platform, it was not possible because the company group uses Skype, and this cannot be changed. We tried in vain not to have Slack at our own company because we don't like it so that it could be something else. In vain, I worked out solutions and cost estimates and everything. No, because we are used to this now, we stay with the old one. That's fine because the business sees that it still works. So, I think my board would be innovative, but unfortunately, our horns are usually crushed."

During the new investigation of the cases, I came to the conclusion that the basis of the similarity between the four investigation units, i.e., Kristóf's management, Company B, Company C, and Company D, is the existence of trust.

In contrast to the research of Reynolds and Lewis (2017), the results of my dissertation show that in the medium-sized domestic companies operating in the IT sector that participated in the study, the existence of a sense of psychological security created not only by HR but also by CEOs and TMT ensures the organization from below future renewal processes. In the case of these organizations and organizational units, the leaders formed the view among the employees that they will not be punished or humiliated if they voice their ideas, questions, or concerns or if they draw attention to mistakes (Khan, 2018).

Case of Anett5 - Opinion on diversity, diversity policy:

"Within the company, no one was ever subjected to atrocities for expressing their opinion or for thinking that they saw it differently than the management."

We encourage everyone to share and tell them, because that's the only way we can change, and this is the first step to creating a culture of feedback"

Kristóf2 – his view on diversity:

"I believe in teamwork,"... "our team,"... "our structure"

"For me, it is vital that my board of directors is a team - and I would always like to see this as authoritative in management - we must be able to work together because we are rowing in the same boat."

The case of Levente1 - Ambidexterity:

"We don't talk, we discuss everything. I think joint bar storming is very important."

Consequently, the above organizations and organizational units are characterized by cooperation, the effort to identify and solve problems quickly, the sharing and application of information, and the ability to maintain attention and continuously invent new approaches and solutions. This is achieved by the psychological safety perceived by the organizational members, i.e., the team members' common belief that the members can safely take interpersonal risks within the team (Edmondson, 1999, p. 354). After that, with the help of the information obtained during the investigation, I placed the individual organizations in the matrix of cognitive diversity and psychological safety (Reynolds & Lewis, 2017).

In the case of Company A, I supplemented the above examination with a comparison of the units within the organization. In the case of Kristóf and Júlia, information sharing, brainstorming, team building, partnership, "*back and forth communication*" support, and the "*positive caress*," is in the "*reject hierarchy*." So, in the case of the two TMT directorates, it can be said on the one hand that the degree of information processing is high. On the other hand, the creation of new knowledge and new solution paths, in addition to the consolidation and use of existing knowledge, is expected (Reynolds & Lewis, 2017).

Case of Júlia1 - Opinion on diversity, diversity policy:

"Practically, I discuss everything with my colleagues, and when we start something, we discuss it with everyone step by step, together, and gather ideas. We try to even out the unevenness or minimize the possibility of mistakes because they can inevitably slip in. And I expect creativity from my colleagues because it is important to them and me. And it's better for everyone because more than one mind is much more. And I see that a lot of people like it. Of course, there are always personalities or individuals who are not so open and brave. There could be a thousand reasons for this. I had to recognize this type and hold his hand a little. And then he gives the direction very well and even has novelties and new ideas. Inclusion is very important to them."

The case of Kristóf1 - Renewal:

"...I experience it very positively when someone learns something new and is proud of himself and happy that he managed to do something. And I noticed that I also feel a great sense of happiness when there is a colleague who asks for help or doesn't even ask for it, but I see that he has a difficulty, we help, we come up with ideas together, we come up with something and then he gets a sense of success as well so of course me too."

Accordingly, based on Reynolds and Lewis (2018), Júlia and Kristóf's team belongs to the generative group, which is characterized by an encouraging and nurturing environment. Such an environment represents an organizational unit where information processing is based on curiosity, experimentation, and interest (Khan, 2018). The above cases also show that the teams of the two TMTs value open and honest communication, clear definition of expectations, trust, independence, and decision-making rights as a positive practice. However, in the case of Kristóf and Júlia, we can see that their empathic attitude requires more attention (Primecz et al., 2008).

		Psychological safety	
		Low	High
Cognitive diversity	High	OPPOSITION	GENERATIVE
		Antal's directorate	Kristóf's directorate
	Low	Lajos's directorate	Júlia's directorate
		DEFENSIVE	UNIFORMING
-	Zoltán's directorate		

Table 14: Company Matrix of cognitive diversity and psychological safety

My own editing

In the case of Zoltán, due to the size of the organizational unit, we cannot speak of a hierarchical structure either. However, in this case, the operation is characterized by strong control, which is not related to the individual profile of the manager, but to the impact of legal frameworks, financial standards and regulations. All of this involves thoughtful information processing, characterized by the appreciation of members and flexible operation.

This is supported by Zoltán's case below (**Case of Zoltán1 – Renewal**):

"Everybody here knows when to come to the office, I don't have to discuss this with them separately. Everything is determined by what the particular colleague's job is and whether it requires someone to be inside or not. Our operation is not hierarchical, everyone knows their job and does it. If necessary, I am always available, we coordinate and discuss if necessary."

and **The case of Zoltán2 - Renewal:**

"We have administrative matters that require both routine tasks and quick decisions. In this case, there was a cancellation, then it had to be resolved there, because the source was also urgent."

In the case of Antal and Lajos within Company A, support for information sharing, brainstorming, and "back and forth communication" also arises. At the same time, they lacked the existence of a personal relationship, the level of team cohesion that would allow team members to receive "positive caresses". Consequently, Lajos and

Antal's organizational unit is also characterized by hierarchical, controlling, and flexible operation, careful, considered and resilient information processing.

They refer to:

1. the previously presented "brought from family" cases,
2. Julia's comparative comment that *"Antal, Lajos or Bernát will never be asked by their colleague...they are not these types. Moreover, if it were to be brought up by chance... during a project discussion, then... cut... let's get to the point."*
3. The case of Lajos (**The case of Lajos 1 – Renewal**)
"Maybe we won't be able to use that idea now, but somewhere else. Last week, for example, a completely new solution was born from the solution of one problem, which we were able to utilize in other areas. It also happened recently that during the oral analysis of the problem we shed light on new fundamental problems, which was very useful. So we proactively prevented the further spread of the problem or the appearance of new problems."

Case of Antal 1 - Decision - search:

"Then I asked my colleagues who preferred what. Everyone had to write down their opinion on what they would choose, why, what they say in favor of their decision, and what risk factors they see. I also read a lot of professional comparisons, mainly in English. I made my decision based on the results I received based on the votes and my research. So in the end, the decision was unanimous, even those who voted for the other one realized that this is a better choice for our company at the moment."

In the case of Bernát, the previously mentioned goal-rational solutions are associated with findings and thoughts such as "revelation", "they learned where the limit is", "we have a special decision-making mechanism within the company". In its case, we can witness a one-person decision-making mechanism. Considering his functional background, he can be considered a generalist, so he is a leader who moves at home in both the professional and operational fields. He himself provides frameworks for the "decision playing field of subordinates" (Dobák & Antal, 2010). According to his own

admission, he belongs to the group of autocratic leaders. Based on the above, the motto of his management style is "do it!". Only he takes action on important issues, and he intervenes in certain steps and "interferes" if he deems it necessary. His leadership orientation can be considered as direct leadership. His aloof, authoritarian communication is almost exclusively written. Aggressive, rigid and restrictive (Dobák & Antal, 2010; Carlin, 2019; Houlihan, 2022). Lajos and Antal show similar characteristics to Bernát in many respects. In contrast, both Júlia and Kristóf belong to the group of democratic leaders. Their *ars poetica* is involving the opinions of their colleagues and assigning joint decision-making directions. Their focus is on relationships and people. They participate in the lives of their teams without taking too much responsibility, they fit in. Their structure is organized, they pay attention to the framework, and they consider everyone's opinion important. Communication can be considered strong both vertically and horizontally and back and forth.

Elevating the issue related to safety to the organizational level, I found that despite the fact that there are generative types within Company A, the role of the CEO plays a decisive role during each process, and this determines the organization's final position in the matrix of cognitive diversity and psychological safety. Consequently, the low psychological safety in Company A caused the teams to lose the key quality and shared belief that they can dare to express opinions within the organization (Edmondson, 1999; Edmondson & Lei, 2014). In my opinion, Companies B, C and D also belong to the generative group, because based on the interviews, all three organizations are characterized by an encouraging and nurturing environment. Their information processing is based on curiosity, experimentation, and interest (Khan, 2018) (see table no. 19). Consequently, at these companies, the team members dare to express their opinions and based on the interviewees' reports, the power of cognitive diversity comes to the surface. In contrast to Kristóf's team, which, according to Kristóf, although innovative and proactive, its cognitive diversity remains underutilized (Khan, 2018).

		Psychological safety	
		Low	High
Cognitive diversity	High	OPPOSITION	GENERATIVE
		Company A	Company B
			Company D
	Company C		
Low	DEFENSIVE	UNIFORMING	
	-	-	

Table 15: Matrix of cognitive diversity and psychological safety of the organizations that participated in the research

My own editing

Connecting all this with the unanimous TMT opinion that all senior managers within Company A see the change associated with renewal as a top-down process. So, within Company A, the top managers play a key role in the strategic renewal (e.g.: Taródy et al., 2021; Hortovány, 2012; Hortoványi et. al, 2021), in contrast to Company B, Company D and Company C, where renewal from below also appears.

5.3.3 Gender diversity

Based on the information received from the interviewees, the gender ratio of the organizations for 2019-2020⁸³ was as follows:

Organization	Number of organizational members ⁸⁴	Gender ratio in the organization	Gender ratio in management	Specializing in female leadership
Company A	110	30%	16 % (6-ből 1)	Director of Organizational Development
Company B	170	26%	20% (5-ből 1)	HR manager
Company C	100	24%	0	-
Company D	140	24%	22% (9-ből 2)	Head of Finance Director of Product and Service Developmen

Table 16: Gender composition of the organizations that participated in the research

My own editing

⁸³ I have included data received from interviewees.

⁸⁴ In accordance with the reports of the interviewees, in some cases it also includes the organization's subcontractors.

The above data are in line with the global phenomenon and the literature: women are significantly underrepresented either in the entire organization or in the management layer. In this part of my research, on the one hand, I looked for the answer to what could be behind the above low ratio, i.e., what causes the underrepresentation of women in either professional or managerial positions in the examined IT organizations. None of my interviewees explained the low number of women with biological determination (Nagy, 2014, Trauth, 2002). On the other hand, I wanted to find out whether my interviewees explain the underrepresentation of women in IT with the views of the essentialist perspective or the social construction of IT (Trauth, 2002).

Regarding the low proportion of women in the IT sector, some of the interviewees voted in favor of the gender theory, i.e., the social structure of IT, highlighting, *"I don't think there are intellectual differences, I think this is a promotion (the case of Ágota2)."* My interviewees, without exception, emphasized that, on their part, there is no - similar to the other diversity categories - *"no consciousness in this."* According to their view, there were very few female IT specialists in the labor market a few years ago because women did not think it was a suitable profession due to the lack of proper promotion and social support (Trauth, 2002; Nagy, 2014). Without exception, the HR specialists emphasized that thanks to various initiatives and retraining centers, the proportion of girls in this industry is showing a slowly increasing trend. These findings are clear signs that the managers who took part in my interview - regardless of their management level - are constantly informed in order to be informed about issues related to their profession.

In contrast to the above, Bernát and Dávid illuminated the issue from a different perspective. Based on their own experience, the judgment of people in the IT industry - both in university and professional circles - is not based on gender, but on knowledge.

The case of Bernát1 - Opinion on diversity, diversity policy

"Those two [girl classmates at the University of Applied Sciences] were always in the top five, and we recognized them, and we never looked at their girlhood."

The case of Bernát2 - Opinion on diversity, diversity policy

"Even then, there were very few girls in the IT profession, but those who were there and made it, were recognized by the profession."

The case of Bernát3 - Opinion on diversity, diversity policy

"the girl who was at the top professionally in her grade won the recognition of the boys, but the girl who was not at the top was ignored by the class. So it was not because of their gender that someone had rank or recognition in our grade, but because of their knowledge..."

The case of Bernát4 - Opinion on diversity, diversity policy

"They [women with professional qualifications] are professionally accepted, you can't argue with that. At that meeting, there was a religious debate about whether solution a) or b) or c) should be made, and I said that it should not be a religious debate, but that the profession should decide [the BME lady and Bernát] which religion for which we cast our vote."

Dávid's 2 case - Opinion on diversity, diversity policy

"These women leaders that I know are there professionally, and we recognize them. This is a professional community and not a community of men."

I extended my research focus to the model of Anker and his co-authors (2003), namely, to examine the extent to which gender segregation within IT can be traced back to social, economic, cultural, and historical reasons. Social norms and stereotypes shape the view of what is the right career path for girls and boys already in childhood. According to the views of my interviewees, on the one hand, the stereotypes in girls and in society stem from these, according to whom in your IT organization, *"there are only people in checkered shirts eating pizza in Vietnamese slippers*. "According to Ágota, the fact that girls are underrepresented in STEM "Science, Technology, Engineering, and Mathematics" is due to the "lack of promotion." At the same time, Norbert has the stereotype that girls are sensitive and fragile and therefore need to be taken care of, which is not supported or liked by his female colleagues (**The case of Norbert5 - Opinion on diversity, diversity policy**). In the case of Company B and Company D, it emerged that developers were taken over from retraining centers, including girls. Accordingly, inequalities related to educational level exist, but looking at the trend of previous years, they seem to have eased minimally. The positive trend is due to Logic

School and Girls' Day (**Gábor2 – Opinion on diversity, diversity policy**) initiatives. In the latter's case, girls get a one-day insight into scientific, technological, and technical professions. The aim of the initiative is to arouse girls' interest in these fields and occupations.

Three of my interviewees were women, two were top managers, and one was a middle manager. Accordingly, the statement that the proportion of women decreased exponentially at the higher levels of the organizational hierarchy is also true for the organizations I examined (Nagy & Primecz, 2010). In all cases, they play a supporting background role, taking on a kind of household role. In the interview that was held in 2019, Norbert explained that it is the organization's and his personal goal to increase the number of management members by at least one person. Company B's website contains the senior managers' introductions with photos and a few sentences, on the basis of which the expansion of the TMT with female members has not taken place to date.

Practically, active openness on the part of the organizations prevailed in this case as well. Consequently, in the case of none of the organizations, we can talk about having any kind of objective regarding the gender ratio of organizational members. Still, also in this case, when the given candidate knocked on the door of the given company, they were open to working together.

6 Discussion

In this chapter, I place my research results on the diversity management map and point out what results it contributes to the professional discourse. I then review his contributions to top management and diversity process theory, focusing on search, ambidexterity, and organizational renewal. Finally, I will examine its practical relevance.

6.1 Summary of research results

The theoretical focus of my Ph.D. research is organizational diversity and the related renewal and ambidexterity, which I examined from the perspective of diversity

management and top management theory based on the theory of Rijamampianina and Carmichael (2005) and Hambrick and Mason (1984).

The broadly understood environment of my Ph.D. research was the domestic IT sector, including the industry of medium-sized solution providers. Within the segment, I focused on four organizations.

My main research questions were:

KK 1: How is the diversity of managers related to strategic renewal and ambidexterity?

KK2: How is the diversity of top managers related to the search patterns that form the basis of decision-making processes?

KK3: How does diversity as an organizational value affect strategic renewal and ambidexterity?

Summarizing the presented research results, the following answers can be given to my research questions:

KK 1: How is the diversity of managers related to strategic renewal and ambidexterity?

Based on this research, we can state that every manager has an individual profile comprising a mixture of visible and invisible diversity elements. And this individual mix determines the chosen direction and goal of each organization. All organizations operating in a turbulent environment pay great attention to organizational renewal and the continuous maintenance of ambidexterity. In the case of Company A and Company C, this manifests itself in the way that they continuously expand their knowledge inputs, and with joint ideas they want to make the user experience even more complete by focusing on the future. In the case of Company B and Company D, it is typical to strive for foreign expansion, and the goal of achieving a more extensive network of services is indicated by increasing the number of employees and developing new services that increase added value and competitiveness. As we have seen, organizations are not able to change direction themselves, when necessary, to make efforts to renew themselves or to implement ambidexterity on a daily basis. This requires managerial decisions of the kind that set directions and milestones (Heyne, 2012; Barakonyi, 2002). In the case of company B, for example, the renewal at the senior management level came at the right

time. After two poorly performing years, the organization's management was renewed. After Zalán's retreat into the background, Norbert concluded successful years with the new operational director.

All these decisions increased the companies' probability of survival because we can find organizational and process restructuring, recombination of existing knowledge elements, and refinement of market approaches (Burgelman, 1991; Heyden, 2012). For example, in the case of Company A, this manifested in how it adjusted its pricing strategy to its monopoly goals and employed a workforce with a higher salary range to achieve its plans related to knowledge expansion. In the case of Company B, this includes, for example, the opening toward various fields of automation and robotization and foreign countries.

I presented several manifestations of self-categorization in the analysis phase, based on which we can conclude that my test results also show that self-categorization is part of a person's self-concept. Consequently, it is the set of cognitive representations that show where the individual places himself, what he thinks about himself, and how he forms the "us" and "them" category groups (Reimer et al., 2020). Accordingly, Bernát identifies himself as the owner of the company group. In contrast, Antal identifies himself as one of the best in the profession and Kristóf as someone who knows better than average.

During the research, it was confirmed that although an individual's decisions and preferences are influenced by their gender, it only partially affects them because the gender of the given TMT is only a constituent element of the individual's unique profile. Consequently, the revelation of the individual's leadership style and the attempt to research it must be connected to getting to know the individual's profile. For example, Kristóf's view of diversity was not caused by his gender diversity but by his experience in the past. However, in the case of Júlia, we can clearly talk about the influence of gender on actions and decisions.

The main pillars of Hambrick and Mason's (1984) model were proven in my dissertation: 1) the interviewees who participated in my study make their decisions based on their personal interpretations of reality; 2) the personal interpretation of reality stems from the managers' cognitive processes, value system, personality traits, professional experience, education, and ethical behavior standards, in short, their individual profile. In the case of Kristóf, for example, it was decisive that he came from

a poor family, which impacted the completion of his higher education studies. Then the workplace experiences significantly influenced his conception of work and his relationship with subordinates. Bernát's life as a "gentleman from Buda" has been accompanied by prestigious schools and cars from his youth. The effect of this is manifested in the ideas and vision of the system operated and developed by the organization, which is represented by the term "product universe." The term universe is usually visualized and associated with creating robust, far-reaching, and prestigious things. This symbol also appears in Lajos with similar content. In this case, the creation and creation of great things is intertwined with knowledge.

I managed to get closer to understanding the strategy of the organizations that participated in the study. The similarity between Company A and Company C, or Company B and Company D, seemed like it needed to be more straightforward at first glance. When contacting the companies, I was unaware of the proportion of old, young, professionally junior, and senior colleagues. During my later investigations, I found a close correlation between the age preference of the organizations and the activities of the companies. In the case of organizations that develop and support their own products, members with several years of experience are preferred. So, in this case, the organizations cast their vote in favor of the information/decision-making perspective, cognitive diversity. In the case of organizations focusing on IT services and outsourcing, the focus is on increasing the number of young, even inexperienced, colleagues. Obviously, this preference of service providers can be explained by several facts.

On the one hand, the characteristic of the IT sector is the lack of manpower, and clients can meet their team size needs more quickly and easily by hiring individuals who have recently graduated and graduated from retraining centers. On the other hand, it is customary for these organizations to use the network of existing members in exchange for rewards in addition to the usual recruitment practices. Young IT professionals can typically recruit new members from their own group, thus increasing the proportion of young people in the organization. Thirdly, the lower the resource cost, the greater the profit the given organization can expect during outsourcing. At the same time, this kind of approach brings excellent benefits to organizations and young people.

On the one hand, after recruiting the workforce and periodically repeating, these organizations hold serious training for new employees, thereby ensuring high service

quality. Therefore, continuous learning and development are ensured for the members. On the other hand, they can accumulate much knowledge and experience within the various projects. Consequently, the diversity category focus of each organization is significantly connected to determining its resource allocation rate and profit-making goals. Because in the case of all TMTs, it is typical to determine the level of resource allocation which served strategic, namely market acquisition purposes. For example, while Norbert and Ákos wanted to achieve this by increasing the number of employees, Bernát wished to achieve this by complying with the order.

