EVALUATION PRACTICE IN THE FIELD

OF TALENT AND SUCCESSION MANAGEMENT

–

A CRITICAL ANALYSIS OF A PRACTICAL SURVEY

Ann-Kathrin Leni Nowottnick

Student registration number: 11902756

Organization Studies

MASTER THESIS

Submitted in partial fulfilment of the requirements for the degree of

MASTER OF SCIENCE

in

Organization Studies

at the Leopold-Franzens-Universität Innsbruck

Supervisor: Univ.-Prof. Dr. Manfred Auer

Innsbruck, 06.03.2024

Preface

Before you read this thesis, I would like to give you a little background about the process of my work. I started my master in October 2019 and finished all lectures in pandemic times in January 2021. From February 2021 till August 2021, I worked as a working student at Transformation Management AG. Since then, I have been working in a different industry and writing my master thesis in addition to my work. Working in a different field made the work on the master thesis sometimes much more fruitful and sometimes not.

I am thankful that Transformation Management AG gave me the opportunity to be engaged in the survey called Talent Management Index and to write about this exciting topic. A big thank you to Gabriela Bodner and Rudolf Binderlehner for sharing me all the insights and tricks by conducting and analysing the Talent Management Index.

A special thank you to Professor Stephan Laske for his support throughout the writing process and research period and for never losing hope in me.

I would like to thank my supervisor Professor Manfred Auer for his long-term availability and excellent guidance during the process.

Further, I would also like to express my gratitude to the proofreaders, finally a huge thank you to my parents for the mental support and to Stefan for all the efforts you have made to keep me motivated to complete this thesis.

ABSTRACT

Evaluation plays an increasingly important role in today's life and work. This thesis examines how to assess a practical-oriented survey on the status quo of strategic Talent and Succession Management in various organizations. Two ambiguous topics Evaluation Theory and Talent and Succession Management get combined in a discursive manner. The research contains a triangulation of methods which including the participation in the interviews of the research object, a literature review and a semi-structured interview.

The results of the thesis are that the practical and economically driven research object (a questionnaire) called the Talent Management Index (TMI) is an appropriate method to evaluate the status quo of Talent and Succession Management in different organizations. To achieve this result, an assessment scheme is developed that can be used for nearly any survey with quantitative questions. In terms of content, the topics of Collings and Mellahi´s (2009) concept of strategic Talent and Succession Management are getting examined and found to be fulfilled in the Talent Management Index (TMI).

Based on the results presented here, new insights can be gained into how qualitative issues can be analysed through Evaluation Theory and presented as a quantitative result.

Keywords: Talent Management, Succession Management, Survey, Questionnaire, Index, Assessment Scheme, Strategy, Quantitative Questions, Evaluation

TABLE OF CONTENTS

List of Figures

List of Tables

List of Abbreviations

AS	Assessment Scheme
ET	Evaluation Theory
GTM	Global Talent Management
HR	Human Resources
HRM	Human Resource Management
SM	Succession Management
TMAG	Transformation Management AG
TMI	Talent Management Index® (protected by a trademark)
TM	Talent Management
TSM	Talent and Succession Management

1 INTRODUCTION

As an old saying goes "If you ask 10 evaluators to define evaluation, you´ll probably end up with 23 different definitions" (Mark et al., 2013, p. 6). If you look into the literature about Evaluation Theory (hereinafter referred to as ET) you will find more quotes like these: "You can do anything you want with it. No one really knows what evaluation is anyway." (Lee, 2000, p. 127). Or "Evaluation is a complex process, working within a context that is even more complex, both of which must be understood for evaluation to achieve its purpose." (Lee, 2000, p. 135). These quotes made me curious about how we can properly evaluate a research object.

Evaluation is ubiquitous present in our daily life, for instance school grades, surveys about our opinion (usually for political reasons) or our judgment/interpretation of our environment. Talent is also something that is difficult to grasp but surrounds us in our everyday life like in so called talent shows on television or in sport-related contexts. Since the famous book "The War for Talent" by Michaels, Handfield-Jones and Axelrod, published in 2001, we also often hear about talent in a workplace context. In our contemporary culture, it is interpreted as a social success factor and is often linked to the prosperity of the society. In addition, talent is a scarce resource and crucial for the competitive advantage in companies (Collings & Mellahi, 2009).

In this thesis, I will combine the topics of ET and Talent Succession Management (in the following TSM) in a critical analysis of a practical survey about TSM in organizations. My research object is a practical questionnaire named Talent Management Index (hereinafter referred to as TMI) which evaluates the status quo of TSM in organizations and has been conducted in the DACH region since 2009. This survey was developed by the Transformation Management AG (hereinafter referred to as TMAG) in cooperation with the University of Innsbruck and the SCI in Munich. My main focus will be on the 26 quantitative questions of the TMI. This will be done with the development of an assessment scheme (hereinafter referred to as AS) in the thesis. This is a novelty in the field, because in 2014 (Bolander et al.) found out that there are few empirical studies about Talent Management (hereinafter referred to as TM) done especially in a strategic context. The design of the AS is made so that it can be used as a tool to evaluate quantitative questionnaires.

1.1 Aim of the thesis

This thesis aims to identify whether the TMI is an appropriate survey method for the evaluation of the status quo of TSM in an organization, to determine relevant TSM topics for evaluation and to tackle future topics for TSM.
This will be done by answering the following research questions:

1. What is an appropriate method to evaluate the status quo of TSM in different organizations?
   a. In terms of the whole survey?
   b. Specifically, by the method in use for the quantitative questions (26 questions)?
2. What topics of TSM are relevant to evaluate the status quo of TSM in different organizations?
   ➔ Which topics need to be added in the future to follow up with the trend / to be up to date with TSM?

In the next subchapter, you will learn more about the methodology of this thesis.

1.2 Methodology

In the following paragraph, I present the roadmap of the thesis and how the research was processed. It is a qualitative methodological critique of the TMI survey in the field of TSM. The qualitative analysis in this thesis used the following triangulation of methods:

- Literature research
- Observation/Listening
- Practicing the TMI survey
- Semi-structured expert interview

To start with the literature research. I searched for TSM and ET apart from each other to get an overview and insights into both topics in the current literature, practical magazines, scientific papers and on the World Wide Web. Then I started to enrich my fundament of research in the above-mentioned media by searching for both topics in conjunction. The web was not useful because most articles had been marketing articles from consultant firms which did not reach scientific requirements. Furthermore, I searched for different lenses on TSM and ET and went from older sources to newer literature. Derived from the literature research, I then created a unique AS to critically evaluate the method applied in the TMI. Many ideas for the AS came up in the literature research but the different methods mentioned above helped to fulfil the scheme.