Like García-Granero and his co-authors, I found a negative relationship between age and ambidexterity in a single organization (García-Granero et al., 2018). In the case of Company A, age diversity negatively affected the ambidexterity of the TMT. However, in my opinion, in this case, the phenomenon is much more related to psychological safety (I will write about this in detail later) than to approaches related to age diversity.

KK2: How is the diversity of top managers related to the search patterns that form the basis of decision-making processes?

The individual's profile impacts the individual's decision mechanism and preferences. In your decisions, all these values, search preferences, and learned and inherited things appear and affect your actions. At the same time, individual decision-making, and behavioral patterns, as well as choices, determine the individual's choices to a large extent. All of this is not only a search but also manifests itself as a sign of self-classification, belonging to particular groups, and differentiation from other groups.

During the examination of cognition, it was proven that it is significant for managers that everyone has their say. For example, Lajos emphasized that it is essential for him that people who do not work as developers and work within Company A but at the same time as parents have ideas and suggestions that can be useful for everyone, express their opinions, and share their experiences. Consequently, in terms of cognitive diversity, Company A prefers homogeneous teams (van Knippenberg et al., 2004). The case of Lajos represents the fact that diverse group members process information by clashing different thoughts, ideas (Shin et al., 2012), and knowledge (Hambrick, 2007)

(Shin et al., 2012), which leads to new ideas, feedback, enables use after a few months (Williams & O'Reilly, 1998).

In addition to the above, it was also confirmed that Company A has a sub-coalition formed by Antal, Lajos, and Bernát. In practice, this dominant coalition includes the elite network of Company A, which has the most significant impact on organizational goals, development directions, and strategy selection. In my opinion, on the one hand, the fact that Antal and Lajos among the TMT are the ones who "understood where the limit is" (Cyert & March, 1963) is and consequently know exactly what Bernát needs as a leader plays a significant role in this. At the same time, in the case of Júlia and Kristóf, Bernát's identification with this demand echoes. In the case of Kristóf, this manifests itself in better-than-average knowledge, and in the case of Júlia, in the well-being of the employees. Although Bernát only wants to participate in organizational events on a protocol basis, at the same time, he considers it important that organizational members feel good as part of rational solutions.

My research results were similar to those of Heyden (2012): managers make their decisions according to the interpretation systems based on visible and invisible diversity categories and bring values and beliefs, i.e., a cognitive basis, to their formal role, through which understanding, and action are embedded in the established social world. At the same time, according to the theory, managers know all alternatives, of which they choose the most suitable one after a rational evaluation. Although professional and managerial experience and schooling contribute to specific insights, revealing and recognizing alternatives, they can also limit them. That is why Bernát, who has both management and development experience and knowledge, is able to make not only strategic but also high-level operational decisions, in contrast to Gábor and Norbert, who mostly make decisions along strategic lines, but at the same time, it is typical here that in every decision-making process, to be drawn as approvers. In addition, all TMTs are characterized by the execution of mental activities that play a role in creating, retrieving, and modifying knowledge structures (Helfat & Peteraf, 2015).

Many diversity studies do not deal with the role of psychological safety in sufficient depth, even though it plays a similarly crucial and universally valid role as inclusion. That is why in many cases, it is treated as part of the concept of inclusion. Obviously, it has a *raison d'être*, but at the same time, psychological safety goes beyond inclusion, in my opinion, a key quality of the team. When it exists, the team has the

security to dare to take personal risks. Based on my research, I see that the CEO is the main source. In the case of Company A, the CEO sees fit to have it on the correspondence of every employee two levels below him. In his view, this is necessary so that, if the situation requires, he can intervene in the processes and minimize the rate of errors. However, at the organizational level, this translates into the TMT seeing team members as less or not innovative. In fact, however, the lack of initiative is typical due to the fear of killing the "little deer".

Consequently, in the absence of psychological safety, the power of cognitive diversity and all types of diversity still needs to be explored. All this can lead to a decrease in creativity and innovation. Although in the case of Company A, the TMT considers itself to be innovative, and the robustness, multifunctionality, and complexity of its product universe shows this, at the same time, if there is psychological safety, bottom-up innovation could be realized, which would significantly improve organizational renewal and ambidexterity.

The exact opposite characterizes Company B and Company D. For these two organizations, I have presented several cases that show that psychological safety, openness to ideas, and innovations - unlike Company A - is not only a matter of words but is actually realized. In this regard, it is exciting and a basis for further investigation that the use of agility and the agile method is characteristic of both organizations, not only at the project level but also in terms of organizational perception and mindset. Although, according to Kristóf, agility has been implemented in his organizational unit, it seems that agile thinking has not yet been implemented at the organizational level.

Closely related to psychological safety is how the direction of the strategic renewal process develops within the given organizations. The autonomy of the strategic renewal, i.e., the bottom-up operation, was realized in the case of Company B, Company C, and Company D. In these organizations, the active participants in the individual processes are the middle managers and those working at lower levels, which I connected with the good community atmosphere and psychological safety as a moderator. Consequently, in these organizations, the supportive and encouraging attitude of the transformational TMT gives organizational members the security to dare to take interpersonal risks. In contrast, the dominant coalition Company A, especially the CEO, practically blocks bottom-up processes with corrective measures (e.g., Taródy et al., 2021; Hortovány, 2012; Hortoványi et al., 2021).

Accordingly, expanding the conceptual framework of organizational diversity with elements of inclusion and psychological safety is important. This is because, while inclusion was realized in the case of all examined organizations, organizational innovation can only be completed with psychological safety because its absence prevents renewal from below. For example, in all companies, special attention is paid to the members' well-being, the creation of a suitable working environment, the revitalization of community life, etc. Still, at the same time, in the case of Company A, the strong TMT suppresses the members' willingness to take interpersonal risks.

KK3: How does diversity as an organizational value affect strategic renewal and ambidexterity?

Based on the research, in the case of the TMT, the selection of team members according to the separation theory only occurred once; in the other cases, all managers cast their votes in favor of the information/decision-making perspective. The exceptional case is related to Ákos, for whom age was the basis of the comparison. This was achieved through a self-classification process. The young leader classified himself and his group among the senior youth, and the interviewee into the opposite pole, the elderly category (Williams & O'Reilly, 1998). Afterward, the leader's group and the other group were evaluated, then the values were compared (Trepte & Loy, 2017). In the case of Ákos, the characteristic was also manifested that he trusted his own group, i.e., the group of young people, more than an elderly person outside the group, and therefore placed him at a disadvantage (Williams & O'Reilly, 1998). So, based on the case of Ákos and Dávid, regarding the diversity policy of managers at different levels, it can be clearly stated that the TMT's view on diversity also affects the views of those working at middle management levels. The highly knowledgeable professional applying for the job was disadvantaged due to his age. Ákos's negative idea of co-diversity also came into effect in the case of the implementing middle manager, Dávid (Mor Barak et al., 2021).

The research results show that the individual profile is influenced by one category and the visible and invisible elements of diversity. At the same time, the weight of the different categories affects, to another degree, a person's experiences, attitudes, and insights. This is indicated by Ágota's view on social gender and the deficient proportion of women working in IT and holding top management positions within the examined

organizations. Based on Bernát's experience, this does not cause a difference either within the framework of workplaces or higher education because, in all situations, it is knowledge and not the gender of the specific specialist. This is evidenced by the "recognition of girls who are at the top professionally," forming a common circle of university friends that exists to this day, whose members were selected from among the best-performing girls and boys. At the same time, in this case, the question arises as to why there are not enough girls in STEM majors and professions.

In connection with this question, the train of thought returns to the lack of promotion. Accordingly, I believe that serious social-level initiatives are necessary, in which companies also need to participate in an active and not just a participating way. During this time, I understood the attitude of the organizations, which I coded as inactive openness. It is characteristic of all organizations that if people with disabilities and members of gender and age diversity apply to them from among the diversity categories, they are open to receiving applicants. However, the given diversity category - in relation to the Big Six as a whole - only sometimes dares to apply to an IT company due to low self-esteem and the image related to IT in society.

It would definitely be beneficial for organizations to take steps in this direction and develop. I am thinking here, for example, of the "revelation" of openness in this direction appearing on companies' websites, of closer cooperation with universities and high schools, of the declaration of transparency towards the diversity categories displayed on social media sites. Regarding the relationship with schools, it is vital that the territorial boundaries are not limited to Budapest but that the poorer regions are also included since it is even more difficult for children and young people living in disadvantaged situations to break through. The SMEs active in the IT field that participated in the research should take a more significant part in making the field better known to society. Among the TMT members, only Lajos's vision shows social involvement at the organizational level. In his case, the future system appears as a knowledge-sharing platform that allows all students to develop. In the case of Lajos, this aspiration is closely related to his experiences as a teacher. On the other hand, in the case of Company D and Company B, although the takeover from the retraining centers takes place, this is a profit-making move rather than a social role.

6.2 Conclusion

Based on my research, we can state that individual processes take place sequentially or in parallel with respect to individual organizations. Past experiences, family roots, achievements, failures, and successes greatly influence TMT preferences. During my research work, I paid attention to the discovery of mediating effects, which I managed to achieve by including, for example, diversity management practices, psychological safety, and management style. Based on all of this, I managed to reveal that the organizations included in the investigation has "the only tool is attention," and none of them have management tools or practices related to diversity. In addition, the openness towards individual diversity categories is only inactive in the organizations. Consequently, they do nothing to attract the individual diversity categories into the organization, which can be considered as blindness in terms of social responsibility.

My research enriches the literature on top management theory by examining the role of diversity management. My research method was based on qualitative research, the number of which needs to be improved in the diversity management literature. My thesis also considers work-oriented dimensions such as functional and educational background. My research enriches top management theories by emphasizing a deeper examination of cognitive processes, during which it connects managerial cognition and the decisions, renewal, and ambidexterity that form the origin of corporate strategy actions. Kin my guidance, I have focused on process mechanisms such as psychological safety, team disunity, and diversity beliefs by synthesizing and using recent and early studies. All of these play a mediating role between management orientation and company results. My dissertation also enriches the literature in this regard, as the present topic is a less researched area among diversity studies.

The cases, opinions, and findings described above were created due to processes characterized by circularity. Part of this is socialization, which constantly refines and changes each individual due to events. As a result, this thesis describes the current state of the TMT of the given organization rather than a permanent state.

6.3 Further possible research directions

At this point in my thesis, I must draw attention to the limitations of my research. Due to the nature of the research, the greatest resource of qualitative research is internal generalizability (Maxwell, 1996). At the same time, in many cases, there is no reason to assume that the experiences of a valid qualitative research would not be valid in a different context. Let's see how typical my sample is, which supports the generalization! The number of individuals examined in the research is relatively small (fourteen people), and the research sample can be considered homogeneous in certain aspects (people working in the IT field, with higher education, and working in managerial positions). During the sample selection, I tried to the best of my ability to include as many different subjects as possible: they hold the role of CEO, senior manager, or middle manager; their distribution by age, functional experience, and gender distribution is heterogeneous. During my search, I did not manage to speak with a female senior manager who would have led the specialized IT areas. I also strove to represent both those with few and many subordinates. The research results can be generalized in the light of these limiting factors.

In light of all of this, using the methodology used in my dissertation, I recommend the continuation and expansion of future research on a pattern significantly different from the current one, as follows:

- extending the investigation to the middle management level,
- extension of the investigation to workers and stakeholders at lower levels;
- the extension of the investigation to women holding senior management positions in fields closely related to IT;
- extending the investigation to a broader range of managers with Hungarian roots across the border.

The questions that I would consider worthy of further investigation are:

- Further investigations related to the individual's profile: are my results confirmed in relation to the relationship between the diversity and the profile of the organizations and in reference to managerial cognition and corporate actions.

- A more in-depth examination of how and with incentives the domestic, medium-sized IT organizations could be made active participants in social responsibility.
- Extending the analysis to other diversity categories (e.g., origin, disability, sexual orientation, Hungarian roots across the border).

In this research, I did not go into the following, in my view, fascinating areas related to the topic, which I would consider worth investigating in the future:

- Repeating the interview with the interviewees today; Measures introduced as a result of economic changes, with the aim of exploring ways of renewal;
- Longitudinal monitoring of the meaning and management of diversity and information-seeking schemes can be an exciting area of research. The purpose of this research was not to follow up on a specific period, such as a period of renewal, exploitation, or exploration.

7 Felhasznált irodalom

1. Abatecola, G. & Cristofaro, M. (2020), "Hambrick and Mason's "Upper Echelons Theory": evolution and open avenues", *Journal of Management History*, Vol. 26 No. 1, pp. 116-136. <https://doi.org/10.1108/JMH-02-2018-0016>
2. Abatecola, G., Caputo, A. & Cristofaro, M. (2018), "Reviewing cognitive distortions in managerial decision making: toward an integrative co-evolutionary framework", *Journal of Management Development*, Vol. 37 No. 5, pp. 409-424.
3. Ablonczy B.& Bárdi N. (2010): Határon túli magyarok: mérleg, esély, jövő In.: Kiss T.: Határon túli magyarság a 21. században. <https://mek.oszk.hu/09200/09282/pdf/>
4. Acker, J. (2006). Inequality Regimes: Gender, Class, and Race in Organizations. *Gender & Society*, 20(4), 441–464. <https://doi.org/10.1177/0891243206289499>
5. Agarwal, R. & Helfat, C. E. (2009), Strategic renewal of organizations. *Organization science*, Vol. 20, No. 2, pp.281-293.
6. Agócs, C., & Burr, C. (1996), Employment equity, affirmative action and managing diversity: assessing the differences. *International Journal of Manpower*, 17(4/5), 30-45.
7. Alvesson, M. & Billing, D. Y. (2009), *Understanding gender and organizations*. London–Thousand Oaks–New Delhi–Singapore: Sage Publications. Second Edition. ISBN 978-1-84860-016-4
8. Andorka, R. (2006): *Bevezetés a szociológiába*. Budapest: Osiris Kiadó.
9. Anker, R. (1997). Theories of occupational segregation by sex: An overview. *International Labour Review*, 136(3), 315-339.
10. Anker, R., Melkas, H. & Korten, A. (2003): Gender-based occupational segregation in the 1990's. Working paper. International Labour Office
11. April, K. & Shockley, M (2007), *Diversity: New Realities in a Changing World*, Palgrave Macmillan, Basingstoke, ISBN-13: 978-0-230-00133-6.
12. Arendt, L. A., Priem, R. L., & Ndofor, H. A. (2005): A CEO-adviser model of strategic decision making. *Journal of Management*, 31: 680-699. old
13. Backes-Gellner, U., & Veen, S. (2013), Positive effects of ageing and age diversity in innovative companies – large-scale empirical evidence on company productivity.

Human Resource Management Journal, 23(3), 279–295.
<https://doi.org/10.1111/1748-8583.12011>

14. Baden-Fuller, C. & VOLBERDA, H. W. (1997), Strategic renewal: How large complex organizations prepare for the future. *International Studies of Management & Organization*, Vol. 27, No. 2, 95-120.old.
15. Bairoh, S. (2008), Current Debates on Classifying Diversity Management: Review and a Proposal, Working Papers 534, Hanken School of Economics.
16. Baskin, J. S. (2013), The Internet Didn't Kill Blockbuster, The Company Did It To Itself. *Forbes*. <https://www.forbes.com/sites/jonathansalembaskin/2013/11/08/the-internet-didnt-kill-blockbuster-the-company-did-it-to-itself/?sh=1b70ec2f6488&fbclid=IwAR32aEwW3J8j7hl4iZyhApBBhYTPJVNkup5sAki418k82Zt7ZFFWanC4sH4>
17. Beauregard, T. A. (2019), Diversity in teams. In H. Mensi-Klarbach & A. Risberg (Eds.), *Diversity in organizations: Concepts and practices* (2nd ed.) (pp. 152-180). London: Red Globe Press
18. Becánics, A. (2012), Az egyenlő vagy egyenlő értékűként elismert munkáért egyenlő bért elv fejlődése az Európai Unió Bíróságának esetjogában. *Debreceni Jogi Műhely*, 9(1), 66–73.
http://www.debrecenijogimuhely.hu/archivum/1_2012/az_egyenlo_vagy_egyenlo_ertekukent_elismert_munkaert_egyenlo_bert_elv_fejlodes/
19. Beck-Bíró, K. (2009), A szervezeti keretek között történő egyéni önmegvalósítás, PhD thesis, Budapesti Corvinus Egyetem, Gazdálkodástani Doktori Iskola.
20. Benischke, M. H., Martin, G. P. & Glaser, L. (2019): CEO equity risk bearing and strategic risk taking: The moderating effect of CEO personality. *Strategic Management Journal*, 40: 153-177.
21. Bezrukova, K., Spell, C. S., & Perry, J. L. (2010), Violent splits or healthy divides? Coping with injustice through faultlines. *Personnel Psychology*, 63, 719–751. old.
22. Bieber F. & Bieber R. (2021), *Negotiating Unity and Diversity in the European Union*. Palgrave Macmillan; 1st ed. 2021 edition. ISBN-10 : 303055015X
23. Blarr, W. H. (2012), Organizational Ambidexterity. In W. H. Blarr (Ed.), *Organizational Ambidexterity: Implications for the Strategy-Performance Linkage* (pp. 57–82). Gabler Verlag. https://doi.org/10.1007/978-3-8349-6859-3_3

24. Bokor A. (2000), Szervezeti kultúra és tudásintegráció: a termékfejlesztés problémája. Ph.D. értekezés, Budapest, BKÁE Vezetési és Szervezési Tanszék.
25. Bouwman, H., Carlsson, C., Carlsson, J.P., Nikou, S., Sell, A., & Walden, P. (2014), How Nokia failed to nail the Smartphone market. 25th European Regional Conference of the International Telecommunications Society (ITS): "Disruptive Innovation in the ICT Industries: Challenges for European Policy and Business", Brussels, Belgium, 22nd-25th June, 2014
26. Brahma, S.; Nwafor, C.; Boateng, A. (2020), Board gender diversity and firm performance: The UK evidence. Int. J. Financ. Econ. <https://doi.org/10.1002/ijfe.2089>
27. Burrell, G. & Morgan, G. (1979), Sociological paradigms and organizational analysis. Heinemann Educational Books, London
28. Burrell, G. (1994), Modernism, postmodernism and organizational analysis: the contribution of Jurgen Habermas, Organization Studies, 1 – 9 old.;
29. Butler, R. N. (1969), Age-ism: another form of bigotry. Gerontologist. 9, 243-246
30. Byrne, D. (1971): The attraction paradigm. New York: Academic Press. Cannon-Bowers, J. A., & Salas, E. (2001), Reflections on shared cognition. Journal of Organizational Behavior, 22, 195–202. old.
31. Calás, M.B., Ou, H. & Smircich, L. (2013), Woman' on the move: mobile subjectivities after intersectionality, Equality, Diversity and Inclusion: An International Journal, Vol. 32 No. 8, 708-731. old.
32. Campbell, K. & Mínguez-Vera, A. (2008), Gender Diversity in the Boardroom and Firm Financial Performance. J Bus Ethics 83, 435–451 (2008). <https://doi.org/10.1007/s10551-007-9630-y>
33. Carlin D (2019), Democratic, Authoritarian, Laissez-Faire: What Type Of Leader Are You? Forbes. <https://www.forbes.com/sites/davidcarlin/2019/10/18/democratic-authoritarian-laissez-faire-what-type-of-leader-are-you/?sh=2550f5942a6b>
34. Carmeli, A. & Halevi, M. Y. (2009), How top management team behavioral integration and behavioral complexity enable organizational ambidexterity: The moderating role of contextual ambidexterity. The Leadership Quarterly, 20(2), 207-218. <https://doi.org/10.1016/j.leaqua.2009.01.011>

35. Carson, J.B., Tesluk, P.E. & Marrone, J.A. (2007), Shared leadership in teams: an investigation of antecedent conditions and performance. *Acad. Manag. J.* 50 (5), 1217-1234.
36. Chang, M.L. (2000), The Evolution of Sex Segregation Regimes *American Journal of Sociology* Vol. 105 Number 6 (May2000), 1658–1701 old.
37. Chermack, T. J., Bodwell, W. & Glick, M. (2010), Two strategies for leveraging teams toward organizational effectiveness: Scenario planning and organizational ambidexterity. *Advances in Developing Human Resources*, Vol. 12, No. 1, pp.137-156.
38. Chia, R. (2003), Organization Theory as Postmodern Science. In H. Tsoukas, & C. Knudsen (szerk.), *The Oxford Handbook of Organization Theory* (113 - 140): Oxford: Oxford University Press.
39. Child, J. (1972), Organizational structure, environment and performance: The role of strategic choice. *Sociology*, 6(1): 1-22.
40. Claes, M. T (2019), Diversity in Europe: Its Development and Contours. In H. Mensi-Klarbach, & A. Risberg (Eds.), *Diversity in Organizations: Concepts and Practises* (2. ed., pp. 31-61). Red Globe Press.
41. Corporateinformation (2020), These are the top 100 companies ranked by Current Market Capitalization (U.S.\$ millions) Tanulmány. <https://www.corporateinformation.com/Top-100.aspx?topcase=b>
42. Cox, T., Jr. (2001), *Creating the multicultural organization: A strategy for capturing the power of diversity*. Jossey-Bass.
43. Cunliffe, A. (2011), Crafting Qualitative Research: Morgan and Smircich 30 years on. *Organizational Research Methods*, 14 (4), 648-673. <https://doi.org/10.1177/1094428110373658>
44. Cyert, R.M. & March, J.G. (1963), *A Behavioural Theory of the Firm*, Prentice Hall, Englewood Cliffs, NJ.
45. Csedő Z. & Zavarkó M. (2019), *Változásvezetés*. Akadémiai Kiadó Zrt. ISBN:9789630599573
46. Csedő, Z. (2006), *Szervezeti változás és változásvezetés a folyamatos differenciálódás és integráció tükrében: az innovatív gyógyszeripar példája*. Doktori (PhD) értekezés. Budapesti Corvinus Egyetem.

47. Csedő, Z., Zavarkó, M. & Sára, Z. (2019): Tudásmenedzsment és stratégiai kettős képesség – Felsővezetői döntések elemzése az innovációs stratégia megvalósítása során. *Vezetéstudomány - Budapest Management Review*, 50 (3). 36-49. old. DOI <https://doi.org/10.14267/VEZTUD.2019.03.04>
48. Danowitz, M. A., Hanappi-Egger, E. & Mensi-Klarbach, H. (2012): *Diversity in Organizations: Concepts and Practices*, Eds., Palgrave, London. ISBN 10: 0230361315
49. Dijk, H., Meyer, B., van Engen M. & Loyd, D., (2016): Microdynamics in diverse teams: a review and integration of the diversity and stereotyping literature. *Acad. Manag. Ann.* 11 (1), 517-557
50. Dixon-Fyle S., Dolan K., Hunt V. & Prince S. (2020): Diversity wins. How inclusion matters. McKinsey Company. <https://www.mckinsey.com/featured-insights/diversity-and-inclusion/diversity-wins-how-inclusion-matters#download/%2F~%2Fmedia%2Fmckinsey%2Ffeatured%20insights%2Fdiversity%20and%20inclusion%2Fdiversity%20wins%20how%20inclusion%20matters%2Fdiversity-wins-how-inclusion-matters-vf.pdf%3FshouldIndex%3Dfalse>
51. Dobák M. (2008): *Szervezeti formák és vezetés*. Közgazdasági és Jogi Könyvkiadó, Budapest.
52. Dobák, M. & Antal, Z. (2010): *Vezetés és szervezés: Szervezetek kialakítása és működtetése*. Budapest: Aula.
53. Dobák, M., Hortoványi, L. & Szabó, Z. R. (2013): Hatásos üzleti stratégiák a különböző vállalati fejlődési szakaszokban = Effective business strategies in different development stages of corporations [Online]. Hungary, Europe. <http://search.ebscohost.com/login.aspx?direct=true&db=edsbas&AN=edsbas.ftmtak.oai.real.mtak.hu.12124&site=eds-live>
54. Donaldson, L. (2003): Organization Theory as a Positive Science. In H. Tsoukas, & C. Knudsen (szerk.), *The Oxford Handbook of Organization Theory* (39-62): Oxford: Oxford University Press.
55. Duhigg C. (2016): What Google Learned From Its Quest to Build the Perfect Team. <https://www.nytimes.com/2016/02/28/magazine/what-google-learned-from-its-quest-to-build-the-perfect-team.html>
56. Dunavölgyi M. (2017): Az alacsony női részvétel okai a felsővezetésben: Mit mondanak erről a döntéshozók?. (2017)

57. Duncan, R. (1976): The ambidextrous organization: Designing dual structures for innovation. *The management of organization design*, 1, 167–188.
58. Dupcsik Cs (2009): A magyarországi cigánység története. *Történelem a cigánykutatások tükrében, 1890–2008*. Budapest: Osiris. 2009
59. Dwyer, S., Richard, O. C., & Chadwick, K. (2003). Gender diversity in management and firm performance: The influence of growth orientation and organizational culture. *Journal of Business Research* 56: 1009-1019
60. Eagly, A. H. & Carli, L. L. (2007): Women and the labyrinth of leadership. *Harvard Business Review*.
61. Edmondson A. C. & Lei Z. (2014): Psychological Safety: The History, Renaissance, and Future of an Interpersonal Construct. *Annual Review of Organizational Psychology and Organizational Behavior* Vol. 1:23-43 (Volume publication date March 2014). <https://doi.org/10.1146/annurev-orgpsych-031413-091305>
62. Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44, 350-383.
63. Eerola P., Paananen M & Repo K. (2021): ‘Ordinary’ and ‘diverse’ families. A case study of family discourses by Finnish early childhood education and care administrators, *Journal of Family Studies*, DOI: 10.1080/13229400.2021.1939100
64. Eger, L., Egerova, D., Jirincova, M., Petrtyl, J., Plevny, M., Bitterova, M., Lancaric, M., Peterka, A., Pisonova, M., Savov, R., Hajos, L., Csegledi, C., Cseh, P. I., Rozwadowski, J., Wojcik, J. (2012). Diversity management. Comparison, the best practices of Visegrad countries. Plzen: NAVA.
65. Eggers, J. P., & Kaplan, S. (2013). Cognition and capabilities: a multi-level perspective. *Academy of Management Annals*, 7, 295-340. <https://doi.org/10.1080/19416520.2013.769318>
66. EIGE (2021): Gender Equality Index 2021: Health. doi:10.2839/834132 <https://eige.europa.eu/publications/gender-equality-index-2021-health>
67. Eisenhardt, K. E., & Sull, D. N. (2001). Strategy as simple rules. *Harvard Business Review*, 79, 107-116. Retrieved from <https://hbr.org/2001/01/strategy-as-simple-rules>

68. Ensley, M.D., Pearson, A., Pearce, C.L., 2003. Top management team process, shared leadership, and new venture performance: a theoretical model and research agenda. *Hum. Resour. Manag. Rev.* 13 (2), 329-346
69. Ernst & Young (2021): Hegedüs Éva: Empátia. Agilitás. Gyors döntésképesség. https://www.ey.com/hu_hu/COVID-19/empatia-agilitas-gyors-donteskepesseg?fbclid=IwAR3VikBsqE4FqiRQft1QMtJNmFYsnLHULdzMnnN05_UeXMj7iThLaMqYfEo
70. European Commission (2012a) Discrimination in the EU in 2012. Special Barometer 393. http://www.progettisociali.it/uploads/File/Discrimination_summary.pdf
71. European Commission (2012b) Active ageing. Special Eurobarometer; No 378. https://www.sbf.admin.ch/dam/sbf/de/dokumente/active_ageing_report.pdf.download.pdf/active_ageing_report.pdf
72. European Commission (2019a). Report on Equality between men and women in the EU. <https://op.europa.eu/en/publication-detail/-/publication/f3dd1274-7788-11e9-9f05-01aa75ed71a1/>
73. European Commission (2019b). Special Eurobarometer 437, Discrimination in the EU in 2019. <https://europa.eu/eurobarometer/api/deliverable/download/file?deliverableId=71116>
74. European Commission (2020a): A Bizottság közleménye az Európai Parlamentnek, a Tanácsnak, az Európai Gazdasági és Szociális Bizottságnak és a Régiók Bizottságának. Az egyenlőségközpontú Unió: a 2020-2025 közötti időszakra szóló nemi esélyegyenlőségi stratégia. COM(2020) 152 final. Európai Bizottság, Brüsszel.
75. European Commission (2020b): Roma equality, inclusion and participation in the EU. The new strategic framework for the equality, inclusion and participation of Roma in EU countries and preparation of the post-2020 initiative. Timeframe: 2020-2030. https://ec.europa.eu/info/policies/justice-and-fundamental-rights/combating-discrimination/roma-eu/roma-equality-inclusion-and-participation-eu_en
76. European Commission (2021b): Women in Digital Scoreboard 2021. Country profiles. <https://ec.europa.eu/newsroom/dae/redirection/document/80470>

77. European Commission (2021c): A digitális gazdaság és társadalom fejlettségét mérő mutató, 2021: általános előrelépés tapasztalható a digitális átállás terén, de újabb uniós szintű erőfeszítésekre van szükség. https://ec.europa.eu/commission/presscorner/detail/hu/ip_21_5481
78. European Commission (2021d): A digitális gazdaság és társadalom fejlettségét mérő mutató (DESI), 2021 Magyarország. <https://ec.europa.eu/newsroom/dae/redirection/document/80589>
79. European Commission (2021e): A bizottság közleménye az európai parlamentnek, a tanácsnak, az európai gazdasági és szociális bizottságnak és a régiók bizottságának. Ifjúsági foglalkoztatási támogatás: Út a munka világába a következő generációk számára. <https://eur-lex.europa.eu/legal-content/HU/TXT/?uri=CELEX%3A52020DC0276#>
80. European Committee (2021a): 2021 report on gender equality in the EU. Free Thrive Lead. Luxembourg: Publications Office of the European Union
81. European Parliament (2021): Reducing unemployment: EU policies explained. <https://www.eumonitor.eu/9353000/1/j9vvik7m1c3gyxp/vkzoneq2mdzh?ctx=vg9id54xf7rx>
82. Eurostat (2019): Smarter, greener, more inclusive? Indicators to support the Europe 2020 strategy — 2019 edition. <https://ec.europa.eu/eurostat/documents/3217494/10155585/KS-04-19-559-EN-N.pdf/b8528d01-4f4f-9c1e-4cd4-86c2328559de?t=1570181425000>
83. Eurostat (2021a): Four in ten young adults hold a tertiary degree. <https://ec.europa.eu/eurostat/en/web/products-eurostat-news/-/ddn-20210625-1>
84. Eurostat (2021b): Women remain outnumbered in management. <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/edn-20210305-2>
85. Filep R. (2018): Vezetési stílus vizsgálata MLQ segítségével a szabolcsmegyei kisvállalkozások körében. International Journal of Engineering and Management Sciences (IJEMS) Vol. 3. (2018). No. 4. DOI: 10.21791/IJEMS.2018.4.5.
86. Finkelstein, S. & Hambrick, D.C. (1996): Strategic Leadership: Top Executives and Their Effects on Organizations, West Publishing Company, New York, NY.

87. Finkelstein, S., Hambrick, D. C. & Cannella, A. A. J. (2009). *Strategic leadership—Theory and research on executives, top management teams, and boards*. Oxford, UK: Oxford University Press.
88. Floyd, S.W. & Lane, P.J., (2000): Strategizing throughout the organization: managing role conflict in strategic renewal. *Acad. Manag. Rev.* 25 (1), 154-177
89. Fodor, E (2004). The State Socialist Emancipation Project: Gender Inequality in Workplace Authority in Hungary and Austria. *Journal of Women in Culture and Society*, 29(3), 783-813. old.
90. Forray R. K. (2013): Előszó. In Varga, A. (szerk). *Esélyegyenlőség a mai Magyarországon*. Pécs: Pécsi Tudományegyetem.
91. Gagnon, S., & Cornelius, N. (2000). Re-examining workplace equality: the capabilities approach. *Human Resource Management Journal*, 10(4), 68–87.
92. García-Granero, A., Fernández-Mesa, A., Jansen, J.J., & Vega-Jurado, J. (2018). Top management team diversity and ambidexterity: The contingent role of shared responsibility and CEO cognitive trust. *Long Range Planning*.
93. Gardenswartz, L. & Rowe A. (1998): *Managing Diversity: A Complete Desk Reference and Planning Guide*. Ed. Jeffrey Krames. United States: McGraw Hill, 1998. Print. ISBN-13: 978-0070220041
94. Garner S (2010): *Racism an Introduction*, London / Thousand Oaks, CA: SAGE Publications Ltd.
95. Garretsen H., Stoker J. I. & Weber R. A (2020): Economic perspectives on leadership: Concepts, causality, and context in leadership research, *The Leadership Quarterly*, Volume 31, Issue 3, 2020, 101410, ISSN 1048-9843, <https://doi.org/10.1016/j.leaqua.2020.101410>
96. Gelei, A. (2006): A szervezet interpretatív megközelítése, *Vezetéstudomány / Budapest Management Review*, 38 (1. ksz). pp. 79-97. old. DOI:10.14267/VEZTUD.2006.ksz1.08
97. Geraldine, H. (2015): The Politics of Equality and Diversity: History, Society, and Biography (2015-11-11T22:58:59). In Bendl R., Bleijenberch I., Henttonen E., Mills A. *The Oxford Handbook of Diversity in Organizations* (Oxford Handbooks). OUP Oxford. Kindle Edition.

98. Gibson, C. B., & Birkinshaw, J. (2004): The Antecedents, Consequences, and Mediating Role of Organizational Ambidexterity. *Academy of Management Journal*, 47 (2), 209-226. <https://doi.org/10.2307/20159573>
99. Gilbert, J.A., Stead, B.A. & Ivancevich, J.M. Diversity Management (1999): A New Organizational Paradigm. *Journal of Business Ethics* 21, 61–76 (1999).<https://doi.org/10.1023/A:1005907602028>
100. Gino, F., Wilmuth C. A &, Brooks A. W. (2015): Compared to Men, Women View Professional Advancement as Equally Attainable, but Less Desirable. *Proceedings of the National Academy of Sciences* 112, no. 40.
101. Gioia, D. A., & Pitre, E. (1990). Multiparadigm perspectives on theory building. *The Academy of Management Review*, 15(4), 584–602. <https://doi.org/10.2307/258683>
102. Grant, J. (1988) Women as managers: what can they offer to organizations? *Organizational Dynamics*, 1: 56–63
103. Groutsis, D., Ng, E. S., & Ozturk, M. B. (2014): Cross-cultural and diversity management intersections: lessons for attracting and retaining international assignees. In: Özbilgin, Mustafa F., Groutsis, Dimitria, and Harvey, William S., (eds.) *International Human Resource Management*. Cambridge University Press, New York, NY, USA, pp. 23-46.
104. Guzzo, R., & Dickson, M. (1996): Teams in organizations: Recent research on performance and effectiveness. *Annual Review of Psychology*, 47, 307–338 old.
105. Hafeez, I., Yingjun, Z., Hafeez, S., Mansoor, R., & Rehman, K. U. (2019). Impact of workplace environment on employee performance: mediating role of employee health. *Business, Management and Economics Engineering*, 17(2), 173-193.<https://doi.org/10.3846/bme.2019.10379>
106. Håkonsson, D.D., Burton, R.M., Obel, B. & Lauridsen, J.T., (2012). Strategy implementation requires the right executive style: evidence from Danish SMEs. *Long Range Plan.* 45 (2), 182-208
107. Hambrick D. C. (2019): Research in strategic leadership: Where next? Keynote address, special conference of the strategic leadership and governance interest group, strategic management society, Las Vegas NV.

108. Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *The Academy of Management Review*, 9(2), 193–206. <https://doi.org/10.2307/258434>
109. Hambrick, D. C., Cho, T. S., & Chen, M. (1996). The influence of top management team heterogeneity on firms' competitive moves. *Administrative Science Quarterly*, 41, 659-684. <https://doi.org/10.2307/2393871>
110. Hambrick, D.C. (1995), "Fragmentation and the other problems CEOs have with their top management teams", *California Management Review*, Vol. 37 No. 3, pp. 110-127.
111. Hambrick, D.C., Finkelstein, S. & Mooney, A.C. (2005), "Executive job demands: new insights for explaining strategic decisions and leader behaviors", *Academy of Management Review*, Vol. 30 No. 3, pp. 472-491.
112. Hardy, C. & Clegg, S. (1996): Some dare call it power. Pages 622 – 641 in Clegg, Stewart & Hardy, Cynthia & Nord, Walter R. (eds.): *Handbook of Organization Studies*. Sage Publications, London and Thousand Oaks
113. Harrison, D.A., & Klein, K.J. (2007). What's the difference? Diversity constructs as separation, variety or disparity in organizations. *The Academy of Management review*, 32(4), 1199-1228. <https://doi.org/10.2307/20159363>
114. Harrison, D.A., Price, K.H. & Bell, M.P. (1998), "Beyond relational demography: time and the effects of surface-and deep-level diversity on work group cohesion", *Academy of Management Journal*, Vol. 41 No. 1, pp. 96-107.
115. Harrison, J. S., Thurgood, G. R., Boivie, S. & Pfarrer, M. D. (2019): Measuring CEO personality: Developing, validating, and testing a linguistic tool. *Strategic Management Journal*, 40: 1316-1330.
116. Hatch, M. J., & Yanow, D. (2003): *Organization Theory as an Interpretive Science*. In H. Tsoukas, & C. Knudsen (szerk.), *The Oxford Handbook of Organization Theory* (old.: 63-87): Oxford: Oxford University Press.
117. Hearn, J., & Louvrier, J., (2016): *Theories of Difference, Diversity, and Intersectionality*: Oxford, UK, Oxford University Press.
118. Heckl, E., Enichlmair, C. & Pecher, I. (2010): *Study on non-legislative initiatives for companies to promote gender equality at the workplace*. Vienna, KMU Forschung AUSTRIA
<http://ec.europa.eu/social/BlobServlet?docId=5631&langId=en>

119. Heyden, M. L. M. (2012): Essays on Upper Echelons & Strategic Renewal: A Multilevel Contingency Approach. <https://repub.eur.nl/pub/32167/EPS2012259STR9789058923042.pdf>
120. Hiller, N. J., DeChurch, L. A., Murase, T., & Doty, D. (2011). Searching for outcomes of leadership: A 25-year review. *Journal of Management*, 37: 1137-1177.
121. Holck, L., Muhr, S.L. & Villesèche, F. (2015): Identity, diversity and diversity management: On theoretical connections, assumptions and implications for practice, *Equality, Diversity and Inclusion*, Vol. 35 No. 1, pp. 48-64.
122. Homan AC, van Knippenberg D, Van Kleef GA & De Dreu CK. (2007): Bridging faultlines by valuing diversity: diversity beliefs, information elaboration, and performance in diverse work groups. *J Appl Psychol.* 2007 Sep;92(5):1189-99. doi: 10.1037/0021-9010.92.5.1189.
123. Honvári P. & Lados M. (2015): WP3 Társadalmi-gazdasági folyamatok modellezése 2050-ig. D3.9 Összefoglaló a modellezés eredményeiről. MTA Közgazdaság- és Regionális Tudományi Kutatóközpont.
124. Hortoványi, L. (2012). *Entrepreneurial Management*. Aula Kiadó: Budapest.
125. Hortoványi, L., Füzes, P. & Szabó, Zs. R. (2019). A szervezeti figyelem irányítása kettős képességű szervezetben. *Vezetéstudomány*, 50(10), 74-86. <https://doi.org/10.14267/VEZTUD.2019.10.07>
126. Hoskisson, R. E., Chirico, F., Zyung, J., & Gambeta, E. (2017) Managerial risk taking: A multitheoretical review and future research agenda. *Journal of Management*, 43: 137-169.
127. Houlihan, F., (2022): Autocratic, Democratic and Laissez-Faire Leadership Styles: Is there a link between these Leadership Styles and Absenteeism/ Withdrawal Amongst Millennials?. Masters. National College of Ireland.
128. Ivancevich, J. M. & Gilbert J. A. (2000): Diversity Management: Time for a New Approach, *Public Personnel Management*. 29(1), pp. 75–92. doi: 10.1177/009102600002900106.
129. Jackson, S.E., May, K.E. & Whitney, K. (1995), “Understanding the dynamics of diversity in decisionmaking teams”, in Guzzo, R.A. and Salas, E. (Eds), *Team Effectiveness and Decision Making in Organizations*, Jossey-Bass, San Francisco, pp. 204-261.