The other methods in use (observation/listening, participation and the semi-structured expert interview) are necessary to learn and understand the TMI survey in practice. Here I want to outline that I do not compare the survey with other surveys. There are a few more surveys on the topic of TSM, but with different focuses. However, my target is to critically evaluate the TMI survey using my developed AS. The chosen approach for this thesis fits well because I took different angles to investigate the survey. I hope the results of the thesis help to gain new insights about the survey and provide a toolbox for different studies.

The observation/listening and participation part is well described in chapter 4.1. The employment with TMAG and the methodology of interviewing by myself brings several limitations during the various research steps within. The inner perspective (working at TMAG) was needed to understand the TMI, because there was not much public information accessible because of the trademark, which might bring a limitation to my research. Another aspect that requires to be mentioned is, that I was an active part of the TMI survey team which could evoke the impression of being biased during my writing. It is to put into perspective that nearly one year passed between the active participation and this research, so that the biased effect can be partially ruled out. Also, after every survey collection and while developing the assessment scale I often talked to people who did not know the survey in detail to get a more detached/natural view/opinion about the research object. However, I had a self-critical view on this thesis project. It is not denied that the author of this thesis might have overlooked several points because of the biases and the literature or the questions which are asked have kind of a subjective manner.

To gain more narratives about the history of the TMI I conducted a narrative expert interview with a semi-structured interview guideline of approximately one hour and 40 minutes. There was enough structure to gain more narrations from one of the founders of the survey. The semi-structured guideline can be found in the Appendix. The interview is transcribed and recorded (to mention recording was accepted) for documentation reasons.

My qualitative research is mostly done deductively knowing that deductive and inductive are both ideals and can never exist without each other. I researched using the self-created AS to review the TMI survey critically about the main theme of ET and TSM.

1.3 STRUCTURE OF THE THESIS

The following paragraph provides an outline of the structure consisting of six chapters. The research work is divided into two theoretical parts and one empirical part. The opening section of this thesis (first chapter) starts with an introduction divided into the subchapters Aim of the thesis, Methodology and Structure of the thesis (where you as the reader can find yourself right now). The second chapter TSM covers the theory and a literature review on the topic of TSM in the academic sector. Most literature I read in English in peer-reviewed academic journals that had TM in the headline. I did a kind of 'back research' on the expert articles, meaning that after reading them, I looked at their sources and worked out which ones were relevant to my topic. In the third chapter, ET literature is reviewed and specifically reflected on the aspects that are relevant for the empirical study (questionnaire). The next chapter deals with the empirical study in detail. The chapter begins with a subchapter about the research object, the next subchapter called data “collection” explains the TMI in more detail and how the researcher was taught about the TMI, the self-developed AS will follow and the last subchapters presents the data analysis and findings. Finally, the thesis is closed with a separate discussion and concluding chapters.

2 Talent and Succession Management

The first theoretical chapter is organized as follows, first we will learn what talent is and what it means, then we will find out more about different streams within TSM, after this we will focus on strategic TM because the research object deals mainly with strategic TM.

In the introduction it is stated, that before the reader can look deeper into strategic TSM, we need an understanding of the historical development of TSM as well as the word talent itself. What demands to be mentioned at the beginning, is that there are multiple meanings of talent as you can see in the following word cloud. Many meanings are more or less the same but a concrete definition is missing (Lewis & Heckman, 2006; Tansley, 2011; Thunnissen et al., 2013; Gallardo-Gallardo et al., 2013). Gallardo-Gallardo (2018) recently contributed the definition of the notion "…talent is a captivating word that people seem to implicitly understand and often use but, actually it is very problematic to obtain a single definition." (Gallardo-Gallardo, 2018, p. 33).

Figure 1: What does talent mean? / Source: own creation

As we can see, the term talent has many eponymous notions, multiple meanings and understandings in our society depending on the angle, we look at it. We can look at it for instance from a biological perspective, a philosophical perspective, a sportive perspective, a (positive or vocational) psychology perspective or a cooperate perspective. There is a huge variety of different interpretations that address and attempt to grasp the term "talent" and thus, it is not a surprise that there is not only consented definition. Thunnissen (2013) basically came to the same conclusion: "There is no unanimous definition of talent." (Thunnissen et al., 2013,

p. 1754). In the following, the perspectives and the origin of the word are explained in depth, without attempting to deliver a concrete definition. What can be said is that the term changed greatly over time and in different places around the globe.

The term´s history starts in ancient Greece where its tálanton described as a unit of weight. In the bible, in the Old Testament, it is mentioned as a monetary unit in Matthew chapter 25:14. In the 17th century it was used for a scarce resource. In the 19th century talent was viewed as embodied and similar to aptitude (Tansley, 2011; Mackensen, 2013; Nagler & Löffler, 2017). To this day, there are differences in the use of talent in several cultures and different languages. In Russia, for example, it is seen as a natural gift. In Danish, on the other hand, it is more an innate ability (Tansley, 2011). A good debate on whether talent is innate or acquired can be found in the paper by Meyers (2013) “Talent - Innate or acquired? Theoretical considerations and their implications for talent management“. Another paper worth reading is Collings and Mellahi (2013) commentary on the first mentioned paper by Transley (2011) also found in Human Resource Management Review. Both papers reflect on the individual approach of talent and on the organizational approach of TM whether it is innate or acquired, in different words nature vs. nurture or inclination vs. disposition. Collings and Mellahi (2013) assume that talent is acquired, but the notion should be extended to performance in an organizational context. But according to Thunnissen et al. (2013) “talent is not absolute, it is relative and subjective” (Thunnissen et al., 2013, p. 1751).

Contrary to these papers listed above that apply a nurture understanding of talent is the opinion of Hengstschläger (2012) an Austrian geneticist at the University of Vienna. He advocates for talent being a matter of genetics. Therefore, talent is innate (inborn), meaning talent is not something that you cannot change when it comes to employees. There is a limit to the success of training for non-gifted people, but talented people get better with training. He derived his assertion from an experiment that he did with two friends who grew up in the same area. Both started to learn and play an instrument at the same time, but the outcome was different depending on the genetics. The genetic talent or innate talent can be subscripted a bit differently from the extreme perspective of Hengstschläger´s epigenetics, described in two metaphors. “A bomb isn´t truly dangerous until somebody lights the fuse. By the same token, a birthday cake isn´t truly festive until someone lights the candles. Like the inert bomb or the unlit birthday cake, not all of our genes are automatically activated when we´re born. Some of them still need to be lit.” (Fabritius & Hagemann, 2017, p. 253). To sum up these two metaphors, there is an interaction between environment and genetics. Thus, a talent can be identified in childhood or adult life. Therefore, some organizations define all employees as talents. This is an inclusive subject TM approach which will be explained later in chapter 2.1.