130. Jahanshahi, A.A.; Brem, A. (2017): Sustainability in SMEs: Top management teams behavioral integration as source of innovativeness. *Sustainability* 2017, 9, 1899.
131. Jansen J., Vera D. & Crossan M (2009): Strategic leadership for exploration and exploitation: The moderating role of environmental dynamism *The Leadership Quarterly*, 20 (1) (2009), pp. 5-18
132. Jansen, J.J., George, G., Van den Bosch, F.A. & Volberda, H.W. (2008): Senior team attributes and organizational ambidexterity: the moderating role of transformational leadership. *J. Manag. Stud.* 45 (5), 982-1007.
133. Janssens, M. & Zanoni, P. (2021) 'Making Diversity Research Matter for Social Change: New Conversations Beyond the Firm', *Organization Theory*. doi: [10.1177/26317877211004603](https://doi.org/10.1177/26317877211004603).
134. Jewson, N. & Mason, D. (1986) 'The Theory and Practice of Equal Opportunities Policies: Liberal and Radical Approaches', *The Sociological Review*, 34(2), pp. 307–334. doi: [10.1111/j.1467-954X.1986.tb02704.x](https://doi.org/10.1111/j.1467-954X.1986.tb02704.x). In.: *The Oxford Handbook of Diversity in Organizations (Oxford Handbooks)* . OUP Oxford. Kindle Edition. In.: *The Oxford Handbook of Diversity in Organizations (Oxford Handbooks)* . OUP Oxford. Kindle Edition.
135. Jonsen, K., Maznevski, M. L., & Schneider, S. C. (2011). Diversity and its not so diverse literature: An international perspective. *International Journal of Cross Cultural Management*, 11(1), 35–62. <https://doi.org/10.1177/1470595811398798>
136. Kardosné K. E. (2000): Az emberi jogok nemzetközi védelme. Ph.D. értekezés. Nemzetközi Kapcsolatok Tanszék Budapesti Közgazdaságtudományi és Államigazgatási Egyetem. http://phd.lib.uni-corvinus.hu/118/1/kaponyi_ervsebet.pdf
137. Kark, R., & Carmeli, A. (2009). Alive and creating: The mediating role of vitality and aliveness in the relationship between psychological safety and creative work involvement. *Journal of Organizational Behavior*, 30, 785-804.
138. Kelemen, M., & Rumens, N. (2008): *An Introduction to Critical Management Theory*. London: SAGE.
139. Kenderfi, M. (2011): Foglalkozás speciális helyzetű csoportokkal. Letöltés: <https://docplayer.hu/69314053-Foglalkozas-specialis-helyzetu-csoportokkal-dr-kenderfi-miklos.html>

140. Khan, N. (2018): Cognitive Diversity: Real Fuel for Growth Engine with Sustainable Future. *IOSR Journal of Business and Management*. Volume 20, Issue 12. Ver. II, 33-38 old.
141. Kirchmeyer C.& Cohen, A. (1992): Multicultural Groups. Their Performance and Reactions with Constructive Conflict. *Group & Organization Management*, Vol. 17, No. 2, 1992, pp. 153-170. doi:10.1177/1059601192172004
142. Kiss M. (2015): Trends in female employment, European Parliament, 2015 October. Briefing. European Parliamentary Research Service. Members' Research Service. PE 569.049
143. Klamroth, K. (2013): A Handbook on Gender Equality Best Practices in European Journalists' Unions. Brussels.
144. Knights, D. & Omanović, V. (2015): Rethinking diversity in organizations and society. In R. Bendl, I. Bleijnenbergh, E. Henttonen and A. Mills (Eds), *The Oxford handbook of diversity in organizations*. Oxford: Oxford University Press, p. 83–108. <https://doi.org/10.1093/oxfordhb/9780199679805.013.22>
145. Kokot K., Tipurić D. & Čalopa M. K. (2021): Upper echelon theory: A review and future research agenda. In: Tipurić D., & Cindrić L (2021): *Building Resilient Boards: Facing Emerging Challenges in Corporate Governance*. Book of proceedings. Zagreb: CIRU - Governance Research And Development Centre. p. 123-135.
146. Koncz, K. (2010): A munkaerőpiac nemek szerinti szegregációjának jelensége és mérése. *Statisztikai Szemle*, 88 (10-11), 1082-1105. old.
147. Köllen, T. (2021): Diversity Management: A Critical Review and Agenda for the Future, *Journal of Management Inquiry*, 30(3), pp. 259–272. doi: 10.1177/1056492619868025
148. Kvale, S. (1996): *InterViews*. An introduction to qualitative research interviewing. Sage.
149. Lau, D. C., & Murnighan, J. K. (1998): Demographic diversity and faultlines: The compositional dynamics of organizational groups. *Academy of Management Review*, 23, 325–340. old
150. Lentin, A (2008). Europe and the Silence about Race, *European Journal of Social Theory*, 11(4): 487–503. DOI: 10.1177/1368431008097008.

151. Levinthal, D. A., & March, J. G. (1993). The myopia of learning. *Strategic Management Journal*, 14(S2), 95–112.
152. Liff, S. & Wajcman, J. (1996). Sameness and ‘difference’ revisited: which way forward for equal opportunities initiatives? *Journal of Management Studies*, 33: 79–94.
153. Linnehan, F. & Konrad, A. M. (1999): Diluting diversity: Implications for intergroup inequality in organizations. *Journal of Management Inquiry* 8(4):399-414. <https://doi.org/10.1177/105649269984009>.
154. Litvin, D. R. (1997): The Discourse of Diversity: From Biology to Management, *Organization* 4(2): 187–209, <https://doi.org/10.1177/135050849742003>.
155. Lo, F. Y., Wang, Y. & Zhan, W. (2020). Does TMT cultural diversity contribute to firm performance and do socialisation and tenure matter? A test of two competing perspectives. *Personnel Review*, 49(1), 324–348.
156. Lovelace, J. B., Bundy, J., Hambrick, D. C. & Pollock, T. G. (2018): The shackles of CEO celebrity: Sociocognitive and behavioral role constraints on “star” leaders. *Academy of Management Review*, 43: 419-444.
157. Maji, S & Dixit, S. (2020). Gendered processes and women’s stunted career growth: An Exploratory Study of Female Software Engineers. *The Qualitative Report*, 25(8), 3067–3084
158. Manata, B., (2021) “Investigating the Impact of Racial Diversity in Decision-making Groups: The Moderating Role of Relationship Conflict”, *Negotiation and Conflict Management Research* 14(1). doi: <https://doi.org/10.34891/7whc-j568>
159. Mannix, E. & Neale, M. A. (2005) ‘What Differences Make a Difference?: The Promise and Reality of Diverse Teams in Organizations’, *Psychological Science in the Public Interest*, 6(2), 31–55 old.
160. March, J. G. (1991) Exploration and exploitation in organizational learning. *Organization Science*, Vol. 2, No. 1, pp.71.
161. Marshall S. (2019): From #Metoo To #Howto: Promoting Diversity and Inclusion in Corporate America. *Columbia Business School*. <https://www8.gsb.columbia.edu/leadership/newsn/6753/from-metoo-to-howto-promoting-diversity-and-inclusion-in-corporate-america>

162. Martínez-Climent, C.; Rodríguez-García, M. & Zeng, J. (2019), Ambidextrous leadership, social entrepreneurial orientation, and operational performance. *Sustainability* **2019**, *11*, 890.
163. Maxwell, J.A. (1996): *Qualitative research design. An interactive approach*. CA, Thousand Oaks, Sage.
164. Mazur, B. (2010): Cultural Diversity in Organisational Theory and Practice. *Journal of Intercultural Management* **2** (2010): 5-15.
165. McGrath, J., Berdahl J. & Arrow H. (1995). Traits, expectations, culture, and clout. In Jackson S., Ruderman M. (Eds.), *Diversity in workteams* (pp. 47–68). Washington, DC: APA Books.
166. Menguc, B. & Auh, S., (2010): Development and return on execution of product innovation capabilities: the role of organizational structure. *Ind. Mark. Manag.* **39** (5), 820-831.
167. Mensi-Klarbach H. (2019): Diversity Management: Historical Development and Different Rationales. In: Mensi-Klarbach H. & Risberg A. (2019): *Diversity in Organizations : Concepts and Practices*. Bloomsbury Publishing PLC. 2nd edition. 67-94.
168. Mihalache, O., Jansen, J., Van Den Bosch, F. & Volberda, H.W. (2014). Top Management Team Shared Leadership and Organizational Ambidexterity: a Moderated Mediation Framework. *Strategic Entrepreneurship Journal*, **8**(2), 128-148. <https://doi.org/10.1002/sej.1168>
169. Miles, M. B. and Huberman, A. M. (1994): *Qualitative data analysis* (2nd ed.), Thousand Oaks, CA, Sage.
170. Milliken, F. J., & Martins L. L. (1996). Searching for common threads: understanding the multiple effects of diversity in organizational groups. *Academy of Management Review*, **21**, 402-433. <https://doi.org/10.5465/AMR.1996.9605060217>
171. Mishra, D., Mishra, S., & Ostrovska, S. (2022). Women's Professional Career and Culture: Software Organizations in India. *SAGE Open*. <https://doi.org/10.1177/21582440221082135>
172. MOL (2021a): Felelős Társaságirányítási Jelentés a BÉT Felelős Társaságirányítási Ajánlásainak megfelelően. https://molgroup.info/hu/show/altalanos_dokumentumok/fobb_tarsasa

[giranyitasi_dokumentumok/mol_bse_corporate_governance_declaration_hu_2021.pdf](#)

173. MOL (2021b): Diversity and inclusion. <https://molgroupcareers.info/en/working-at-mol-group/our-employees/diversity-and-inclusion>
174. MOL (2021c): GROWWW Graduate Programme. <https://molgroupcareers.info/en/students-and-graduates/growww-graduate-programme>
175. Mor Barak M. E., Lizano E. L., Kim A., Duan L., Rhee M., Hsiao H., Brimhall K. (2016). The promise of diversity management for climate of inclusion: A state-of-the-art review and meta-analysis. *Human Service Organizations: Leadership, Management and Governance*, 40, 305-333.
176. Mor Barak, M. E. (2009): Social Psychological Perspectives of Workforce Diversity and Inclusion in National and Global Contexts. In R. Patti (Ed). *Handbook of Human Service Management*. Thousand Oaks, CA: Sage Publications. Pp. 239-254.
177. Mor Barak, M. E., Luria, G., & Brimhall, K. C. (2021). What Leaders Say versus What They Do: Inclusive Leadership, Policy-Practice Decoupling, and the Anomaly of Climate for Inclusion. *Group & Organization Management*. <https://doi.org/10.1177/10596011211005916>
178. Morgan Stanley (2020): 2020 Diversity and Inclusion Report. Morgan Stanley. https://www.morganstanley.com/assets/pdfs/Morgan_Stanley_2020_Diversity_and_Inclusion_Report.pdf
179. Morgan, G., & Smircich, L. (1980): The case for qualitative research. *Academy of Management Review*, 5, 491-500. <https://doi.org/10.5465/amr.1980.4288947>
180. Nagy B. (2014): A magyar női érdekérvényesítő szövetségközpolitikai ajánlásai a nők politikai képviselete és a nemek egyenlőségét elősegítő intézményi mechanizmus területén. In: Juhász B. (2016): *A Magyar Női Érdekérvényesítő Szövetség közpolitikai ajánlásai*. Magyar Női Érdekérvényesítő Szövetség, pp. 17-23.
181. Nagy B., Géring Zs. & Király G. (2018): A munka-magánélet egyensúlya és a genderrezsím viszonya a gazdasági átalakulást követően. In: Nagy, Beáta; Géring, Zsuzsanna; Király, Gábor (szerk.) *Dilemmák és stratégiák a család és munka összehangolásában*, L'Harmattan Kiadó (2018) pp. 15-31.

182. Nagy, B. & Primecz, H. (2010): Nők és férfiak a szervezetben. Kísérlet a mítoszok felozlatására. *Vezetéstudomány - Budapest Management Review*, 61 (1). pp. 2-17. DOI 10.14267/VEZTUD.2010.01.01
183. Nagy, B. (2009): Nők és férfiak a vezetésben. In: *Szerepváltozások. Jelentés a férfiak és nők helyzetéről 2009*. Szociális és Munkaügyi Minisztérium; TÁRKI, Budapest, pp. 52-64. ISBN 9637869271
184. Nagy, B. (2014): *Biológia vagy társadalom? – Bevezető tanulmány a nemek kérdésköréhez* *Kultúra és Közösség*, 5(4), 95-103. old.
185. Nagy, B. (2017): *Szervezet és nemek*. In: *Társadalmi nemek. Elméleti megközelítések és kutatási eredmények*. ELTE Eötvös Kiadó, Budapest, 57-68. old. ISBN 978-963-284-835-8
186. Nemetz, P. L. & Christensen S. L. (1996): *The Challenge of Cultural Diversity: Harnessing a Diversity of Views to Understand Multiculturalism*. *Academy of Management Review* 21 (1996): 434-462.
187. Netemeyer, R.G., Boles, J.S., McKee, D.O. & McMurrian, R., (1997): *An investigation into the antecedents of organizational citizenship behaviors in a personal selling context*. *J. Mark.* 61 (3), 85-98
188. Nkomo, S.M. & Cox T. (2006): *Diverse Identities in Organizations*. In Clegg, S. R., Hardy C., and Nord W. R. (Eds.), *Handbook of Organization Studies* (pp. 338–356). Sage Publications, Inc.
189. Nkomo, S.M. & Stewart, M. M. (2006): *Diverse Identities in Organizations*. In Clegg, S. R., Hardy C., Lawrence T. B. and Nord W. R. (Eds.), *Handbook of Organization Studies*. 2nd Edition, 520-540. London/Thousand Oaks/ New Delhi: SAGE Publications, pp. 520-540. Chapter DOI: <http://dx.doi.org/10.4135/9781848608030.n18>
190. Nooteboom, B. (2005). *Elements of a cognitive theory of the firm*. *Cognition and Economics*, 9, 145-175.
191. Oakes, P. J., Turner, J. C., & Haslam, S. A. (1991). *Perceiving people as group members: The role of fit in the salience of social categorizations*. *British Journal of Social Psychology*, 30, 125–144
192. OECD (2021): *Education at a Glance 2021*. OECD Indicators. OECD Publishing, Paris, <https://doi.org/10.1787/b35a14e5-en>

193. Olasz, N. (2020): Nomen est omen: roma diplomás nővel szembeni diszkrimináció Magyarországon = Nomen est omen: discrimination against roma women in Hungary. *Vezetéstudomány - Budapest Management Review*, 51 (4). pp. 40-50. DOI <https://doi.org/10.14267/VEZTUD.2020.04.04>
194. Olasz, N. (2021): Nők a hazai kis- és közép IT-vállalkozásokban. *Vezetéstudomány - Budapest Management Review*, 52 (8-9). pp. 108-118. DOI 10.14267/VEZTUD.2021.09.08
195. Oppenheimer, D. B. (2016): The disappearance of voluntary affirmative action from the US workplace. *Journal of Poverty and Social Justice*, 24, 37-50
196. O'Reilly, C. A. III, Williams, K. Y., & Barsade, S. (1998): Group demography and innovation: Does diversity help? [in:] Gruenfeld D (Ed.), *Research on Managing Groups and Teams*, Vol. 1, pp. 183–207, St. Louis, MO: Elsevier
197. O'Reilly, C.A. & Tushman, M.L., (2013): Organizational ambidexterity: past, present, and future. *Acad. Manag. Perspect.* 27 (4), 324-338
198. Ortiz-de-Mandojana, N., Bansal, P. & Aragón-Correa, J. A. (2019): Older and wiser: How CEOs' time perspective influences long-term investments in environmentally responsible technologies. *British Journal of Management*, 30(1), 134–150
199. Østergaard, C R, B Timmermansa & K Kristinsson (2011): Does a Different View Create Something New? The Effect of Employee Diversity on Innovation, *Research Policy*, 40, pp.500–509.
200. Paksi, V. (2014a): Miért kevés a női hallgató a természet és műszaki tudományi képzésekben? Nemzetközi kitekintés a „szívárgó vezető”- metaforára. *REPLIKA*, 85-86 (4, 1). 109-130. old. ISSN 0865-8188
201. Pandolfo, A. (2017): What is the “Cognitive” in Cognitive Diversity? Investigating the Convergent Validity of Cognitive Diversity Measures.
202. Park, K.M. & Gould, A.M. (2017): “The overlooked influence of personality, idiosyncrasy and eccentricity in corporate mergers and acquisitions: 120 years and six distinct waves”, *Journal of Management History*, Vol. 23 No. 1, pp. 7-31.
203. Park, Y.; Pavlou, P.A. & Saraf, N.(2020): Configurations for achieving organizational ambidexterity with digitization. *Inf. Syst. Res.* <https://doi.org/10.1287/isre.2020.0950>

204. Parola, H. R., Ellis, K. M., & Golden, P. (2015). Performance effects of top management team gender diversity during the merger and acquisition process. *Management Decision*, 53, 57-74. <https://doi.org/10.1108/MD-03-2014-0141>
205. Pataki, G. (2000): Az Ökológiailag Fenntartható Vállalat. Doktori (PhD) értekezés. Budapesti Corvinus Egyetem
206. Peeters A. M. (2020): Genderörület - Útmutató a globális mesterterv megértéséhez. Jogállam és Igazság Nonprofit Kft. ISBN:978615814670
207. Pieterse, A. N., van Knippenberg, D., & van Ginkel, W. P. (2011). Diversity in goal orientation, team reflexivity, and team performance. *Organizational Behavior and Human Decision Processes*, 114(2), 153–164.old.
208. Plummer, D. L. (2003). *Handbook of diversity management: beyond awareness to competency based learning*. Lanham, MD: University Press of America, Inc.
209. Prasad, B., & Junni, P. (2017). Understanding top management team conflict, environmental uncertainty and firm innovativeness: empirical evidence from India. *International Journal of Conflict Management*, 28, 122-143. <https://doi.org/10.1108/IJCMA-02-2016-0006>
210. Prasad, P., & Mills, A. J. (1997). Understanding the dilemmas of managing workplace diversity. In P. Prasad, A. J. Mills, M. Elmes & A. Prasad (Eds.), *Managing the organizational melting pot: Dilemmas of workplace diversity* (pp. 3-27). Thousand Oaks: Sage.
211. Prasad, P., Pringle, J., K. & Konrad, A., M. (2006): Examining the contours of workplace diversity: concepts, contexts and challenges. in Konrad, A., M., Prasad, P. and Pringle, J., K. (szerk.): *Handbook of workplace diversity*, SAGE Publications, London, 1 – 22 old.; DOI: 10.4135/9781848608092.nl
212. Primecz H. & Farkas F. (2019): Nők és férfiak a szervezetekben. In.: László Gy.; Németh J. & Sipos N.: *Vezető és menedzser. Emlékkötet Farkas Ferenc születésének 70. évfordulójára 2019*. ISBN online: 978-963-429-442-9.
213. Primecz H., Csillag S., Bácsi K., Kiss C. & Szilas R.: (2008): Sokszínűség, valamint a munka és magánélet egyensúlya. *Munkaügyi szemle* 52 (1), 25-27.
214. Primecz, H. (1999): A szervezeti tudás születése: A szervezetelméletek pozitívista, kritikai realista és posztmodern megközelítése. *Vezetéstudomány - Management and Business Journal*, 30 (6). pp. 12-23.old.
215. Primecz, H. (2018): Kritikai interkulturális menedzsment. *Replika* (1-2). pp. 41-55.

216. Primecz, H. (2019): Diverzitásmenedzsment: a hat kiemelt kategória. A “Big Six”. *Munkaügyi Szemle*, 62(5), 17-25.
217. Primecz, H., Kiss, J. & Toarniczky, A. (2019): Diverzitáskategóriák és társadalmi vállalkozások: Nemzetközi kitekintés. *Vezetéstudomány - Budapest Management Review*, 50 (10). pp. 61-73. DOI <https://doi.org/10.14267/VEZTUD.2019.10.06>
218. Pringle, J. K., & Strachan, G. (2015): Duelling dualisms. A history of diversity management. In R. Bendl, I. Bleijenbergh, E. Henttonen, & A. J. Mills (Eds.), *The Oxford Handbook of Diversity in Organizations* (pp. 39–61). Oxford: Oxford University Press.
219. Pryor, M.G., & Taneja, S.L. (2010): Henri Fayol, practitioner and theoretician – revered and reviled. *Journal of Management History*, 16, 489-503. old.
220. Pudielko, M. & Liu, J. (2020): The Role of Trust in Cross-Cultural Management. In B. Szkudlarek, J. Osland, D. Caprar & L. Romani, *The Sage Handbook of Contemporary Cross-Cultural Management*, London: Sage. 326-339. old.
221. Qi, M. Armstrong, S. J., Yang, Z. & Li, X. (2022): Cognitive diversity and team creativity: Effects of demographic faultlines, subgroup imbalance and information elaboration, *Journal of Business Research*, Volume 139, 2022, 819-830 old.
222. Qin, J., Muenjohn, N. & Chhetri, P. (2014): A Review of Diversity Conceptualizations: Variety, Trends, and a Framework. *Human Resource Development Review*, 13(2), pp. 133–157. doi: 10.1177/1534484313492329
223. Quigley T. J. & Hambrick D. C (2015): Has the “CEO effect” increased in recent decades? A new explanation for the great rise in America's attention to corporate leaders. *Strategic Management Journal* Volume 36, Issue 6 p. 821-830. <https://doi.org/10.1002/smj.2258>
224. Rácz, Z. (2019): He for she vagy egyenlő értékű munkáért egyenlő bér. In *MultiScience - XXXIII. microCAD International Multidisciplinary Scientific Conference* (pp. 1–9). https://www.unimiskolc.hu/~microcad/cd2019/e1/E_Racz_Zoltan.pdf
225. Reimer, N. K., Schmid, K., Hewstone, M., & Al Ramiah, A. (2020): Self-categorization and social identification: Making sense of us and them. In D. Chadee (Ed.), *Theories in social psychology* (2nd ed.). Wiley-Blackwell.
226. Reynolds A. & Lewis D. (2017): Teams Solve Problems Faster When They’re More Cognitively Diverse. *Harvard Business Review*.

227. Richard, O.C. & Shelor, R.M., (2002): Linking top management team age heterogeneity to firm performance: juxtaposing two mid-range theories. *Int. J. Hum. Resour. Manag.* 13 (6), 958-974
228. Richter (2020): Az igazgatóság előterjesztése a 2020. évi rendes közgyűlésre. https://rgwebsite-prod-media-cdn.azureedge.net/-/media/sites/hq/documents/investors/announcements/2020/20200406_1_agm/20200406_1_hu_agm.pdf?rev=d814bf6820db4d9e8315ad8212d7cd1b
229. Rijamampianina R. & Carmichael T. (2005): A Pragmatic and Holistic Approach to Managing Diversity, *Problems and Perspectives in Management* 3 (1):109
230. Romani, L. & Holgersson, C. (2020): Cross-Cultural and Diversity Management Intersecting in Global Diversity Management: Tensions and Opportunities. In B. Szkudlarek, J. Osland, D. Caprar & L. Romani, *The Sage Handbook of Contemporary Cross-Cultural Management*, London: Sage. 255-269. old.
231. Romani, L. (2010): *Relating to the Other: Paradigm interplay for cross-cultural management research*. 2nd ed. Saarbrücken: LAP Publishing
232. Sambharya, R.B. (1996): Foreign experience of top management teams and international diversification strategies of US multinational corporations. *Strateg. Manag. J.* 1996, 17, 739–746.
233. Schachter, H.L. (2018): Labor at the Taylor Society: Scientific management and a proactive approach to increase diversity for effective problem solving. *Journal of Management History*, Vol. 24 No. 1, 7-19. old.
234. Schmitt, A., Raisch, S. & Volberda, H. W. (2018): Strategic renewal: past research, theoretical tensions and future challenges. *International Journal of Management Reviews*, Vol. 20, No. 1, pp.81-98 <https://core.ac.uk/download/pdf/72002225.pdf>
235. Shore, L. M., Chung-Herrera, B. G., Dean, M. A., Ehrhart, K. H., Jung, D. I., Randel, A. E., & Singh, G. (2009): Diversity in organizations: Where are we now and where are we going? *Human Resource Management Review*, 19(2), 117–133. old
236. Shore, L. M., Cleveland, J. N., & Sanchez, D. (2018): Inclusive workplaces: A review and model. *Human Resource Management Review*, 28(2), 176–189. <https://doi.org/10.1016/j.hrmr.2017.07.003>

237. Shore, L. M., Randel, A. E., Chung, B. G., Dean, M. A., Holcombe Ehrhart, K., & Singh, G. (2011): Inclusion and diversity in work groups: A review and model for future research. *Journal of Management*, 37, 1262.
238. Simon, H.A. (1976): *Administrative Behavior. A Study of Decision-Making Processes in Administrative Organizations*. 3. Auflage. New York (erstmalig 1945)
239. Smith, W.K. & Tushman, M.L. (2005): Managing strategic contradictions: a top management model for managing innovation streams. *Organ. Sci.* 16 (5), 522-536
240. Sundin, E., & Billing, Y.D. (2005): From Managing Equality to Managing Diversity: a Critical Scandinavian Perspective on Gender and Workplace Diversity.
241. Sydow, J., Schreyögg, G., & Koch, J. (2009): Organizational path dependence: Opening the black box. *Academy of Management Review*, 34 (4), 689-709. <https://doi.org/10.5465/amr.34.4.zok689>
242. Szabó, Z. R. (2010): *Strategic adaptation, ambidexterity and competitiveness in Hungary between 1992 and 2010 - PhD Thesis*. Corvinus University of Budapest.
243. Szászvári K. (2011): *Az idősödő munkavállalókkal kapcsolatos sztereotípiák*. Doktori (ph.d.) értekezés. Pécs, János Pannonius Tudományegyetem.
244. Szellő J. (2021): Magyarország. p 17-39 In.: Dobeš J, Fornusková R., Kostelníková M., Kříž J., Pokorný B., Štorová I., Freve A., Szellő J., Kuijpers I., Laurier J., Határ C., Hrebeňárová L., Hegerová I., Kapucian B., Lőrincz S., Mindeková L. & Šilhár K. (2021): *Az aktív idősödés munkahelyi támogatása. A Munkaképesség menedzsment projekt szerzőgárdája*. Erasmus +
245. Szellő J., Nemeskéri Zs. & Zlatic J. (2017): *Az idősödő korcsoport munkavállalását meghatározó stratégiai tényezők Európában és Magyarországon*. *Opus et Educatio*. 4. évfolyam 4. szám
246. Szokolszky, Á. (2004): *Kutatómunka a pszichológiában, metodológia, módszerek, gyakorlat*. Budapest, Osiris
247. Tajfel, H. & Turner, J. C. (1986): The social identity theory of intergroup behaviour. In Worchel, S. & Austin, W. G. (ed.) *Psychology of Intergroup Relations*. Chicago, Nelson, 7-24.
248. Tajfel, H. (1981): *Human Groups and Social Categories: Studies in Social Psychology*. Cambridge: Cambridge University Press.

249. Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin, & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-37). Monterey, CA: Brooks/Cole.
250. Talke, K., Salomo, S., Rost, K. (2010): How top management team diversity affects innovativeness and performance via the strategic choice to focus on innovation fields. *Research Policy*, 39(7), 907–918
251. Tang, Y., Li, J. & Liu, Y. (2015): Does founder CEO status affect firm risk taking? *Journal of Leadership and Organizational Studies*, Vol. 23 No. 3, pp. 322-334.
252. Tardos, K. (2016): Kortalan szervezetek: Vállalati stratégiák és munkahelyi esélyegyenlőségi rendszerek a különböző életkorú munkavállalók foglalkoztatásában. In *szocio.hu*
253. Taródy D., Ferincz A. & Kárpáti Z. (2021): A növekedéssel kapcsolatos kihívások és kontextuális kettős képesség: a felső vezetők (tmt) integráltságának vizsgálata. *Vezetéstudomány - Budapest Management Review*. LII. évf. 2021. 8–9. szám pp. 34-47. DOI: 10.14267/VEZTUD.2021.09.03.
254. Taródy, D. (2012): Formalizált rugalmasság – a kettős képesség kialakulása egy közép vállalatban. *Vezetéstudomány - Budapest Management Review*, 43 (12). 49-60. old.
255. Taródy, D. (2016): Organizational ambidexterity as a new research paradigm in strategic management. *Vezetéstudomány - Budapest Management Review*, 47 (5). pp. 39-52. DOI 10.14267/VEZTUD.2016.05.04
256. Taródy, D.; Ferincz, A. & Kárpáti, Z. (2021): A növekedéssel kapcsolatos kihívások és kontextuális kettős képesség: A felső vezetők (TMT) integráltságának vizsgálata *Vezetéstudomány* 52 : 8-9 pp. 34-47., 14 p.
257. Tatli A. & Özbilgin M. F. (2009): Understanding diversity managers' role in organizational change: Towards a conceptual framework. *Canadian Journal of Administrative Sciences / Revue Canadienne des Sciences de l'Administration* Volume 26, Issue 3 p. 244-258. <https://doi.org/10.1002/cjas.107>
258. Telekom (2021): Fenntarthatósági jelentés 2020. <https://www.telekom.hu/static-tr/sw/file/magyar-telekom-fenntarthatosagi-jelentes-2020.pdf>
259. Teow Y. J. & Jain S. (2017): *Women In Work Index. Closing the Gender Pay Gap*. PricewaterhouseCoopers.

260. Thatcher, S. M. B., Jehn, K. A., & Zanutto, E. (2003): Cracks in diversity research: The effects of diversity faultlines on conflict and performance. *Group Decision and Negotiation*, 12, 217–241. old.
261. The Economist (2018): The Economist explains Are gender quotas good for business? *The Economist*.
262. Thomas, R. (1991): *Beyond race and gender: unleashing the power of your total work force by managing diversity*. American Management Association. New York. ISBN 0-8144-7807-7
263. Thomas, R.T. (1995): Diversity Framework In: Chemers et al.: (1995) *Diversity in Organizations: New Perspectives for a Changing Workplace*. DOI: <http://dx.doi.org/10.4135/9781452243405.n10>.
264. Tihanyi, L.; Ellstrand, A.E.(2000). Daily, C.M. Composition of the top management team and firm international diversification. *J. Manag.* 2000, 26, 1157–1177.
265. Toarniczky, A. (2008): Munkahelyi diverzitás, mint szervezeti csodaszer?! *Munkaügyi Szemle*, 52. évf. 1. szám, 2008, pp.18-24.
266. Toarniczky, A. (2012b): *Szocializáció multikulturális szervezetben*. Doktori (PhD) értekezés, Budapesti Corvinus Egyetem, Gazdálkodástani Doktori Iskola.
267. Toarniczky, A. (2012a): Multikulturális szervezet és identitás. *Vezetéstudomány - Budapest Management Review*, 43 (7-8). 18-31.old.
268. Trauth, E. (2002): Odd girl out: an individual differences perspective on women in the IT profession. *Inf. Technol. People*, 15, 98-118. old.
269. Trepte, S., & Loy, L.S. (2017): Social Identity Theory and Self-Categorization Theory. *The International Encyclopedia of Media Effects* pp 1-13; <https://doi.org/10.1002/9781118783764.wbieme0088>
270. Tuncdogan, A., Lindgreen, A., Volberda, H. & Van Den Bosch, F. (2019): *Strategic Renewal: Core Concepts, Antecedents, and Micro Foundations*, New York, NY, USA, Routledge.
271. Turner, J.C., Hogg, M.A., Oakes, P.J., Reicher, S.D. and Wetherell, M.S. (1987): *Rediscovering the Social Group: A Self-categorization Theory*. Oxford and New York: Basil Blackwell

272. Tushman, M. L., & O'Reilly, C. A. (1996): Ambidextrous organizations: Managing evolutionary and revolutionary change. *California Management Review*, 38 (4), 8-30. <https://doi.org/10.2307/41165852>
273. van Knippenberg, D. & Schippers, M.C. (2007): Work Group Diversity. *Annual Review of Psychology*, 58, 515-541. <http://dx.doi.org/10.1146/annurev.psych.58.110405.085546>
274. van Knippenberg, D., De Dreu, C. K. W., & Homan, A. C. (2004): Work Group Diversity and Group Performance: An Integrative Model and Research Agenda. *Journal of Applied Psychology*, 89(6), 1008–1022. <https://doi.org/10.1037/0021-9010.89.6.1008>
275. Viki, T. (2017): On The Fifth Anniversary Of Kodak's Bankruptcy, How Can Large Companies Sustain Innovation? https://www.forbes.com/sites/tendayiviki/2017/01/19/on-the-fifth-anniversary-of-kodaks-bankruptcy-how-can-large-companies-sustain-innovation/?sh=16f457666280&fbclid=IwAR3nMuaFuIWoLupwfyLsgqiyYO2gaftubi2_XmCZG-UcLUcUnlJX27IGCk
276. Vito, R. & Sethi, B. (2020): Managing change: role of leadership and diversity management, *Journal of Organizational Change Management*, Vol. 33 No. 7, pp. 1471-1483. <https://doi.org/10.1108/JOCM-04-2019-0116>
277. Volberd. A, H. W. (2017). Comments on ‘Mastering strategic renewal: Mobilising renewal journeys in multi-unit firms’, Henk W. Volberda, Charles Baden-Fuller, Frans AJ van den Bosch. *Long Range Planning*, Volume 34, Issue 2, April 2001, Pages 159–178. *Long Range Planning*, Vol. 1, No. 50, pp.44-47.
278. Volberda, H. W., Baden-Fuller, C. & Van Den Bosch, F. A. (2001): Mastering strategic renewal: Mobilising renewal journeys in multi-unit firms. *Long Range Planning*, Vol. 34, No. 2, pp.159-178.
279. Vuori, T. O. & Huy, Q. N. (2016): Distributed attention and shared emotions in the innovation process: How Nokia lost the smartphone battle. *Administrative Science Quarterly*, Vol. 61, No. 1, pp.9-51.
280. *Wall Street Journal (WSJ)* (2004): Through the glass ceiling. How these 50 women got where they are – and why they bear watching.

281. Wang, H., Waldman, D.A. & Zhang, H. (2012): Strategic leadership across cultures: current findings and future research directions, *Journal of World Business*, Vol. 47 No. 4, pp. 571-580.
282. Warner, K. S. & Wäger, M. (2019): Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning*, Vol. 52, No. 3, pp.326-349.
283. Warr, P. (1993): Milyen körülmények között változik az életkorral a munkahelyi teljesítmény? In: Czigler I. (szerk.) (2000): *Túl a fiatalságon–Megismerési folyamatok időskorban*. Akadémiai Kiadó, Budapest, 171-183
284. Warrick, D. (2017): What leaders need to know about organizational culture. *Bus. Horiz.* 2017, 60, 395–404. <https://doi.org/10.1016/j.bushor.2017.01.011>
285. Wiersema, M. F., & Bantel, K. A. (1992). Top management team demography and corporate strategic change. *Academy of Management Journal*, 35(1), 91–121.
286. Williams, K. Y., & O'Reilly, C. A. (1998): Demography and diversity in organizations: A review of 40 years of research. *Research in Organizational Behavior*, 20, 77–140.
287. World Economic Forum (2021): *Global Gender Gap Report*. Insight Report. WEF.
288. Yadav, S., & Lenka, U. (2020). Diversity management: a systematic review. *Equality, Diversity and Inclusion: An International Journal*, 39, 901-929. <https://doi.org/10.1108/EDI-07-2019-0197>
289. Yin R. K. (2011): *Qualitative Research from Start to Finish*. The Guilford Press.
290. Yin, R. K. (2003): *Case study research. Design and methods*. Thousand Oaks: SAGE Publications.
291. Yoon, W., Kim, S. J., & Song, J. (2016): Top management team characteristics and organizational creativity. *Review of Managerial Science*, 10, 757-779. <https://doi.org/10.1007/s11846-015-0175-7>
292. Yuan, X., Guo, Z. & Fang, E., (2014): An examination of how and when the top management team matters for firm innovativeness: the effects of TMT functional backgrounds. *Innov. Manag. Policy Pract.* 16 (3), 323-342.
293. Zanoni, P. & Janssens, P. (2004): Deconstructing differences: the rhetoric of human resource managers' diversity discourses, *Organization Studies*, 25(1), 55 – 74 old.

294. Zapata-Barrero, R. (2009): Setting a research agenda on the interaction between cultural demands of immigrants and minority nations. In R. Zapata-Barrero (Ed.), *Immigration and Self-government of Minority Nations* (pp. 1-25), Bruxelles: PIE – Peter Lang.

8 Appendix

8.1 Interview outline

Topics of introduction

- Introduction
- Presentation of the purpose of the research
- Brief presentation of the interview process
- Request for permission to record, the confidentiality of information

Demographic data

Personal data:

Name:

Age:

Qualification:

Work experiences:

Meaning of Diversity

- What does diversity mean to you?
- What does diversity mean to the Company?
- How is diversity integrated into the strategy?
- What tools are used to strengthen diversity in the organization?
- Does the company have an official or unofficial diversity policy?
- How well does the recruitment strategy support diversity?
- How prepared is the organization to find, attract and retain the workforce of the future?
- How and what strategy is used to attract the different diversity categories to the different needs and aspirations of the company?

Regeneration and Ambidexterity

- On what basis do you make your decisions?
- Where do you look for knowledge inputs during decisions?
- What tools are used to collect ideas and share opinions?
- In what cases do they use the involvement of external partners?
- What role do you think you play as a leader in shaping the organizational/team atmosphere?
- Is your company innovative?
- Tell me about events and turning points in the life of your company or organizational unit that are related to renewal!
- Tell me about events and turning points in the life of your company or organizational unit that speak of focusing on the future or the present!

8.2 Custom profile

Bernát

(Case of Bernát1): Bernát grew up in an aristocratic family in Buda, providing him with a background where performance requirements and financial and spiritual support were met.

"I am a gentleman from Buda, I come from a noble family, and I have always lived in Buda (...) when I was a doctoral student, my father gave me a black BMW. And that's why you looked bad at university, because how can you have a black BMW at the age of twenty? Then my dad said he would also buy a white one so they could see that he had two.

(Case of Bernát2): Bernát dislikes having private conversations or activities with his colleagues. Its roots go all the way back to the family.

"I learned from my father that private life is private life... we don't live our private life with company employees. So I don't go out for beer or wine with people. I have my own

group of friends with whom I discuss the big things in life; you don't have to discuss this with the people inside."

(Júlia): Supporting Antal and Bernát's goal-rational solution-based attitude:

"If we hire another senior colleague within the organization. Let's say Antal, Lajos, or Bernát will never, ever ask their colleague what you saw last night at the Vígszínház. Because they are not those types, never. In fact, if they accidentally brought up that I saw this and that last night at the Vigsthínház and this and that is my opinion about it, let's say they somehow got involved during a project discussion, they would still say, fine, okay, let's get to the point."

(Case of Bernát3): Company A belongs to a group of companies where, based on the owner's decision, the managers receive a Skoda Superb as a company car. In management circles, the demand for another car brand, such as Audi, has arisen several times, but the owner insists on this brand. During his leadership years in the state administration, Bernát also drove a Skoda Superb, so he wanted something different. The respect and importance of principles also emerge in his story.

"I've had enough with Skoda when I worked as a manager in the state administration. I will never go with Skoda again. That's why I went to the store and bought myself a Lexus because that's what I wanted... Only the owner has a Lexus within the company group, and everyone else has a Skoda. Therefore, it is a constant problem in the company group why I have a Lexus. So there are principles: Skoda is a company car; if you want to deviate from this, you should, but pay for it yourself. You don't have to wait for anyone here."

(Case of Bernát4): In Bernát's case, the goal-rational solution and specific decision-making mechanism return several times as a motive, which he also explained and connected with his childhood roots.

"During the five years of the university's IT department, I was prepared to make decisions. There is nothing else. We programmed in 24 programming languages and

had 16 different mathematics subjects at university. We were bred solely and exclusively as breeders in that barn to be able to make decisions."

(Case of Bernát5): Bernát completed his high school studies in Fazekas Gimnázium, a high school that is still at the forefront today. During his years here, his current individual profile was visibly formed. He points out that he likes the challenging and demanding path, and the goal-oriented solution also appears here as a motive.