In the opinion of Collings and Mellahi (2013) research should not focus so much on whether talent is biologically given or not. TM should extend and embed the term to performance and should extend the usage in an organizational context. Additionally, Transley (2011) suggests that we could substitute terms such as skill, knowledge or competence for the term "talent." However, one thing remains evident: every talent requires nurturing through training.

PricewaterhouseCoopers extended the definition of talent in the consideration to an organizational field. A talent in an organizational field possesses strength combined with energy and intelligence and the willingness to make changes and demonstrate enthusiasm to take responsibility in challenging situations (Thunnissen et al., 2013).

What we learned in this pre-chapter is that the term talent is an ambiguous term. It can be seen from many perspectives and therefore, it is such a blurry notion. As we have seen in this chapter the notion of TM is phenomenological. It depends on how we see and interpret things. That means the term is socially constructed or invented by assumptions, expectations, imagination and sensemaking of the subject matter. The many terms in that field also reflect our changing society in which it is almost a dilemma to define a term.

2.1 Different Streams of Talent and Succession Management

There is a big ongoing discussion about TM regarding whether it is infancy or adolescence. In 2011 Transley argued that “TM is still in its infancy” in scientific research but “the practitioner community has long recognized its value” (Tansley, 2011, p. 273). In academia the gap between theory and practice is present but so many questions are not answered yet. For example, the terminological ambiguity of the term talent remains, hence leading to subjective bias because of the semantic unclarity. To mention here TM is a more phenomenon-driven theory instead of a theory-based research (Mahajan, 2019b). To wrap up, Thunnissen et al. (2013) answered to the question “TM is infancy or adolescence?” that TM has made some progress towards puberty during the last decade. One year later Bolander et al. (2014) pointed out that concepts of TM are still in an early phase because of its lack of empirical research. However, where does TM come from before the term “The war for talents” was developed by Michaels et al. (2001)? Mainly the army framed a pre-version of TM and General Electrics started in the early 1920s applying Human Resource (in the following HR) practices to develop talents internally. The development in the organizations especially in the USA was driven by bureaucratic supported practices like internal succession planning till the 1950s. Around the 1980s the concept of lifetime employment with one organization ended and uncertainty raised because of flatter hierarchies (less defined roles) and less job security. A reason why external hiring of talents for special positions emerged and the method of internal workforce planning came out of practice (Collings et al., 2017; Mahajan, 2019b).

Often literature describes TM as underdeveloped, unsystematic and mainly proven by anecdotal evidence (Bolander et al., 2014). Especially the lack of empirical research is a reason why researchers such as Bolander et al. (2014) point out that TM research is still in an early stage. Marian Thunnissen (2013) also came to the same conclusion. She reveals that empirical research in the field of TM is scarce in the European context and mainly US driven.

The main literature focuses on TM. The title of this thesis as well as this chapter is called Talent and Succession Management. The reason for this is that the research subject is not looking for TM as a stand-alone field, but also TM in combination with Succession Management hereinafter referred to as SM). TM without SM in a company would be a blind flight.

According to a biometric content analysis by Gallardo-Gallardo et al. (2015) Collings, Mellahi, Dries, Scullion, Lewis and Heckmann are well-known authors in the field of TM, who published around five articles dealing with the TM topic. Gallardo-Gallardo is a well-known author who is often cited and wrote some articles about the topic (Gallardo-Gallardo et al., 2015).

Because it is such a short period of academic research most papers and books refer to the same authors. I would call it a circle citation, so it is hard to filter the original source/to find out who invented the concept first.

But still, in the short period of academic research TM passes different phases. The initial research started by publishing best practice findings mainly with a normative basement. Followed by a publication that stated the different types of TM. First in the sector of strategic Human Resource Management (in the following HRM) and later in the literature of international HRM followed by global TM (in the following GTM) in multinational enterprises. Because of the highly different contexts in organizations it is hard to manifest a general theory of TM (Bolander et al., 2014). Most concepts are supported by anecdotal evidence and are not distinct from traditional HR practices. There is a "strong" need for each organization to define a definition (Lewis & Heckman, 2006). Mainly the approaches are related to a best fit but the whole context gets overlooked. It is all on the meso level (organizational level) but the micro level (individual level) and the macro level (society level), which deals with the whole organizational field are often excluded in studies (Gallardo-Gallardo et al., 2020). On the other hand the latest research claims for an alternative framework for instance knowledge management, social exchange theory or a strength-based approach (Gallardo-Gallardo et al., 2015).

Most of the literature in TM is phenomenon-driven rather than theory based. It is a different approach to traditional research which starts from a gap in the theory that is stated in a hypothesis. Consequently, the phenomenon-driven theory starts from a fact of an analysis (Gallardo-Gallardo et al., 2015; Mahajan, 2019b).

There is a need for a more pluralistic approach for instance ethics mentioned by Swailes (2013). According to Gallardo-Gallardo et al. (2020) an inclusive and exclusive approach can coexist and would be one option for a pluralistic focus. But to have a pluralistic view research in this field must be more comprehensive and holistic to understand the dynamics of TM.

Thunnissen et al. (2013) compare strategic TM with a managerialist and unitarist view focusing on the fulfilment of organizational aims and organizational performance. The interests and motives of other stakeholders are underestimated. Therefore, the researchers Thunnissen, Boselie and Fruytier (2013) recommend a more pluralistic perspective. After the different streams were developed in this field, TM research went on and put TM into a context. For instance global, multinational or public companies, have been a start for context research (Gallardo-Gallardo et al., 2020).

There is little empirical research done from an inner perspective, this means by organizational members and about the context of organizations (Swailes & Blackburn, 2016; Gallardo-Gallardo et al., 2020).

As the term talent is ambiguous, TM can also be seen from multiple perspectives. Some streams I would like to present in the following. In TM literature the streams of TM are called themes according to Thunnissen et al. (2013) or types according to Bolander et al. (2014).

TM can be seen as an HR solitary with a focus on attracting, developing and retaining talents (Lewis & Heckman, 2006).

According to Gallardo-Gallardo et al. (2013) there are two approaches. There is a distinction between the subject and the object approach.

Object approach (What is talent?): Talent is approached from a resourced based view equating individuals with knowledge and competencies and is moreover divided into an inclusive and exclusive dimension. The object approach follows a categorization of talent as natural ability, talent as mastery, talent as attitude and talent as fit. More details can be found in the book "Global talent management" in the article "The meaning of Talent in the world of work" by Eva Gallardo-Gallardo (2019).

The inclusive dimension in the object approach is similar to the HRM view but it is still not the same. All employees are receiving support for their abilities and to develop them. This is a kind of human resource development and is named by a positive approach to HRM.