"Fazekas is also about this. It was stable, which was about learning to make decisions, and we were trained to be admitted to the university with 120 points out of 120 points. Everyone wrote 120 points in the admission. There were no questions. (...) These were stables, so whoever thinks this is not the case should not go here, to the University of Arts, or to Fazekas. (...) Those who couldn't stand it left. Many people left Fazekas. Those who couldn't take it left, that's not a question, they advised him from the high school, they told him to leave."

Kristóf

(Case of Kristóf1): Kristóf had to stop his higher education studies due to modest financial circumstances. And after leaving college, he had to work.

"I started studying electrical engineering and stopped it because we got into such a financial situation."

(Case of Kristóf2): Kristóf started working immediately after leaving college, where he found himself in a very difficult situation, as neither the team nor his manager was helpful or supportive.

"I experienced what it's like to join an already existing structure with strong leadership as an outsider. And it was challenging. And then, I thought a lot about what I did wrong as a new employee. And obviously a lot, a lot of things."

(Case of Kristóf3): After bad experiences and experiences, Kristóf got into a leadership position with hard work. He carried these initial bad experiences with

him and has motivated him ever since to be able to use his position positively to help others so that others don't have to go through what he did.

"When I first became a team leader, the most important thing for me was that yes, new colleagues would come, and then I started to think that I am now in a different position, and I have to think about what I can do to help the next Kristóf, who comes here as an outsider. And this was a driving force when I started thinking about it and trying to put together an action plan on how to integrate the newly joined colleague into the team as quickly and in the most enjoyable way as possible so that the others do not feel it forced, and that the new colleague has some help, too. In fact, this has been a constant driving force for me since then, to care about people."

(Case of Kristóf4): Kristóf started working in the financial field after leaving the university. He initially became a group and then a branch manager thanks to his hard work. He then got a job at a commercial company, where he and his team started to deal with IT system organization and planning. It was here that communication/management and sales combined with the IT field for the first time in his work. After that, he joined Company A as a business analyst and was appointed to a management position a year later.

"From the technical side, I can mainly summarize my life journey by saying that I have never dedicated myself to anything from the point of view that I want to be very, very good at something. So I couldn't find a topic in the financial, sales, or IT fields, to which I would have said that, yes, I love that. It has always been important for me to be able to lead projects very well and to be able to help my colleagues during projects. So, I have quite a balance - at least if you have to look at myself, the management, and the professional side. For me, the most important thing was always to understand as many things as possible, a little better than the average."

(Case of Kristóf5): Kristóf's team should have performed a load. In order to load, you need to know the details of the system, Company A's database, as well as the database management languages so that loading and migrations can be carried out. Company A has two scientists for this process. However, one colleague fell ill on one occasion, and the other could not make it.

"...when my task is to help my colleagues with something, then I help my colleagues. It depends on what the situation that I'm currently involved in with the team requires. The point is to remedy the problem as soon as possible... I always say that we should not see the problem but the task to be solved."

Júlia

(Case of Júlia1): During the decision mechanisms, he noted that *"I am a woman because I was born a woman because I am completely like that, and yes, I bring all my feminine features, thoughts, everything into [view]."*

(Case of Júlia2): At the beginning of her career, Júlia structured all the steps related to her work, as she had fewer handholds and professional confidence. However, over the years, endowed with many experiences, he began to look at the approach to professional issues in a different dimension.

"I realized in the last 8-10 years that people open up much more easily, and it's much easier to find out real things if it seems more spontaneous or if the relationships and discussions are more spontaneous. So, in many cases, my colleagues don't even notice that I'm having an unstructured but still structured discussion with them. It seems to him that it is not structured because, after all, he talks about what he wants, but still, in connection with my questions or our maneuvering between topics, I lead him to where I want to go. To find out what is inside it and what ideas it has for its near future. So, actually, I don't structure it like I did back then, but it seems more spontaneous, but how should I put it? I structure it, but it doesn't appear to the individual; it seems spontaneous."

(Case of Júlia3): It is vital for Júlia to build a personal relationship with her colleagues. His pursuit in this direction can be linked to his personality and the nature of his profession. As part of this, he considers positive caresses to be one of the most important tools.

"Due to my personality and my profession, there is extra interest in everyone. Also, giving feedback is a basic management method and attitude because people need it to

be recovered. And a lot of investment can be saved with feedback, that too in quotation marks, yes."

(Case of Júlia4): Every week, Júlia holds an hour-long meeting with her team, during which they discuss current events, tasks, and questions. The atmosphere of the meeting is light, depending on the topic. It is characterized by seriousness and lots of laughter and humor.

"Then we will discuss it there together, and everyone can add their own to each topic. And in the meantime, of course, there are humorous and less humorous laughs. But in a completely informal way. And we also keep to the time because there are no particularly stressful factors in addition to trying to take these stories lightly, I always try to keep to time because we are quite scheduled. So keeping time is for me a respect for the other person so that I won't steal your time."

Lajos

(Case of Lajos1) Lajos made the following comment regarding his professional and higher education roots and past: *"I am sure of the top three experts in the country on this topic. So I draw on those experiences a lot."*

(Case of Lajos2): Lajos always uses his previous experiences in his decisions:

"I always say to my colleagues, especially the younger ones, that it's with limited thinking, but basically, yes. I am greatly influenced by my previous experiences in decision-making, whether successes or failures. So, let's say, when I enter a similar river as before, I'm much more careful and use the experience gained there."

Ákos

(Case of Ákos1) Ákos linked his origin beyond the border with his idea of work, his attitude to work, and his desire to do something.

"I grew up in Serbia, in Vojvodina. When I was born, it was still Yugoslavia, then it became Serbia, and I finished high school there ... [he continues, referring back to his origins across the border later] ... I think that I am in this position at such a young age

because I approach it this way. My will to do it and my attitude to work quickly got me this far. This is only due to how reliable you are, how much your colleagues can count on you... by the way, it is typical of my Hungarian friends across the border - there are a lot of them here in Hungary and abroad - but it can generally be said of people from Vojvodina, Transylvania, and Highlands that this is the mentality. The X [factor] is absolutely in us."

(Case of Akos2): During the development work, several times, the development team hit a wall and faced problems. That is why Ákos' expectations of his colleagues include a love of work and a focus on problem-solving.

"Transparency, reliability, professional humility, humility in the attitude to work are very important to me, so we like to work. We are used to saying that work is painful and difficult and that 80% of the work is shoveling, but we really like that 20%, and that's why we do the 80%. By attitude to work, I mean that we don't see problems but look for solutions because everyone can bring a problem, but I'm curious about the solution. One can have personal and work-related problems, but at the end of the day, we have problems to solve."

Antal

(Case of Antal1): Antal brought the principle from home that the manager should not spend his free time with his colleagues. In addition, ars poetica include the observance and respect of principles.

"I learned this at home. That's why I'm not a fan of this kind of hanging out with friends, we go to parties, concerts, and pubs together kind of leadership, and I'll be a good leader because I protect my subordinates unprincipledly in all circumstances. And I try to blame it on another department or another company within another company group. This probably won't lead to a good result in the long run."

(Case of Antal2): During Antal's managerial and teaching career, he followed the principle that you don't have to love him, but you do have to respect him. In his view, respect can be earned through knowledge and personality.

"I don't necessarily need to be popular within the company, and everyone likes me, but what's important is that that kind of knowledge and performance, whether it's with technology colleagues, business colleagues, or partners, is recognized for that. I have held management positions for almost twenty years, but before that, I followed this path as a teacher. When I was teaching, my goal was not to be loved by the students either, but respect and recognition were definitely important. And this kind of attitude is very good for me, so I usually stick to it."

Norbert

(Case of Norbert1): Norbert and Zalán managed Norbert and Zalán before the reorganization. During the transformation, a specialist, currently the company's operational director, was contracted. The two leaders make decisions together.

"He makes every decision with me. He is much more operative than I am. I'm more strategic and dreamy; he's not. I won't go into the last number of the budget, and he does. And this should complement each other."

(Case of Norbert2): Norbert has a daughter whom he wanted to guide in the direction of IT. His attempt was unsuccessful.

"I have a daughter who, if she were open to this, I would support her to the fullest. But it probably won't be because we sent him to Logic school, but he wasn't so happy about it."

(Case of Norbert3): Norbert previously worked in a multinational organization, where he had to perform consulting and team leader tasks regarding financial processes. When a financial process was introduced at Company B, he also used his previous organizational experience in a multinational organization.

"I used the experiences I gained there with Hellyel-Köz. It is not standardized to the same extent as at an MNC, because I also worked in an MNC, and I started my profession there. It was quite standardized there, but it looked more or less the same as here. We are obviously a smaller organization."

Gábor

(Case of Gábor1): Gábor previously worked for a multinational company. When the promotion system was introduced at Company D, it relied heavily on its experience in the multinational organization when building the strategy.

"Yes, we transferred my experiences there to our environment. They're not as formalized as that MNC, but they look pretty similar."

Zoltán

(Case of Zoltán1): Zoltán has more than ten years of consulting experience. During that period, it happened several times that he had to work on more than three projects at the same time or even at the client's headquarters. During this period, he always had to be able to adapt to the circumstances.

"... there was a case where there was a table in the corner of a server room, and the project was of such a type that one time a development strategy had to be created, and the next week an organization transformation project had to be supported. So, in the ten or twelve years after university, I socialized so that this is how it should go."

8.3 Opinion on diversity, diversity policy

Bernát

(Case of Bernát1): Bernát continued his higher education at the University of Technology between 1992 and 1997. At that time, 92 people were studying IT, of which 5 were girls. Among the graduating students were two girls.

"Those two were always in the top five; we recognized and never looked at her girlhood."

(Case of Bernát2): During Bernát's early career (end of the 90s), he worked with very few female IT professionals. However, in his view, professional respect was determined not by the gender of the professional but by his knowledge.

"Even then, there were very few girls in the IT profession, but those who were there and made it, were recognized by the profession."

(Case of Bernát 3): In Bernát's year at the University of Technology, those girls who had knowledge were respected. This respect (recognition of expertise) was shown by asking for the notes.

"The girl who was at the top professionally in her grade won the recognition of the boys, but the girl who was not at the top was what the grade looked like. So that someone's rank or recognition in our grade was not because of their gender but because of their knowledge. This represented someone's knowledge in such a way that we recognized the knowledge of those whose notes we asked for and photocopied and those whose notes we did not ask for were not recognized as knowledge. And there were girls, two of whom we proposed to, and - yes, there were five girls - there were three of whom we never proposed to. "

(Case of Bernát 4): In a professional meeting, several people participated on the side of Bernát and his clients. The two protagonists of the discussion are Bernát and a lady with a BME IT degree. One of the issues was based on what kind of development environment should be used during the development of the given system.

"They [women with professional qualifications] are professionally accepted. You can't argue with that. At that meeting, there was a religious debate about whether solution a) or b) or c) should be made, and I said that it should not be a religious debate but that the profession should decide [the BME lady and Bernát] which religion for which we cast our vote."

(Case of Bernát5): Bernát was previously the CEO of a state-owned company that developed IT systems for local governments. During a meeting, there was a longer technical discussion about which development strategy to choose. The meeting was attended by 24 people, of whom only Bernát and one lady had an IT degree, but at the same time, all participants had an opinion on the right direction.

"... I only asked that the person with an IT degree speak, not the person with an opinion about life. I also have an opinion about life but let those who understand it professionally speak about it. The others shouldn't interfere; in fact, I was left with one

girl I had taught before. And then it became what we said because there is no point in arguing with those who have not learned these things."

(Case of Bernát6): Bernát shared the following thoughts with me regarding diversity:

"In life, there are objective, rational solutions, you have to follow them, and the same is the case with the company, there are objective, rational solutions, here it is not about whether we like someone or not, we have to move forward."

(Case of Bernát7): According to Bernát, apart from the owner, he is not liked within the company group. He justifies the development of this with his results.

"I know that everyone in the group hates me, so I know that no one but the owner likes me, but it doesn't really bother me. I think my numbers bear me out. How could these numbers be reached in a more socially sensitive way? I think not. So, I think someone who is more socially sensitive and pays more attention to these things probably won't be able to produce numbers like that. So you can only do this if you are objectively rational."

Lajos

(Case of Lajos1): Columnist member of Lajos Company A. Lajos chose its board members. He made his recruitment decisions based on the information/decision-making perspective:

„The choice of my colleagues was very conscious. My colleagues represent the mid-thirties to mid-fifties age group, so they are mainly ex-teachers. They were deputy principals at school, so they are professionals with a pedagogical background".

Antal

(Case of Antal1): Antal often likes to ask team members' opinions concerning small and large decision-making issues. He considers it essential that everyone gives their view and takes it into account. He takes great care to ensure a good atmosphere within his organizational unit and that a specific decision does not

spoil it. In his view, if someone is downvoted for a long time or his opinion is not accepted, sooner or later, he will lose his temper and will not want to be creative or come up with ideas. As a result, his attention usually extends to this as well.

"Therefore, I also make sure that the ideas and suggestions of my colleagues can be implemented on some level or that we can incorporate them into the development."

(Case of Antal2): At the end of each year, the company group announces the innovation award, for which the companies of the company group can apply their own ideas and developments [the interview was conducted before the current application period]."

"Last year, we received the innovation award within the company group, so our company won it with an improvement."

Ágota

(Case of Ágota1): According to her, it can be considered a global phenomenon that few women work in IT, and few reach senior management positions. His opinion on the cause of the phenomenon:

"I can't think of anything else behind it, other than the fact that, basically, the engineering profession, mathematics, physics, are all increasingly lacking from this point of view, electrical engineering, which is based on these real objects. So I don't think there is a connection with the girls' smartness. It needs to be promoted more so that you can choose an engineering profession. You can even think about it. I don't think there are no intellectual differences. I think it's promotion."

(Case of Ágota2): Although the organization does not have a diversity policy, one of Company B's goals is to make it important for clients and employee candidates.

"Our goal is to create a good working environment and for our company to be attractive to more people on the market, either in terms of clients or candidates and I wouldn't even consider it a good idea if we were only thinking in one segment and then only of a certain type we could attract colleagues or customers."

(Case of Ágota3): In Ágota's organization, it is not age but seniority (personality, skills, and abilities) that can make someone a leader.

"A 20-year-old can be a leader with us if he has the ambition, skills, and abilities. You don't have to be 45 or older, or I don't know. There is no such distinction. I can say that for sure."

(Case of Ágota4): In response to my question about the diversity policy of Company C, Ágota gave the following answer: *There is no conscious. We were not particularly concerned with increasing the proportion of women in the company, for example, but it was a natural process as more and more people were interested. Obviously, we are also more open. We never had to deal with this because we never turned away from anyone."*

(Case of Ágota5): Nowadays, IT organizations have to face two difficulties regarding the workforce: one is recruitment, and the other is retention. In this environment, the management of Company C set the strategic goal of increasing the number of specialists.

"Due to the market challenges, it is quite difficult to attract new colleagues. The lack of skilled labor specifically affects the IT sector...The other challenge is retaining colleagues, which can affect the number of employees in this type of company."

(Case of Ágota6) Ágota's organization (Company B) approaches everyone with an open mind, regardless of gender, age, or disabled diversity category:

"...random, if they come, we are also open: we have 19 - he still needs to finish university - and around 50, Spanish, Croatian, Ukrainian, and 98% visually impaired colleagues. Some came from multinational companies, and several who work part-time because they had babies. There was never any turning away from anyone. I am here as HR manager. As a woman, I belong to the management layer, and my two-year-old daughter works part-time. There was never a case where we didn't hire someone because they were too young or too old. There was never anything behind it."

(Case of Ágota7): For Ágota, diversity means that

"...for me, diversity is not only about the gender ratio but also about the qualifications of our colleagues, what age group they belong to, what generational differences there are, what kind of culture they come from, whether they worked in a multinational environment, at a large domestic company, because that is also very important for in terms of thinking. Small company, big company, even national differences."

Ákos

(Case of Ákos1): Ákos' organization (Company C) set a strategic goal to become outstanding in product design in the Hungarian market. Therefore, they also want to expand in strategic terms.

"We are looking for people who are 1) senior, 2) strong in their profession. I measure seniority not only by the fact that he has been working for ten years but by what kind of soft skills he has, how well he can mentor, how well he has a business eye, and how strong his people management skills are so that he is a complex person. Our team consists almost exclusively of seniors. We believe in working with seniors."

(Case of Ákos2): The average age of Ákos' team is 30-32. Following the strategic directions, they targeted hiring new people on the board of Ákos. One of the candidates is a knowledgeable professional with 20 years of experience. Ákos is afraid of potential tension in the team due to the age difference between the other team members.

"Now we are interviewing a forty-five-plus old fox; understand the old fox, who has been in the business for twenty years and actually has excellent knowledge, and everything is good, but maybe we won't make him an offer because he is simply so out of this from the whole, and we don't know what this decision will do to our young, ambitious, strong designers. We have a very low turnover, almost zero. Those who were here three years ago are still here now. And we pay a lot of attention to this (..) because it is much more risky to lose the others because of this... And of course, I have to look at the finances as well, so how much he asks for is also a deciding factor, whether it causes salary tension in the team."

(Case of Ákos3): Following the organization's growth plans, Ákos had to select the expansion strategy of his board: they choose to hire labor or hire new workers:

"I want to build a team, I believe in this, (...) I believe in this because of human things, that as a team (...) a better working environment and a better product can be designed and created."

David

(Case1 of Dávid1): In Ákos' team, the professional interviews are conducted by Dávid as the lead developer. A few years ago, a knowledgeable IT specialist applied to the board. However, during the interview, Dávid saw that the candidate did not fit into the organizational unit based on his personality (he is too mature and likes conventional solutions):

"The old fox had a lot of knowledge, but I was worried for the team that they would not feel comfortable because of the age difference. That's why I refused, because my goal is for the people who work for me, for us, to feel good here. They want to work here, they want to stay here, and we do tasks that are good for them and that they like. Being in a good community and feeling good means delivering a good product (...), so these people could earn more elsewhere. Still, they stay here because the community is better here, (..) we can learn and develop from each other, and that is sometimes worth more, like cash."

(Case of Dávid2): Dávid participated several times in IT projects where women were present in management positions.

"These women leaders I know are there professionally, and we recognize them. This is a professional community and not a community of men."

Anett

(Case of Anett1) Company B does not have a policy on diversity in its internal regulations, but at the same time, they do not shy away from diversity. When a colleague belonging to a given diversity applied to them, they did not shy away

from joint cooperation but did not seek it directly. Such a situation arose when a disabled candidate applied to them.

"We came across [disabled, visually impaired], and we looked at [the situation] ... we looked at how we could solve the problems we were facing. He had a helper, who came from the institute for blind people to give us training, who showed the colleagues how to treat him, help him, support him, and how he can work. He has his own computer, device, etc., and he knows how to connect to work."

(Case of Anett2): Company B, although it is not a strategic goal to increase the proportion of female employees in the organization, they are open to girls:

"Now we have hired girls from retraining centers, not even one. There are more of them now. They are still in a junior position, very senior - we have one or two senior Java developers, and we also have Frontend - different from typical. However, there are more Business Analysts or Project Managers, and that's why they're also in testing. I wouldn't say there are many, but we also have tester girls."

(Case of Anett3): The experiences of Company B show that the younger and older age groups have a positive effect on each other.

"We welcome everyone from the young to the elderly. I have to say more than welcome. On the one hand, it's because they complement each other very well, and on the other hand, you can learn from each other very well. You can learn a lot from young people, even knowledge of new technologies, methodologies, attitude, and I could list more. I must say that the older colleagues can also be outstanding mentors due to their professional experience, so we have that. In fact, we have hired developers with zero balances and zero kilometers, and we are even open to such retraining centers. We don't only accept university graduates."

(Case of Anett4): A few years ago, Company B contacted a retraining center to expand its teams with juniors.

"We started from scratch; we didn't know these retraining centers. So we looked at who offers what, what kind of training system they have, what kind of training time they expect. We were able to go see demos, hold interviews, and then we included in the

strategy how we can integrate the juniors into the team when we can put them on the projects when the junior becomes profitable. -ancestor."

The company brainstorming is held every Thursday within the organization. Members bring ideas and suggestions for development to the organizational level discussion. These ideas and suggestions can come from any member of the organization.

"Within the company, no one was ever subjected to atrocities for expressing their opinion or thinking that they saw it differently than the management. We encourage everyone to share and tell them because that's the only way we can change, and this is the first step to creating a culture of feedback."