The exclusive dimension pays attention to employees with abilities who have shown them, proven that they achieve better performance in the organization. Again Gallardo-Gallardo criticises the connection between abilities and their lead to performance (Gallardo-Gallardo et al., 2013).

Subject approach (Who is a talent?): A prevalent approach in academia focuses on the characteristics of people and is also divided into an inclusive and exclusive dimension.

In the inclusive dimension all employees in an organization are seen as talents. Here the word talent can be extended to people, human resources or human capital. The goal is to develop, retain and obtain human resources to reach the aim of the organization. In that dimension TM has no differentiation from the common HRM. The inclusive approach is also called Pygmalion TM. Small companies do have a more inclusive approach and bigger organizations apply more of an exclusive approach (Gallardo-Gallardo et al., 2020).

The exclusive dimension means TM is only available to a selected group of employees in the organization. This selected group of talents is developed for pivotal positions or selected people for a better performance of the company in the future. In this case, talents are called high performers, high potentials or A-players. The exclusive subject approach is especially criticized because the group of employees who are not selected receive less budget (for instance training, attention, etc.) and this can lead to destructive internal competition and harm organizational morale. In particular, it should be noted that Gallardo-Gallardo disagrees with the term high performer for talent, because the performance comes from using the talents for a specific task and not for performance (Thunnissen et al., 2013; Gallardo-Gallardo et al., 2013).

To sum up there are two theories (either object based – What is a talent? Or subject based - Who is a talent?) and they are divided into inclusive (all employees are affected) or exclusive (just a selected group). The object approach is much older than the subject approach. Which direction is most suitable for organizations depends mainly on the organizational culture (Collings et al., 2018). Companies often choose an inclusive as well as an exclusive dimension and combine them (Thunnissen et al., 2013). According to the study on GTM by Stahl et al. (2016) this often leads to controversies in organizations because one group is more worthy than the other.

Meyers et al. (2020) wrote about the different TM philosophies. They are divided into inclusive and exclusive defined as above and stable which means innate and developable which means acquired perspective.

Exclusive innate:
This means a small group of around 20% of the organization are inborn talented and they perform so well that it becomes a competitive advantage. Therefore, the statement "the war for talents" exists. They are tied to the company via bones etc. The negative sides are the same as those mentioned later in the paragraph about talent pools. The negative sides can come up because of the two categories in an organization (talented vs. non-talented) (Meyers et al., 2013).

Inclusive innate:
The foundation is here the positive psychology. Everybody has a strength when it is used in a person, job fit can increase performance. So, every employee´s strength is developed (Meyers et al., 2013).

Exclusive developable:
Roundabout 10-15% of the employees are called high potentials. This means that they show the potential for higher positions in the future and with training they can be promoted. First, the employee is separated in the "separation stage" then the individual is developed to the "transition stage" and is then eligible to receive a better position in the "incorporation stage" (Meyers et al., 2013).

Inclusive developable:
Because of experience and lessons learned everybody can become a competitive advantage because in this way nobody is born with a high potential (Mahajan, 2019b; Meyers et al., 2020).

Another type of TM is about building talent pools, there are many terms for it such as intra firm networks. It is a variation of the exclusive approach, because only the talent pool is supported. Talents are developed and promoted to either a free position or their favourite job (Bolander et al., 2014). This is a bit different from HR because it focuses on the development and early research for employees and employee planning. As I wrote before there are different perspectives of looking at talents and talent pools are often seen from a resource-based perspective (Swailes & Blackburn, 2016).

TM activities are:

- Recruiting
- Staffing
- Succession planning
- Training
- Development
- Rewarding
- Retention management

(Thunnissen et al., 2013)

A bit more reduced to the main topics: attracting, selecting, developing and retaining (McDonnell et al., 2011). Many scholars extend, for instance, employer branding to TM (Collings et al., 2017). All these activities can be carried out in different ways. Often organizations practice an exclusive dimension by recruitment, staffing and succession planning in a pool solution. In that pool, there should be an equilibrium between external and internal talents.

Talent pools can be organized differently, some see talents in a talent pool just as a group and arrange group activities with the aim to develop the group towards more performance. In organizations for instance called shadow management groups or shadow management boards. Often there are monthly or quarterly reviews by HR and the leader of the talents in the pool are checking who is ready for a promotion (Bolander et al., 2017).

One main criticism about talent pools is the negative consequences of employees who are not selected for the talent pools. This was a research purpose of Swailes and Blackburn (2016) to find out more about the "backlash by disaffecting" (Swailes & Blackburn, 2016, p. 112). Talent pools are often "handpicked [and] foster a sense of entitlement and discourage talents from taking personal responsibility for their careers" (Bolander et al., 2017, p. 1534).

According to Swailes and Blackburn (2016) there is little research done about the prospective of employees outside the talent pool. In their study they called it "the dark side". The findings of Swailes and Blackburn´s (2016) survey show that employees outside the talent pool feel unequable, motivation decreases and frustration or self-doubt can follow. In some cases, they are seen as underperformers and thus they do not perform well. Hence, there is the question based on social exchange theory for each organization whether an exclusive talent pool pays off, when considering the negative performances of the "unchosen" employees. This effect is called the Golem effect and shows the vision and meaning of the organization and its understanding of performance and promotions. Taking the Golem effect into account, an organization can limit the outcomes with practices of workforce democracy that will raise more acceptance concerning talent pools in the organization. Especially the processes of nomination and identification need a democratic way. A democratic way is suggested by Swailes and Blackburn that every employee gets a fair voting right to nominate and select a talent for the pool (Swailes & Blackburn, 2016). Transparency in the talent pool programs helps the organization to foster democracy and also to present its values in a strategic way (Mahajan, 2019a). Especially, the exclusive approach with the exclusion raises the questions about ethical concerns. Often biasing methods such as impression management as a dehumanizing factor are overlooked. Hence gender equality is also often seen in TM. Therefore, it is pointed out that justice is often missed in TM. According to many discussions, an exclusive way of TM in an organization is only acceptable if the organization as a whole benefits more from the exclusive talent than it loses from the non-exclusive talent (utilitarianism approach) (Swailes, 2013).

The following paragraph centers on the TM stream known as the A-player, also referred to as A-performer or pivotal talents. A-players are different from talent pools talents, because of their significantly higher performance in their present jobs they are identified as A-players and get supported to perform better in future roles. But there are no specially defined positions selected for them. This stream defines that talent is not in everybody, therefore there are different players called A-players who are talented as well as there are non-talented employees B- / C-players (Mahajan, 2019b).

The last stream I will write about in theory focuses on "A-positions". An organization has to focus on positions that are key for the success of a company. That does not have to be a top management position. Collings and Mellahi (2009) argue against the stream of A-player because they consider it inefficient to focus on people instead of positions that are more important in a company. Different from the talent pool is that the high potentials in the pool for A-positions are only promoted to pivotal positions. More about that stream can be found in chapter 2.2.