Ádám

(Case of Ádám1): During the COVID peak, Company D had to face the challenge that their colleagues took the confinement very badly. This was related to the young age of their employees.

"A significant part of our employees is young and a significant part does not live in their parents' house, so this significant part is at home alone at the moment, or possibly with a roommate. Well, now they are taking confinement very badly"

(Case of Ádám2): Company D has its own developed products, which are also developed based on individual customer needs. These developments can take a few weeks or even several months/years. Depending on the size of the project, a separate project team can be dedicated to the realization of a customer's business needs.

"It is part of our organizational culture that the goal is for the employees here to feel good and we try to strengthen this as much as possible. We don't always succeed (...) the problem is that we work in such an environment, I mean the environment in Hungary, where there are projects where it is not always possible to achieve this, because we are locked in limits and it is therefore more difficult to self-realize. Unfortunately, we have projects where we are locked into too strong a framework, and our free-spirited developers don't always like that."

Norbert

(Case of Norbert1): When asked about the low gender composition of Norbert's organization (Company B), I received the following answer:

"In the first place, our profession is IT, it is quite a male-dominated profession. Let's add, I think the majority of the employees are also 75-80%, it is a male-dominated profession from the beginning. Professional leaders are made up of men. It's a social gift. The number of women among developers is negligible. Among the testers, there are a few. Among the consultants, the consultant leader is a man, but the two group leaders are both women. The proportion of women is higher there. We have a clear female dominance in the HR field. However, HR used to be a special management member, HR was a leading management member, but I mentioned to you now that we split it into two separate areas, so it is not with management, but women also lead it. The HR Business partner and the other HR are also women. I wonder why it turned out that way. We were all professionals, and it evolved from us to be leaders, and that's probably it. There is no awareness in this, and we do not have any prejudice."

(Case of Norbert2): Norbert's goal is to increase the organization's TMT with female members.

"Currently, there are only men in the top management. Anyway, our goal is to enrich you with at least one lady. There used to be a lady colleague, but she went abroad, her husband got a secondment. So when he was with us, we always paid attention to him."

(Case of Norbert3): The Association of Information Technology Enterprises (IVSZ) had an initiative called Girls' Day. Today, female students go to IT companies and see what IT is about. Norbert is an active member of IVSZ; Company B also participates in the initiative.

"Girls about to choose a career came to us from schools to see how an IT company works. We don't do an independent initiative, and I don't think we will do it, but we are highly involved in such industry initiatives."

(Case of Norbert4): Norbert's organization's perception of diversity is unrelated to the company's strategic directions. Although Company B has set itself the goal of

opening up to international markets, it needs to equip its internal policy with diversification elements consciously.

"We don't have any diversity strategy. We also want to expand internationally, which means that we have to tap into multiculturalism. But we don't consciously deal with that."

(Case of Norbert5): There are many developers and business analysts in Norbert's organization. The developers have two female colleagues; the vast majority are men. More women work in the business sector. In his view, girls don't like discrimination.

"We take great care of the girls, but they don't like us treating them like male eggs."

Gábor

(Case of Gábor1): In Gábor's organization, diversity takes on a different meaning:

"We used to use diversity for the diversity of projects, not for internal proportions. We are aware that we don't have a strategy like Google or these Facebook, big companies."

(Case of Gábor2): Gábor's organization had previously participated in an initiative promoting IT among high school girls.

"We've already hosted high school girls to see that it's not just plaid shirts eating pizza in Vietnamese slippers."

Júlia

(Case of Júlia1) Júlia does not like hierarchical and authoritarian relationships, she is a believer in partnership. In his view, it is important for people to be able to work together honestly. He found that he could give room for individual ideas to soar and that high-quality work is created when everyone moves within a given framework as their talents and ideas allow.

"Practically, I discuss everything with my colleagues, and when we start something, we discuss it with everyone step by step, together, and gather ideas. We try to even out the unevenness or minimize the possibility of mistakes because they can inevitably slip in."

And I expect creativity from my colleagues because it is important to them and to me. And it's better for everyone because more than one mind is much more. And I see that a lot of people like it. But, of course, there are always personalities or individuals who are not so open and brave. There could be a thousand reasons for this. I had to recognize this type and hold his hand a little. And then he gives the direction very well and even has novelties and new ideas. Inclusion is very important to them.”

(Case of Júlia2): Júlia's team members' view of the boss-subordinate relationship was significantly influenced by their previous workplace experience. His colleagues in the previous places received minimal information during their work.

"They quite like the fact that I always share everything with them, and it's easier to work that way because they can see the next steps. So they are sufficient in information, never hindered by setting new directions, or moving on, thinking further. And they really enjoy this, and especially the fact that sharing information not only makes their work easier, but also gives them a kind of trust, that is, they say that this means that I trust them, which is why I share the information one hundred percent. And this is a very important thing, a lot of people really need to feel every day that they trust them 100 percent. So they work in a completely different way.”

(Case of Júlia3): When Júlia joins a new community, she discusses the tasks with her colleagues for several hours. During this time, he covers the tasks, what, why, and how the given colleague usually does during the work. In addition, he strives to get to know the personalities of his colleagues as much as possible.

"I cover a lot of his specific things. For example, what do you do in your free time? Does he live in a family or not? What do you like to do with your family? Who is your best friend? What do you focus on in your personal life? Do you like the arts? Or do you prefer sports? Based on three or four conversations, I finally put together what the given colleague is like. What personality? What do you like? What do you like to exercise in? How closed off are you? How open is it? So the interactive conversations, and how far can I venture into the specific, individual, private sphere? Because there is no other way to understand a person. Some shake me off, and I respect that and try again later from the other side. And when working together, it is much easier to work together if I know that you hate carrot soup, that you run five kilometers in the morning,

and that your dog is called Morzsi or Zsömle. That the child was screaming all morning this morning, the ordinary things that are part of our lives. And they love it when I know that your dog's name is Morzsi, they love it when I know the child's first name and when he was born, how many kilos he weighed, that he was at the theater the day before yesterday, what he saw. We'll talk about it then. So you have to discuss many, many more things with a given person in order for him to see you as a partner and not just his boss."

(Case of Júlia4): Júlia surveyed within the organization. He was looking for the answer to what is most important to the subjects who participated in the survey during their daily work.

"99% of people said team cohesion and that they would like to receive professional and human feedback on a daily basis, i.e., positive caresses. So when XY's boss would tell him in just two sentences - it doesn't matter which level of manager - to listen, Gyuri, you solved this task so well, and that's why it was phenomenal, you approached it with a good sense of humor and still it went very well and that's how it should be and move on—those two sentences. If you do it in a more polished way, let it be three, and let's say once a week, people would be in heaven. Feedback is very important for everyone because it gives a compass and determines their self-esteem."

Kristóf

(Case of Kristóf1): Kristóf started his career at Company A as a business analyst. He maintained a close relationship with the project team, and thanks to his persistent and diligent work, he was appointed the director of the project team after one year.

"I maintain a closer relationship with each colleague than I usually see with a manager. I worked with the core team before my administration, so there was personal familiarity. And with new colleagues, I always strive to spend time together, to have joint meetings. Since I became a director, I am still an integral part of the structure. So I didn't get to the top of the mountain from where I can't be reached. It has always been important to me that if anyone has a problem, they should contact me. If I need to talk to someone about something, I like to talk to them. Unfortunately, I am not very good at

it, but I really try to have conversations with people and my colleagues. This is important from both the work side and the private side (...). It's important to be able to find each other."

Kristóf2 - his view on diversity:

"I always try to adapt to the vehemence and psychological profile of the given colleague, what kind of person he is. Because no two people are the same. It would be very easy if you had to do the same thing with everyone and then you could reach a positive conclusion, but it's not that easy. And as I said, I believe that every person is valuable and that you can get a lot of positive things out of every person, you just have to find the key to achieve this for each person. Everyone's motivation is different, everyone handles good days and bad days differently, this requires a lot of patience, and it may take a little more time than it takes in the 21st century. In the 20th century, they used to provide employees with the opportunity to show what they can do"

"Everyone has positive and negative periods, which must be taken care of and dealt with in order to be able to create something good together with the given person, the given colleague. I think that this is very trivialized in today's world, not only by managers, but also by companies in general. So what everyone used to do was that this quarterly period is here, the trial period and then show it now. Although it is possible that the person is capable of a hundred times more, he just couldn't say the things about himself that might be worth knowing in order to develop a complete picture. I should add...they don't even ask. So I think the key to it all is lots and lots of communication that isn't directed or one-sided. And it is important for me that the colleague talks about himself so that I can get to know him, because it will be easier for us to work together."

"For me, it is very important that my board of directors is a team - and I would always like to see this as authoritative in management - we must be able to work together, because we are rowing in the same boat"

8.4 Renewal

Bernát

(Case of Bernát1): Bernát's goal-oriented approach is also valid in his view of a successful company: *„The numbers don't lie, (..) sales growth is success. Actually, there is only one authoritative number that is decisive, so everything else is a continuation of it.”*

(Case of Bernát 2): Bernát makes the organizational transformation decisions in one person, he does not ask anyone's opinion. On one occasion, he promoted a new agent because he wanted to put more emphasis on it.

"I announced this to my leaders and no one had any objections. So - that's a bad word and maybe a bit too strong, but really from a distance - there is a revelation. This is going to happen. If there isn't much resistance, I'll take it all the way. I've never had it before, but if there was a lot of resistance, I'd back off and think about it. But this has never happened before."

(Case of Bernát3): Due to the continuous brainstorming for the future, several TMT ideas within the company talk about future developments. Such developments include implementing a function that allows the system to perform comparison tests using a number of parameters.

"It gives itself, such clear connections. There are thirty such connections that we have already written down and we are analyzing them. So, these are all known and clear connections. Whether politics or education policy wants to deal with this is up to him. But we know where we should intervene, but it's not our job to intervene."

(Case of Bernát4): The CEO is a fan of rapid decisions. He sees a more significant risk in waiting for a given decision rather than making a decision quickly, flexibly, and experimentally.

"...decisions within the company are very rapid. I follow the principle of making quick decisions, thereby not slowing down work processes. And if I'm wrong or someone questions my decision - in the positive sense of the word, so how can I be sure I made

the right decision? - then I can reconsider my decision a day later. But I made the decision, and it's not that people are waiting for the fried pigeon to fly into their mouths, but there is a decision that allows you to move forward."

Quantity

(Case of Antal1): According to Antal's view, a developer must also see through the business processes. That is why he considers informing and communicating with colleagues continuously necessary. He justifies his preference with the turbulent environment and his individual preferences.

"I think that developers should also know the business and professional side of the system. I think this is important because 1) we work in an environment [the educational environment] that changes very quickly. By the time you specify it, write it down, do it, it has long since changed, either the legal environment or the customer's needs. Ad 2) I claim that you can't make something - whether it's a car or software - without seeing the big picture.

Norbert

(Case of Norbert1): The two founders of Company B are Norbert and Zalán, of which the latter has majority ownership. Zalán led and managed the company for a long time. However, around 2017-18, the organization's performance decreased significantly, which could be linked to the fact that the organization was ripe for renewal.

"Zalán has a personality, he was the engine of the company for quite a long time. Without qualifying him or his activities, let's say that he was tired at the end. We've had some not-so-good years. 17-18 were not so good years, 17 was decidedly not good, and then Zalán decided to step back, and this was the root cause, which created the opportunity for renewal, and we started with a slightly different mindset run a company".

(Case of Norbert2): Zalán (Norbert's business partner) started his career as an IT consultant. Later on, however, he got bored of making the plans, mostly for his desk drawer. He met Norbert's company in connection with a joint assignment. They later worked together on many projects.

"Since the two companies complemented each other perfectly, we decided that the companies would join forces and continue together as a stronger group. Thanks to the combined strength, we have grown a lot in the eyes of their corporate customers".

Gábor

(Case of Gábor1): Company D's system constantly registers who is doing what in the system. Events are stored in log files. A few years ago, my colleagues wrote their own logging software and solution, which worked for a long time. However, many child errors came out when the system received a heavy load.

"And then we were faced with the fact that this logging system was not even tested for large amounts of data, users, or throughput. Then we looked at what was on the market. And that's why there are free or paid products that are used by thousands, hundreds of thousands, or millions of users. Why did we have to write our own? Well, these would be perfectly usable. And then a decision was made, let's see which system has which advantage and what we will switch to. Because this is our hand-made stuff, isn't it, so it won't withstand such a load test. And then we had to transition to that gradually".

Kristóf

(Case of Kristóf1). In previous years, Kristóf participated in every detail in the work processes of his board. He looked at and checked all development tasks and developments. He checked every email and double-checked everything. He spent sixty to seventy hours a week at work. After a while, he felt increasing stress and couldn't take it anymore physically, health-wise, or mentally.

"That's when I formed the opinion that one of the hallmarks of driving under a death sentence is that you must do everything. It was then that I decided that I would rather devote the time I spend looking at everything to increasing the competence of my colleagues and training them into valuable professionals who will be able to shoulder

these burdens with dedication... So I changed my approach and tried to delegate and deal with colleagues. I experience it very positively when someone learns something new, is proud of himself, and is happy that he managed to do something. And I noticed that I also feel a great sense of happiness when there is a colleague who asks for help or doesn't even ask for it, but I see that he has difficulty, we help, we come up with ideas together, we come up with something, and then he gets a sense of success as well so of course me too. And then I saw after a few months, on the one hand, that it was also worth it as an investment. On the other hand, I can also learn quite a lot because more than once, it happens that a colleague has insights that I hadn't thought about before and wouldn't have thought about if I just did the task at night."

Zoltán

(Case of Zoltán1): Zoltán's organizational unit is small, consisting of a total of four people. Their main activity is related to finance.

"Everybody here knows when to come to the office; I don't have to discuss this with them separately. The particular colleague's job determines everything and whether it requires someone to be inside or not. Our operation is not hierarchical; everyone knows their job and does it. If necessary, I am always available, we coordinate and discuss if necessary."

(Case of Zoltán2): Zoltán's client requested an invoice amendment on the day of the transfer. An immediate decision was needed because Company A calculated the transfer amount on the given day.

"We have administrative matters that require both routine tasks and quick decisions. In this case, there was a cancellation; then it had to be resolved there because the source was also urgent."

Lajos

(Case of Lajos1): Company A's system has an interface where customers can report errors, ask questions, give suggestions, and make requests regarding individual functions. During the strategy development, Lajos thinks through

implementing these proposals with his team, considering what percentage of customers would benefit from this implementation.

"I always say that I'm not the smart one, but I read these ideas and suggestions, and then we organize them and think about them. But you have to see that a good idea might work well in a specific school, but we have to implement it in 3,500 schools. It might be confusing for others. So I always read every development proposal - usually with the team - and then we discuss and design whether it is good, how it would work in the entire institutional network, and then we prepare such a short description for the developers that it is worth including this and that function. Or is it worth changing this and that? So, it's a very exciting and creative part of our job."

(Case of Lajos2): Lajos considers it very important to understand the customer's user goals.

"I always tell my colleagues that when customers ask a question, we should understand the essence of the question, what the user wants, and describe to him that yes, here is this, and this is the solution, but otherwise think about the fact that the function, such and such things can be done this way and that way, that this is for this and that. It would be ideal if a software guided the user's hand. It is not possible to do this with a software of a similar level to our system, but I think that, for example, those trainings, workshops, conferences, where we meet the teachers and their users in person and talk to them, are very, very important. Because on the one hand, we also learn, so I also learn a lot when, say, a little more informally during a conference break or before, I talk to the institutions afterwards. On the other hand, it's really good that different special problems can be discussed in a larger forum and explained to them."

Ákos

(Case of Ákos1): Ákos' organization previously received an invitation for IT outsourcing, which Ákos refused based on a joint decision with TMT.

"... we don't believe in temporary staffing; our goal is not to make x% of the daily fees per day but to be outstanding in the Hungarian market, which we believe we can achieve by building teams."

Anett

(Case of Anett1): At Company B, the team and human relations at the organizational level are very good. The team members often organize joint beer drinking and parties outside of working hours. During one of these friendly-college gatherings, the idea was born to make a proposal to replace the Slack messaging application with Teams.

"This developed in such a way that the development team came up with this for themselves. After partying together, they shared the idea with the others and went on to the upper floors. This meant that they told the business manager what they thought the advantages and disadvantages were, what it would cost, and that's how the decision was made to replace it."

8.5 Ambidexterity

Bernát

(Case of Bernát1): According to Bernát, he makes quite strange decisions in HR. For him, the primary consideration is not whether the wage demand of the given person fits into the wage structure but how many orders the organization has and must fulfill them.

"If we can generate even more profit with the person's appearance, then the question is not whether he fits into the company's wage structure, but whether we can generate even more profit."

(Case of Bernát2): Company A's TMT meets regularly for brainstorming. Within the framework of such brainstorming, they collect the future development directions regarding projects and IT matters that internal support operations.

"These brainstorming sessions usually last 2-3 hours. Based on the topic, these ideas can be divided into two large groups: a) project-related questions; b) IT matters supporting internal operations. In the case of type A) brainstorming, we take out an Excel sheet and write down what we think and what development should be implemented. We collect these in larger sets. There are forty-six such sets on our

current list, which is roughly one hundred million forints. And do we discuss with our colleagues what the particular strategic directions are, whether we will do the given function or not? In the case of type B brainstorming, we discuss the IT issues that support internal operations and support the operation of the organization. For example, creating documentation about how we do our own developments?"

(Case of Bernát3): In Company A, the question arose about which ATM device to use in the future. To make the decision, Bernát had to consider professional and financial aspects as a manager. In this case, professional and non-financial issues were given greater emphasis in its decision-making mechanism.

"It was an important financial and professional decision as to which one the guys would support. There was a device that was very cheap, but no one supported it. Therefore, there was no question that we would not choose it."

(Case of Bernát4): Bernát does not consider himself a good leader. In his view, it was a good time, a good time. Professional preparation is the most important for him, and he sees his leadership strength in this.

"...I would never dare argue with the most prepared negotiator. If someone is prepared, thinks logically and behaves rationally, I think that it is challenging for anyone to oppose him. If the negotiator is not sufficiently prepared to negotiate with you and if you are the most prepared, then he has no chance. And that's all it comes down to."

(Case of Bernát5): Bernát only considered professional aspects when selecting his TMT team.

"There are born leaders, although I think that if a born leader is not prepared, he will drop out and from then on he will never be good. Being a born leader is a fantastic thing, a talent for those who have it, but if you don't have the preparation and knowledge necessary to understand the market, you won't be able to lead your team well. (...) In the beginning, this is good, but then..."

Lajos

(Case of Lajos1): Lajos is a big fan of brainstorming. He considers it important that all his colleagues can express their opinion, even the wildest.

"Maybe we won't be able to use that idea now, but somewhere else. Last week, for example, a completely new solution was born from the solution of one problem, which we were able to utilize in other areas. It also happened recently that during the oral analysis of the problem, we shed light on new fundamental problems, which was very useful. So we proactively prevented the further spread of the problem or the appearance of new problems."

Norbert

(Case of Norbert1): Norbert's strategic plans include, on the one hand, focusing on operations-related activities. On the other hand, expansion abroad, staff growth, and developing of new services with added value increase competitiveness.

"Our company has four competencies: development, testing, business intelligence and consulting. We definitely want to keep and refine these. One of our long-term plans is to increase the number of employees. On the other hand, my growth plans also include foreign countries and increasing added value. By foreign target market, I mean the West, especially the German-speaking market. We did a survey to find out which markets are the best. Scandinavia and Benelux are still good, but we have a reference in the German market, because we have a big customer there, with whom we have been working for ten years. So this direction is the logical one. However, the Germans are much more conservative than the other two regions, the Nordics or the Benelux, which are much more open to cooperation. Added value means that we have started new services that we have yet to deal with so far. Because based on market needs, we saw that it would be beneficial to start developing software robots and factory automation."

(Case of Norbert2): Company B has an open-door policy. The organization operates on an agile basis. Accordingly, the self-organization of the teams is expected. The outsourced workforce is provided with a special working hour for

daily learning and common ideas outside of the project, which is included in the contracts.

"We are an agile organization; we constantly cooperate. It is very important for us that everyone gives their opinion and idea. Everyone is involved here, whether I mean the teams or the company community.