But what means TM in detail? The latest research found out that Employer Branding is part of a good talent strategy. TM could aim to increase openness to diversity, for instance by assessing applicants with non-traditional Curriculum Vitae. Most talents in TM are seen as multiplicators (Swailes & Blackburn, 2016). This means that "Talent management can be seen as one aspect of a high performance approach because investments are made in a small proportion of individuals whose activities should have a big impact on the success of organizational strategy." (Swailes & Blackburn, 2016, p. 3)

In the next chapter, I focus on strategic TM because my object of study relates to this approach.

2.2 Strategic Talent and Succession Management

Boxall and Purcell (2000) suggested TM with a strategic component. Boudreau and Ramstad (2005) had been two of the first researchers who acclaimed the concept of pivotal positions in which it is important that talents must be placed in the right position. Collings and Mellahi extended the concept that the pivotal positions get connected to the strategy of the organization (McDonnell et al., 2011; Gallardo-Gallardo et al., 2015; Mahajan, 2019b).

The aforementioned strategic TM theory is based on Collings and Mellahi and was introduced in 2003. According to the founders, strategic TM is essential for maximizing the performance of an organization. The basic assumption of the strategic TM theory reads like "Structure follows strategy" according to Alfred Chandler (1962). This means that the structure is ideally oriented to the mission and strategy of a company. According to the quote of Chandler Collings and Mellahi (2009, p. 304) strategic TM is defined as follows:

"… we define strategic talent management as activities and processes that involve the systematic identification of key positions which differentially contribute to the organisation's sustainable competitive advantage, the development of a talent pool of high potential and high performing incumbents to fill these roles, and the development of a differentiated human resource architecture to facilitate filling these positions with competent incumbents and to ensure their continued commitment to the organisation. In this regard, it is important to note that key positions are not necessarily restricted to the top management team (TMT) but also include key positions at levels lower than the TMT and may vary between operating units and indeed over time." (Collings & Mellahi, 2009, p. 304)

Swailes (2013) describes the concept of Collings and Mellahi on key positions along these lines: "…polling high performers and creating a 'differentiated human resource architecture' that ties the talented to the organization. It is therefore an elitist and exclusive process, focusing on only a few percent of a workforce who are deemed to have the 'X-Factor'". (Swailes, 2013, p. 34). This definition is the highly cited TM definition (Gallardo-Gallardo et al., 2015). Hence the theory of strategic TM, the question is no longer "how do I identify my talents", it rather stresses the question "which future competence do I need in which position in my business according to the strategy?"

Strategic TM extends the focus from only inside the organization to a bit wider perspective. The strategic TM view covers the whole strategy of the organization and therefore competitors and legal guidelines are always included. However, the bigger picture including the external context of an organization is often overlooked in the field of TM (Gallardo-Gallardo et al., 2020).

Talents in the pool are developed largely within the organizational context which frames them and they frame the context (Collings et al., 2017). Culture is always omnipresent and for example in organizations, without an end. Culture is always deeply ingrained in the whole strategy. In many parts of TM culture is implemented to 100 percent and taken for granted. For example in recruitment, development and retention (Mahajan, 2019a).

To organize such a role model in a company the following steps are required according to Collings and Mellahi (2009):

- Identifying pivotal talent positions
- Developing a talent pool
- Creating a differentiated HR architecture

(Collings & Mellahi, 2009)

Step one "identification of pivotal talent position" is the first entry of a strategic TM in a company. Thus, the first move is to find out which positions in an organization have a competitive advantage for the company. These positions are called pivotal positions, key positions, A-positions or strategic positions and have a big tacit knowledge within. Pivotal positions can be defined as positions that have a sustainable improvement on qualitative and quantitative strategic goals (Nijs et al., 2014). For the identification you need to separate non-key positions from key positions. The analysis must be orientated to be future-safe so that the key positions have a competitive advantage in the future for the organization. According to Graf et al. (2010) a Top-Down view of the company is recommended, level by level to find out the key positions. More positions are in the upper hierarchy. Between 0,5% and 1,5% of all positions in a company are strategic key positions. However, it is noted that between 20% and 25% of the strategic key positions change over time. This means that these percentages of defined positions today may be eliminated or changed to other strategic key positions. Another detailed example of how to identify key positions is the Talent Grid Model which exists in different variations (Graf et al., 2010).

Strategic TM will support a better organizational effectiveness and performance based on HR practices that are matched with TM and vice versa. There should be a strategic focus on positions rather than players. Perspectives should align with the requirements of pivotal positions, rather than the individual. Pivotal positions are also called critical positions. These can lead to a better motivation and performance of the identified talents and support the company's success. Here, TM helps to transform the talents input into an output (Jayaraman et al., 2018).

Step two is to develop a talent pool to occupy the pivotal positions. This is the same task as in traditional succession planning. It means "the proactive identification of incumbents with the potential to fill key positions which may become available" (Collings & Mellahi, p. 307). The organizations recruit skilful people and find positions for them afterward. Good talent pools need a good match between supply and demand otherwise this could lead to mismatches. In a talent pool the meaning of boundaryless careers emerged. It is not to promote the talent pool people to a specific position, it is more an approach of a boundaryless career where it is not the narrow-minded traditional succession planning. For recruiting this means not to fill empty positions but to recruit high potentials for the talent pool. An oversupply of talents would be a waste of resources. A company that develops talent in a broader field has more options than to develop strategically. There are various methods of developing talents. Competency models, which are widely used, are one of them. Feedback is essential in all approaches and both internal and extrinsic rewards are helpful supporting progress (McDonnell et al., 2011).

The third step is the HR architecture. Strategic TM assumes an intertwining between HRM practices and organizational performances and effectiveness. The HR architecture must tie the talents to the organization. However, there are two opinions on strategic TM about how to reach a better organizational performance with HRM practices (Collings & Mellahi, 2009). The first, according to Pfeffer (1994) is that a best practices approach exists. This means that there is one universal way how an organization reaches a better performance with defined HRM practices. The second approach is based on the contingent school, claiming that there is not only one way but there is a way that depends on the employee's values (Lepak & Snell, 2002).

Cappelli (2009) suggests for open positions to staff pivotal positions internally because of the higher costs of external hiring. External hiring shall be mainly used for less predictable demand positions. There shall be a balance between internally made talents and externally bought talents. Strategic TM is an elitist and exclusive process that can overlook talents and bring a mismatched feeling into the company. On the other hand, it can lead to many benefits, for example a strong competitive advantage, long retention of employees, cost reduction for HR practices and increasing company attractivity.

Professional TSM is equal to risk management according to the TMAG (2013). This statement is based on the definition of strategic TSM according to Collings and Mellahi. Strategic TSM in their eyes, means strategic key positions in a company must be defined, have to be secured, that these positions can be optimal occupied all the time. According to Collings and Mellahi (2009), effective strategic TM has an indirect positive correlation not only with organizational performance but also with work motivation and organizational commitment of the employees.

My personal critique of strategic TM is that the talents in the pool have high expectations because they are treated as special and if the process and career don´t go fast enough they leave the company and do not bring a return on investment.

For me it is understandable that there are so many different streams and perspectives in TM because the term talent is so ambiguous that there is no clear definition or roadmap on how to do TM in the best possible way. TM has to do something with the culture of the company, therefore, "each company must understand the specific talent profile that is right for it." (Michaels et al., 2001, p. xiii). Moreover, this chapter serves to provide a holistic overview of possible perspectives that a company can take to look at TM.

In the next chapter, we want to find out more about the methods for identification and measurements in ET.

3 Evaluation Theory

Paraphrasing an old joke, "[i]f you ask 10 evaluators to define evaluation, you´ll probably end up with 23 different definitions" (Mark et al., 2013, p. 6).

In my view, this joke has some truth because there are numerous expressions for evaluation. Evaluation is a valuable tool for contemporary social science research which helps to understand social phenomena and provides help for facilitating decision-making and sense-making across various fields. Especially in practical settings evaluation gained increasing recognition (Mertens, 2020).

This chapter offers an overview of the development of ET and provides a basic understanding of its use, the main foundations, methods and purposes all in all in a practical way instead of a deep technical/theoretical way. Special emphasis is placed on one of the three methods presented: the questionnaire I will provide various definitions for each paradigm including: postpositivism, constructivism / related thinking and transformative / emancipatory. Additionally, advantages and obstacles of the methods (observation, experiment and questionnaire) will be presented.

The following figure gives an overview about the structure of this chapter.

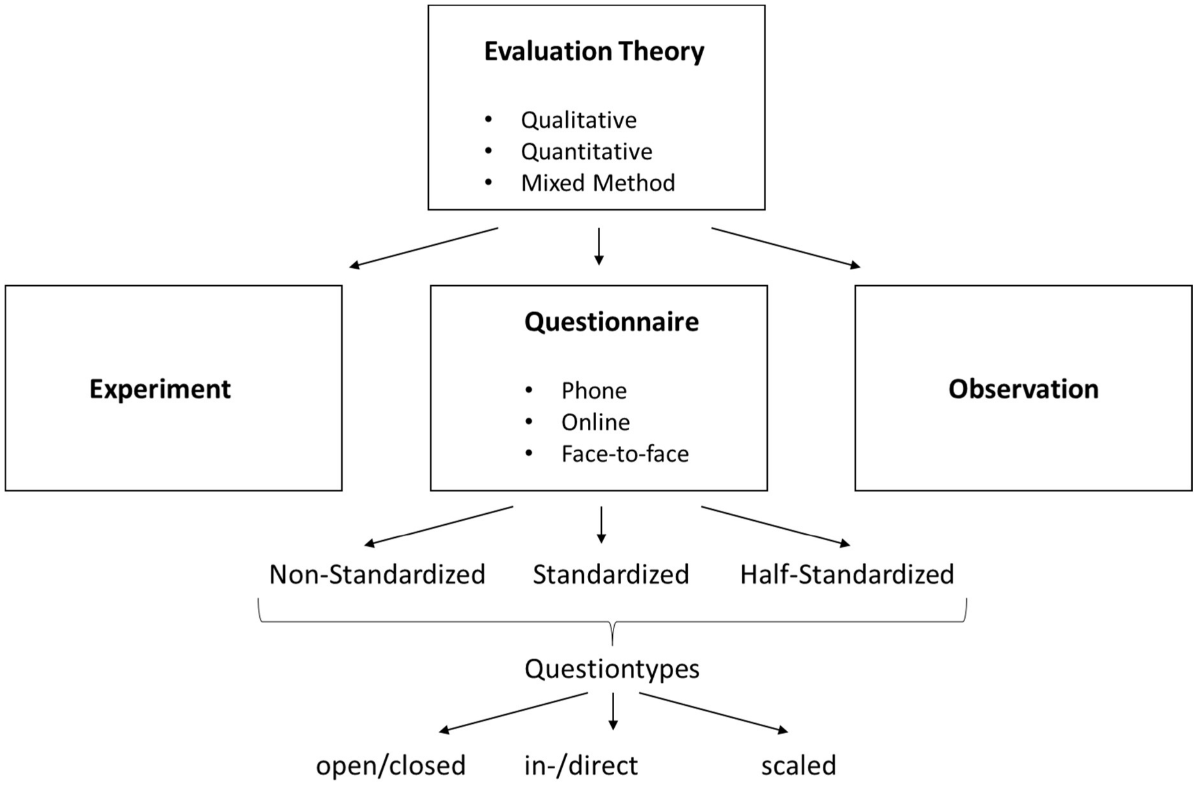


Figure 2: Overview Evaluation Theory / Source: own creation

Let´s start this section with a test for yourself. What would you answer to the question: "Which colour has snow?" I probably would answer "white", as the majority of individuals would do. However, what would an Inuit respond? An Inuit probably will differ between ice and snow, because there is a variety of whites. This was my experience during my research. I discovered that there are different types of research analysis and a variety of approaches depending on the different perspectives and purposes of the research. It all depends on the research purpose because different types of analysis can be used. This means also that "[d]ifferent preoccupations may lead to emphasis on different aspects of analysis" (Dey, 2005, p. 1). Evaluation is a complex topic and theory helped to make sense of this complexity.

Evaluation originates from the Italian word "valere" and from the French word "valoir" which means to determine the worth of something. The intention is to establish the legitimacy of universal claims and the legitimacy of truth or to falsify a statement. A function of evaluation is to claim the nature of knowledge and validity (or limitation) of knowledge to justify for determining accountability. Evaluation is often used in theory and practice, for example in government agencies to support the assessment process and knowledge building. Also, evaluation assesses the effectiveness of measures taken within institutions and organizations or accompanies their development. Mostly here it is used for decision aids. It is an empirical method to rate situations, behaviour and structures. Evaluation utilizes methods like quantitative, qualitative or a mix of both. Quantitative research involves the collection of numerical data which can be presented in statistics. Qualitative in this context means collection and analysis of non-numerical data, it is more about understanding. Mixed methods combine quantitative and qualitative methods. Various methods for instance are listed here: Group discussion, interview, questionnaire, observation, experiment, etc. Evaluations can provide recommendations for actions by rating how well goals are achieved. The role of learning during the evaluation process is significant, this could be even bigger than the results. Conflicts of interest often pose a challenge for evaluations as all stakeholders have their own perspectives. Moreover, researchers themselves may frame the evaluation in certain ways due to selective perception, which could be viewed as a limitation or simply a different perspective (Schirmer, 2009; Alkin & Christie, 2013; Shaw et al., 2013).