Levente

(Case of Levente1): During a joint beer drinking, Levente and his colleagues came up with the idea that many people would like to acquire new knowledge and learn new technologies within the organization. Before the appearance of COVID-19, there were regular trainings within the organization, which were not carried out after the closures. During the beer drinking, it became clear that this was a problem among the employees. That is why Levente, a developer and a Scrum Master colleague, started to develop solutions, listing pro and con arguments.

"...the three of us wrote a one-page document, gathered the advantages and disadvantages, why we want it, why it's good for the company, why it's good for the people, why it's not good for the company, why it's not good for the people, and then we knocked on the door to our business manager. The business manager decided within his own authority whether our proposed idea could work. But this is common with us, if we collect the arguments - and obviously, we go there with an idea if we have arguments - then it usually goes through. I don't really remember an idea that was rejected...So we discuss everything within the company. I think joint bar storming is very important."

Kristóf

(Case of Kristóf1): According to Kristóf's view, the people on his own board strive for innovation. They started moving towards agile development directions, using new software. Kristóf managed to get a Udemy subscription for the company and his colleagues to learn. At the same time, in his view, company management blocks innovation because it cannot surprise many things in advance due to organizational characteristics. For example, they suggested replacing Skype with Teams. Unsuccessfully.

"So I think that we clearly have the innovation and the intention, but above all the intention, because unfortunately quite a lot of things are blocked by the company management. And I feel that there are quite a few topics in which we cannot make much progress due to circumstances. For example, even if we wanted Teams to be the corporate (...) communication platform, it was not possible because the corporate group uses Skype and this cannot be changed. We tried in vain not to have slack at our own company, because we don't like it so that it could be something else. In vain, I worked out solutions and cost estimates and everything. No, because we are used to this now, we stay with the old one, that's fine because the business sees that it still works. So I think my board would be innovative, but unfortunately, our horns are usually crushed."

Gábor

(Case of Gábor1): In the case of Company D, no weekly or monthly brainstorming is recorded in the calendar. At the same time, within the organization, it is expected, and there is a great openness to hold meetings for ideas in a self-organized manner. The organization provides a different working time frame for this [1 hour per day - outsourcing is also adjusted to this] and chat rooms and idea boxes in the office.

"Our entire organization is very open to new ideas and the wildest ideas. The teams start to talk about specific topics in a self-organized way. This is the core of the whole thing (...) and it goes on "wow, good, then you have to invite the others to this". They involve those who are interested in the topic and think about it together, make decisions, and make suggestions."

8.6 Decision - search

Bernát

(Case of Bernát1): Previously, Company A had to decide whether to go against the competition or to acquire it:

"We chose the version so that [our company] would spread and be even more recognized and loved, and the so-called product universe that I want to build would be connected to it one more time. That's what the story is about."

(Case of Bernát2): Bernát uses a specific information-gathering strategy for his decision-making mechanism. He does not prefer many meetings. Instead there is an agreement within the company that Bernát must be on all emails in which his colleagues [second and third level] communicate.

"...that's how I have an idea about matters, and I don't have to ask a lot. And if there is still uncertainty, I ask questions to colleagues, to which I expect quick answers. This means 4-500 emails per day. My colleagues are shocked, but I indeed read every letter. If a letter is very long, I write back that I have not read it because it is too long; please make it shorter."

Proof of this: (Zoltán1's reflection): *Company A starts a public procurement, in which Zoltán represents the organization. In connection with this, he informs Bernát in the following way:*

"We communicate a lot in writing, so it is expected of Bernát in the company operation to be always on the outgoing letters. So I will briefly describe to Bernát what happened in relation to public procurement. If you are overworked all day that day, you might answer at one in the night, because that is when you are close to the machine. And personally, I might not get to it until two days later because you have meetings. In many cases, I can reach you electronically much faster than in person."

(Case of Bernát3): Within Bernát's organization, they developed a module for their own system. The development cost several million forints, plus they had to buy a product. In connection with the development, new people were also hired. And after the development was completed, they started selling the module. Their experience showed that the market could not pay HUF 2,000 per month.

"... then I said we were going for free. ... The fact that we would have received twenty million forints annually from two thousand forints and the several millions would never have been repaid is one thing, but the question here is whether we should give it away

for free. And we decided to go free because it was another position of market acquisition."

(Case of Bernát4): Company A has an APM (application performance monitoring) software for infrastructural elements, which they voted for last year. In the meantime, however, the operating price increased significantly, greatly increasing the operating cost annually. At that time, based on Bernát's request, the experts examined what could be changed instead.

"... I don't even know what they are. The experts had a suggestion...the guys told me what they wanted. I don't get involved in this, I was interested in how much it will cost me and which one is worth more for us in the medium term in terms of operation."

(Case of Bernát5): Bernát has repeatedly experienced that his young colleagues would urge him to gain experience. In his view, what kind of professional experiences someone has had fundamentally influences their current decisions.

"I always tell my young colleagues that you can't buy experience; it takes time. The events of the past, based on professional experience and experiences, have a maximum influence on the decisions and directions of the present. A striking example is that one woman carries a child in nine months, but nine women do not carry a child in one month. There are no miracles in IT either. Anyone who thinks so is wrong."

(Case of Bernát6): Based on Bernát's request, he is on all correspondence with his colleagues [second and third level]. There were times when his colleagues mistakenly leaked a particular piece of information. Bernát sees nothing wrong with this. In his opinion, it is part of life.

"No one is perfect, and no one is infallible. Only those who work make mistakes. I always tell my colleagues when they make a mistake that there is such a thing. That's why I have to be on every letter because if they make a mistake, there is an opportunity to intervene. So communication, you can intervene right away. A day or two later, I read the letter at night. Then I can intervene - sorry, it wasn't like that, sorry, the letter went out incorrectly, and that's it. If I'm not on it, but you have to intervene when a letter comes back after eight weeks, then you can't get involved in a process so easily anymore, and it's much more risky and expensive."

(Case of Bernát7): Bernát created a specific operating and decision-making mechanism within the company, which I call an operating model. In his view, this is neither a standard nor the most efficient solution but a tailor-made operating model.

"At the lower levels, I can really understand that it is much more difficult to make decisions below me, that many people make their decisions out of fear because they are afraid that I will intervene in the decision afterward. But fortunately, some colleagues understand where the limit is and who will go as far as the limit in their own decisions until they think they can go safely. If not, they will ask you."

Proof of this: Reflection of Lajos:

"There are no boundaries set in stone, but I think I know what I can decide on and what I can't. If I'm not sure that I can decide on this, I'd rather ask than make a decision. So I think I'm confident that I'm not making a decision that I couldn't make."

(Case of Bernát8): When Bernát comes home after work between eight and midnight, he reads his letters and writes the answers. He works 10-10 hours every Saturday and every Sunday.

"I don't expect anyone to read my letters after working hours or on weekends. But I can be involved in the processes if the letters contain all the information I need to know and make a decision about. If all the information is not there, then I ask if I feel something is wrong, that's all."

(Case of Bernát9): At the time of the interview, the budget for one of Company A's projects was completed. Bernát gave a higher amount when determining the pricing strategy than Mihály (the other company owner). However, Bernát insisted on his developed price strategy, thanks to which Company A realized a more significant profit.

"You have to foresee these things in advance (...) and for this you have to be able to price well, and in order to price well, you have to consciously build what you want to do from the very beginning. You can't let the market influence your worldview. I told them I

would sell the product for that much, but they couldn't say they would buy it for half that much. If you are tough in the beginning, then from then on, they will never ask you why you were tough in the beginning."

Lajos

(Lajos' case 1): Concerning users, Lajos considers it very important to pay attention to customers since a significant number of their users need an IT degree or in-depth knowledge. Therefore, when new functions and program parts are released, it considers it necessary that their users receive help. The form of this is the expansion of the knowledge library and video library, but at the same time, they do not respond to comments or messages on the Facebook page. The exception was the period of COVID.

"...our principle is that we do not communicate via Facebook, or more precisely, we only make statements, so we post news that we consider important in our Facebook group, but we do not, for example, respond to comments or write. There was a period when the digital work schedule came in, and we suspended it, and I said that now if the parents ask us something via Facebook, we will answer them. But otherwise, no, so we are not actively involved in these processes,"

(Case of Lajos2): In the case of Lajos, the objective, rational solution, the long-term decision mechanism, and the product universe also arise

"During a decision, the short-term effects are obvious; rather the question is how the system will develop in the future, what effect it will have on the Product universe. Therefore, flexibility, further development, and robustness are very important to me."

(Case of Lajos3): Lajos' team had to vote for technology within the organization. The choice was a defining decision for the organization for several years.

"I had an opinion based on my own professional experience and - true to my custom - I asked the opinions of my colleagues and took them into account. Then I read the topic quite thoroughly. Both what I thought about the topic and what my colleagues said."

(Case of Lajos4): During TMT decision-making processes, Lajos always pays attention and reminds his fellow managers to keep the long-term effects of the developments in mind when developing strategic decisions and development paths affecting the System.

"For example, I told you at the management meeting yesterday that it is very important to take into account that we may have now come up with a solution that is quick, simple and easy to implement, but it may in the long run hinder the possibility of further development and because of this, in a few years we will suffer. So it is very important that we make long-term decisions and not short-term decisions and examine the long-term effects of our decisions."

(Case of Lajos6): A few weeks ago, Lajos had to select a partner company for a project that was about to start.

"At that time, I research the company on the Internet, I look at the company, their website, their company information, how many people work, who are the people who work there. So I usually collect quite a lot of information from the Internet in order to be prepared in, say, who I work with in the case of such a partner company."

(Case of Lajos7): Lajos Cég's vision of its System also includes a significant social role:

"I have said many times that we can help, say, a student who is not good at math, whose father is a tractor driver, and whose mother is a weaver. No way. And if, say, there is no money to pay for a private tutor, then this child will stay caught up, drop out, and not have a sense of success. Yes, but if we can help him with different digital tools, even with online textbooks, e-learning, all kinds of playful quizzes and tasks, then there is the possibility that he can learn in a slightly more exciting way. The internet is full of information, it's just very, very difficult to organize it. And in the case of our system, for example, if I'm a ninth-grade student and I'm studying mathematics, then I have what they learn in mathematics in the ninth grade, and the various study materials can be provided to the student in a much more targeted and much more organized way."

Antal

(Case of Antal1): A few years ago, Lajos had to decide to choose Angular, React, or other specializations among the front-end technologies on his board of directors.

„I then asked my colleagues who preferred what. Everyone had to write down their opinion on what they would choose, why, what they say in favor of their decision, and what risk factors they see. I also read a lot of professional comparisons, mainly in English. I made my decision based on the results I received based on the votes and my research. So in the end, the decision was unanimous; even those who voted for the other one realized that this is a better choice for our company at the moment.“

(Case of Antal2): A new ticketing system was introduced a few weeks ago. Antal decided to choose the right system based on three criteria:

"Here, there were mainly three aspects that I took into account. The preliminary is experience, so if I have already worked with that tool at my previous workplace or on previous projects, it is obvious that because I know it, it gives me an advantage, but it is not an exclusive advantage. So if someone comes with another device, I'm, of course, open to it. The second is the opinion of my colleagues, and the third is what I myself can collect from other places about it."

(Case of Antal3): There are occasions when Company A uses the help of external experts to complement its own ideas.

"We had an idea and an idea of what the system should be that we wanted to integrate into our systems, but we wanted more information. At that time, we asked an external company to find tools for us, and we also told them one or two that they should include in the analysis and compare the advantages and disadvantages from both a business and a professional point of view. And then we got this complex analysis."

David

(Case of Dávid1): The software architect working in Dávid's project team and the backend developer could not agree on a technical issue related to a function. Based on the discussions, the two specialists did something but knew it was not perfect.

When they saw that they were not getting results, they approached Dávid to decide on the development direction.

"Although I form my opinion quite quickly, I usually don't share it with my colleagues, but I ask the colleague what his opinion is, what are the advantages, what are the disadvantages, on what basis do you think this is a good solution and whether there might be something right? I don't like to make arbitrary decisions in technological decisions. I like to convince my colleagues that the solution we finally put together this way is the best solution and that everyone can identify with it. I think that decisions should not be imposed on colleagues, but rather try to convince them why this is a good solution and that if they insist on the other solution, I will try to point out the weak points of that solution without criticizing it in particular. So, doesn't it always start with yes? This is a very good solution, but I see the following dangers? And then I will tell you what dangers I see."

Adam

(Case of Ádám1) Company D's customer previously sent the proof of completion, to which Company D also sent the related invoice. The client accepted the invoice, but on the day of the transfer, two minutes before the end of working hours, Ádám received a phone call from his client that the invoice was not filled in correctly, so they could not transfer. These can only be approved by Gábor, the CEO, based on the decision of top management in the organization. However, at the time of the event, Gábor was not in the office, nor was he available, and an immediate decision had to be made.

"The invoice and the TIG were issued like that, and then we had to figure out if it would be good like that or should we cancel it?" The point was that it had to be solved anyway because the source was also urgent for us. I agreed with other colleagues and exceptionally did not wait for Dávid. As it turned out later, he wanted it that way too."

Ákos

(Case of Ákos1): Within the framework of a workshop, Ákos and his team defined the main activity direction of the business branch and the customer base they

wanted to target. As a result, they decided to deal with product design, i.e., product design and their customer-related needs. The strategy was discussed in a workshop formed within its framework.

"We want to work for educated large SMEs or multinational companies because these companies are more digitally mature. They understand why user research is important. They understand why prototyping is important. They don't need to be told this eighty-six times, and in the end, they take it out of the price, but they understand the importance of this because they also think in terms of strategy and look to the future, and want to minimize costs. It's no use telling an SME that you will spend two million forints with the prototype, but with that, we exclude that you will spend twenty unnecessarily during the development. He can't think about it because he sees him for the next month. (...) And he doesn't want to believe it and prefers to pull it out and then suck it up during development. But that's his problem. I can't do anything. I'm trying to convince him of that. With an MNC, this can happen much less often. That's why we prefer to work with them. That's why we love Telenor and RTL because they don't even ask if it's necessary but say yes, of course, we'll do it."

(Case of Ákos2): Ákos highlighted concerning the decisions related to the project that they have projects that fall into the "no go" category.

"In no-go cases, we pass the lead on to our partners for a certain sales commission. This is an important decision because the client is valuable, that is why we contract with them, but we absolutely outsource the task, and we do not deal with it."

(Case of Ákos3): If Ákos' team decides to implement a project, it receives the "go" category. In such cases, it is usually not only Ákos' company that participates in the project tender, the first step of which is discussions with the client.

"We try to get the information about what you really need, because many times (..) even though they don't know what they need, it's usually not what they need, they just don't know that they don't need it, and we help them with that."

(Case of Ákos4): From a strategic point of view, Ákos wanted to be part of a company's network of relationships. In order to implement long-term plans, he undertook the current project, which generated a loss.

"Strategically, we wanted to get in, and that's why we lowered the prices so that we could somehow get in. Practically, in this case, my business took on the project at its own cost, and we did not make a single penny of profit, and we will even make a loss. But we see strategically that this will backfire in the long term."

(Case of Ákos5): Due to his position, Ákos usually participates in the organization's important events. In most cases, his team members inform him verbally about the content of these discussions.

"I inform my colleagues verbally, as I am also present at every such joint event, that is, I am present at most of them. I usually discuss this verbally with them, that there is a joint event, we will discuss it, so listen, we won this way and that way, and this and that. I'm used to saying what's up."

Júlia

(Case of Júlia1): A few weeks ago, a new retention program was introduced at Company A. Júlia's primary focus when planning the strategic paths was whether or not the given decision is worth it, whether it is worth investing energy in, does the given decision have a payoff or not. In his view, these benefits cannot always be expressed in HUF but rather in the fact that the colleague feels better, works better, and is more motivated.

"My main goal with this is to keep it, and in this regard, how can this be realized? On the one hand, I look at what I have to put into that system. How much energy, how much time, how much money? If this involves money specifically. And then, I have to see how it works in a pilot project. And when I see that it works, i.e., methodologically, structurally, and content-complex together, I start it. And then I calculate that, well, what can I expect from this? So, can I expect from this what I have set as a goal, i.e., turnover will not increase, colleagues will stay here, they will become more energetic and feel that we care about them, that they will do their job, that they will integrate into the organization, that the individual will be able to form cohesion with his colleagues and about work, he can practically become a part of the team, a spiral of the team. I

looked at these, and if the practice confirms this, it was a workable good decision over a semester or a year. "

(Case of Júlia2): Júlia's search pattern is similar in all workplaces because, in her view, although people and teams are not the same, according to her experience, the unique methodologies work equally well. During his decisions, he relies on his research based on information gathering and decades of experience.

"I'm gathering information. The methodologies are similar no matter where you work. You can apply this in any organization, anywhere. However, it must always be tailored to the individual or company because people and teams are different. The needs are different. The ideas are different. The preferences are different. I'm not saying they're very different, but they're different. And for this, I need to know the needs, the common origins and common points, and where it is worth going. And the experience that a person gathers over decades: he knows things that have stuck in him from his previous professional life. You can use these as well, but basically, I always work with the given stock and the given experiences in the given place at the given time. It requires a lot of communication and a lot of togetherness, attunement, and connection so that I can then put together what is needed to be successful. The story is about many interactive relationships. So I can't do without it... In addition, I read and study portals and professional articles, especially from my former teachers."

(Case of Júlia3): During her work, Júlia monitors domestic and foreign market changes. In the case of Germany, he considers this necessary so that he is aware of the fluctuation in other companies and the reality of the advertised position in the case of abroad. It has a dual purpose: 1) to protect colleagues if they want to go to the wrong place, 2) to gain global knowledge on issues related to their profession.

"I have to follow these; otherwise, I don't know the trends. For example, one day, a colleague of mine told me that he was going to get up and go to X company. It was during that period that I saw that there was a high turnover at that particular company...Obviously, for a reason. On another such occasion, my colleague said that he would try abroad. I talked him out of it, because what he said and where he was going was a humbug, and he fell for it. So it's good to keep an eye on this because that way I can handle the entire labor market process as a unit."

Christopher

(Case of Kristóf1): Kristóf asks for the opinions of some of his colleagues on issues that he is less familiar with. These questions are primarily technical questions. He decides alone on a technical issue if it is a question in which he himself is very comfortable.

"I ask for the opinion of my colleagues whose word I take. Usually, this means two or three people. After that, the decision is always up to me. It's complicated when these two or three people say different things. In such cases, I organize a meeting where we can discuss with colleagues what would be the right direction. Of course, I also learn from this because you can learn a lot from the guys from the conversations."

Norbert

(Case of Norbert): Norbert's organization underwent a profound organizational development transformation. The essence of this was people-centeredness. During the organizational development, they first looked for how to give feedback to a person and how to structure it. An external consultant was used to implement the plans.

"We worked with a training company, and they had a methodology for this, which they adapted for us. Colleagues were very satisfied with him."

(Case of Norbert2): Norbert is a fan of quick decisions. He prefers a quick decision within the organization rather than having to wait for a longer time.

"If we didn't think it through, we'll approach the decision and change it."

Gábor

(Case of Gábor1): The Gábors measure the satisfaction level of the organization's members every year. During the measurement, the organizational values are mapped.

"We have a very detailed satisfaction measurement, which we do with an external HR company. The survey also measures how well we, the organization's members, comply with the organizational values."

(Case of Gábor2): Gábor is a fan of quick decisions. He doesn't like workflows to stop. It is better to make a quick decision that requires immediate action than to think about it for weeks, and the processes stop in between.

"We are human; we make mistakes. But let's make mistakes rather than not work."

Ágota

(Case of Ágota1): When looking for new employees, Company C uses the services of headhunters in addition to the LinkedIn search. In addition, monitor your competitors.

"There are competitors that we monitor, and if we see that the situation there is not so good, we use direct inquiries."

Zoltán

(Case of Zoltán1): Zoltán was participating in an open public procurement at the time of the interview. In order to submit a suitable offer, various conditions had to be met, which included the presence of x references and experts with specific competencies.

"And then, of course, in the first round, I'll check what kind of experts we have; I'll ask the HR people if there are any. If there is none, then another company or separate independent experts must be involved. There was also a time when we brought in independent experts because we needed someone with a special certificate. At that point, I said that someone would have to be involved here, and obviously, this had to be discussed with Bernát. Obviously, in the first round, we try to involve an expert within the company group or from a company with which we have a relationship, know, etc. If not, then we will search through it at some level, but usually this issue is resolved in these circles."