The difference between social research theory and ET is that they use the same methods, but differ in their objectives. In ET it is about the effectiveness of programs (work context, politics, etc.) and in social research theory the research is more about social phenomena such as human behaviour or social structures (Schnell et al., 2018; Scholl, 2018).

Four quality principles for evaluating measurement are: objectivity, reliability, validity and representativity. These are separately and detailed described in the paragraphs below.

- Objectivity: means if you pose a question twice to an interviewee, he/she needs to consistently answer "nearly" the same, particularly in quantitative scaled questions. Objectivity can be measured in several stages: the process of the questionnaire, the results or the interpretation of the results. Potential issues with objectivity may arise when multiple researchers conduct the research, which could result in subjective outcomes (Scholl, 2018).

- Reliability: refers to which degree the questionnaire results can accurately measure the research object. Thus, it is crucial to do a test of the questionnaire before, to ensure the reliability. Another reliability test is to try the questionnaire in a parallel way (known as parallel forms reliability) to compare results from two distinct test groups (Schirmer, 2009). There are varying analyses regarding reliability, including the correlation coefficient. In SPSS the analysis according to Cronbach alpha coefficient is possible. For instance, reliability can be researched about the stability or inner consistency of a research object (Raithel, 2008).

- Validity: in a questionnaire for example, measures how accurately the questions meet the construct/research object. In short, how generalizable the evaluation is. It shall ensure that the instrument measures what it intends to measure. Validity statements can be about the content, the criterion-related validity, the construct validity, etc. (Mummendey & Grau, 2008).

- Representativity: in a questionnaire, is when the given answers are generalizable. This is exclusively achievable with an adequate number of random samples, which should represent various types such as gender variation, age group difference, working /non-working or blue/white collar workers, etc. (Schirmer, 2009).

In the US evaluation became prominent during the time of the democratization process in the 20th century. In Europe evaluation started in the UK, Sweden and Germany. In the 60ties and 70ties the primary focus in Europe was on cost benefit analysis and cause vs. effect analysis. In Germany, evaluation gained prominence within the field of education policy. In the 80ties, the emphasis shifted to the importance of usage and costs or efficiency instead of the cause vs. effect analysis. More and more groups emerged and the demand for standards grew (Beywl, 1988). For instance, in Germany the "Deutsche Gesellschaft für Evaluation" or the "EES" (European Evaluation Society) (Stockmann, 2000).

Famous authors of ET are Scriven, Stake, Levin, Rossi, Weiss, Mertens, Alkin, Lincoln and Guba. Most of the developed theories are not separate from each other, but this also means that they are not independent of each other either. Some theories are more theoretical and for the basement and some theories are more specified for defined branches. Rossi and Freeman are famous authors who, over time published many articles and their book "Evaluation – a systematic approach" is now in its sixth edition. Their approach is theory-driven, deals with internal and external validity and views evaluation as social research. Other theories are more pragmatic and deal with the use of evaluation (Mertens, 2020).

A wide overview of ET is given by the evaluation tree by Christie and Alkin which you can see below (2013).

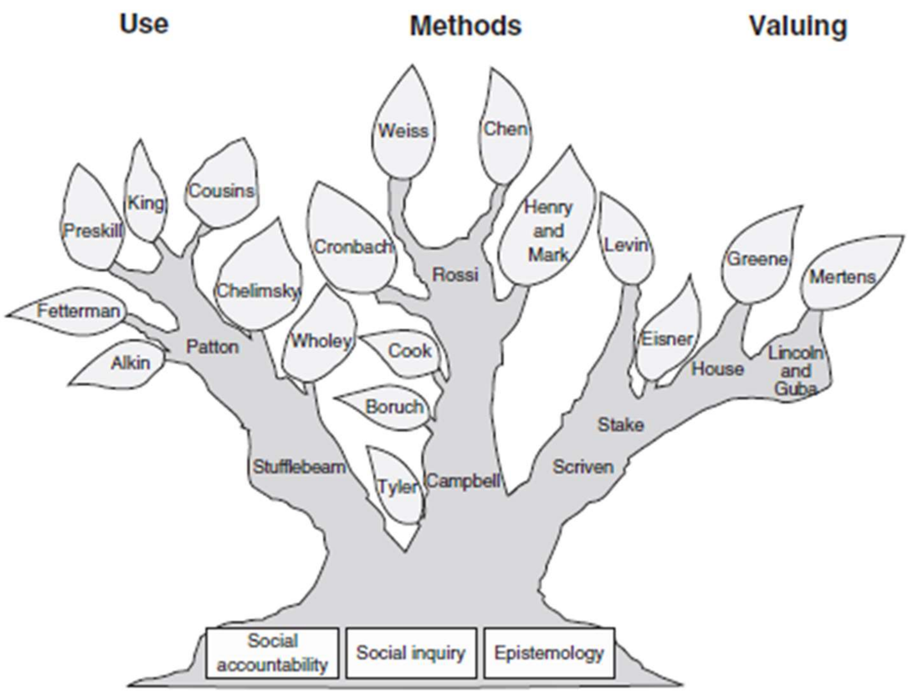


Figure 3: Evaluation Tree from Alkin, Christie, 2013 p. 12

It gives a broad overview of streams and famous authors in ET most of them are from North America. Most theories are from America, but I want to note that other streams and authors from Europe are excluded from the tree. The Authors Christie and Alkin (2013) describe that there are challenges with placing every stream in the roots, because some are more multidimensional and interdependent. The origins of ET are "social accountability", "social inquiry" and "epistemology". Social accountability refers to evaluation as a liable tool for analysis. Social inquiry deals with the study of human behaviour and actions within social groups. In the 17^{th} and 18^{th} centuries Marx and Weber laid the foundation of ET. "Key evaluation concerns that are based in epistemological arguments include the legitimacy of value claims, the nature of universal claims and the view that truth (or fact) is what we make it to be." (Alkin & Christie, 2013, p. 11). Epistemology adds the third dimension to ET and underpins the philosophical mind. Multiple theories exist within ET, such as theory-driven evaluation or participatory evaluation (Alkin & Christie, 2013).

ET can be seen from different viewpoints also called paradigms. These paradigms are basic beliefs about the nature of reality, the nature of knowledge about reality, and how one should approach systematic inquiry into reality. To say it at the beginning, the strength of a paradigm is not that it explains the basic assumptions but the weakness is that the assumption can limit the paradigm (Mertens, 2020). Paradigms in this context are: postpositivism, constructivism / related thinking, transformative / emancipatory or pragmatism. This leads to a lack of a basic definition of ET, because each paradigm of ET has a different definition. To explain this briefly "…positivists believe that the goal of science is to uncover the truth, postpositivists believe its goal is to attempt to measure truth, even though that goal cannot be attained because mostly every observation is fallible and has errors. Thus a full understanding of truth can be approached but never reached." (Alkin & Christie, 2013, p. 17). The middle part of the tree which methods refer to a postpositivism paradigm and depend on well-designed experimental studies. Early work in this field was carried out by Campbell and Stanley in the late 50ties. In this part of the tree, evaluation is understood as a methodology to develop plans, to monitor the effectiveness and to judge in different sectors like health, education and welfare (Shaw et al., 2013; Alkin & Christie, 2013). This paradigm according to Lee (2000) might not be seen as evaluation is seen today in a scientific context. Rossie and Freeman, both sociologists, assumed that the objectives-based ET has an existing singular reality and evaluation is there to measure. This one reality can be measured with scientific methods to gain cause and effect results (Lee, 2000).

Constructivism is an element of the interpretivism paradigm and replaced the postpositivism paradigm. Constructed in this field refers to that there is no one reality. Consequently, realities come to light from one´s subjective belief system. This means, that reality is socially constructed. Every person also called a "knower" has its own unique experiences and understanding of reality, there is no objective reality. This further leads to the point, that there is no absolute truth just relative truths and numerous different perspectives. Famous scholars in this field are Guba and Lincoln, who introduced the term "merit" for the intrinsic value in TM programs. Also, they embedded the term "worth" which is the extrinsic value of a program, referring to the value of the group outside of a program. The task of an evaluator is to make a value judgment based on survey data in a given setting. In this paradigm reality is an ongoing process, which means that truth depends on the frame of somebody. This part of the left tree side is defined into a subjective and an objective part. Scriven is another well-known author who introduced an everyday form of evaluation into the field with a functional use like the judgment of value, value claims or determination of worth as definitions (Shaw et al., 2013).

As evaluation is still operating within the theoretical process, some scholars have transitioned to a metatheory known as program evaluation that emphasizes objectivity similar to the postpositivist paradigm. Another factor behind this was that postpositive evaluation designs are often too closely and sometimes not feasible. This development was largely spearheaded by Scriven and his colleague Stake in the 70ties. They claimed that description and judgment must be included in the evaluation and emphasized the importance of objectivity. Judgment is making a decision about value, so someone needs to make a decision about which way is better or worse. A responsive evaluation with a goal free evaluation was developed. Stake adapted multiple disciplines (trans-discipline) like different observers to prevent bias called responsive evaluation. In the late 90ties, Lincoln and Guba criticized Campbell's objectives-based model, and instead developed the naturalistic approach which was utilized for program evaluation in England. The continuing development in evaluation led to a transformative / emancipatory paradigm by Mertens (2018) with the aim of social justice. The basic assumption about reality is constructed from different social constructions similar to constructivism. Power imbalances between parties involved in the evaluation process have often been overlooked in the past and she focused on enhancing democratic pluralism. Therefore, she wanted to pay more attention to the powerless parties showing different perspectives in evaluation rather than presenting general results which may not be relatable to everyone. To show the different perspectives, different methods are in use and combined which makes it difficult to define if the evaluation itself is done good or bad. She also assumed that bias is everywhere present, but nobody shall be advantaged. The paradigm shall represent diverse viewpoints because methods are pluralistic and evolving rather than generalizable. The ideal is to represent all perspectives, but the risk is that the evaluation is not meaningful because of so many perspectives. Evaluation is often considered unscientific due to the varying and non-comparable methods. Hence, significant evaluation requires systematic and transparent processes to evaluate information about the research object (can also be called evaluand) and bring it to an objective result with an intersubjective method. So, it is no longer the issue for the legitimation of evaluation (do we use it or why?) it is more the question "how?" to evaluate. Because there is a wide variety of methods for both believe points objective and subjective (Lee, 2000; Mertens, 2018, 2020).

To sum the above-mentioned points up, evaluation needs a collection of information and collection of data from the object which gets researched with an applicable method according to the specific cultural context. The involvement of making judgments of worth is the basis of evaluation, which means facts and values are inextricably intertwined and cannot be separated. Additionally, scientific methods contain inherent biases. The value must be seen in comparison to the context in which the research object persists. In conclusion this means that the setting matters, and evaluation is limited when applying it to a different context. As a further point this means that every evaluative judgment is unique due to time (time-limited), culture, etc. and not easily to generalize to numerous settings. According to an ethical perspective, which became more prominent in recent years, as much impartiality as possible must be achieved. Till now in my research, there is more done to close the gap between theory and practice with creativity. Added by an ethical viewpoint (Lee, 2000).

On the left-hand side, the tree has the pragmatist´s paradigm section with a focus on usage or utilization. So, the user is in the middle of the evaluation. Inductive and deductive logic shall be used to embrace objectivity and subjectify knowledge. To make it clearer pragmatists are close to the postpositive paradigm, but they do not share the understanding of one reality/one truth. Pragmatists argue that there is one reality but at a given time with one explanation which makes sense. Pragmatists think that causes could be linked to effects as postpositivists. However, they argue as constructivists that evaluation is value free. A prominent author who works in the decision-oriented evaluation branch is Patton. Another notable figure is Stufflebeam, who developed the CIPP Model (Context, Input, Process und Product Model - It is a comprehensive model which examines the context surrounding a program, input factors, the implementation process, and the resulting product or outcomes to guide thorough evaluation and improvement strategies) (Alkin & Christie, 2013).

An illustrative example of what evaluation is and what it is not provides Lee. "We are doing evaluation when we try to think through any decision, weighing the pros and cons, and we don´t do it when we flip a coin to decide or ask someone else to tell us what to do, decide that something feels right, or look for divine inspiration." (Lee, 2000, p. 130). ET is a relatively new profession and developed in the last 50 years in various ways on different creativity levels or to say it in the words of Lee "The discipline of evaluation has accumulated an impressive diversity of theories about methods, measurement tools, and practice in an enormous variety of settings." (Lee, 2000, p. 161).

The current development and stage of ET is not seen as the evaluation of the truth for ages, it is rather seen as the best advice for the time the evaluation is made in the organizational field it is made. Evaluation developed from different disciplines for example sociology, psychology, education, economics, business and philosophy. Nonetheless, it is still an infant theory. To say it more concrete the activity of evaluation is to figure out the value of an object – by knowing this is basically subjective. Over the years some theorizing of evaluation began. Even though the used methods may vary the main goal of evaluation is always to aid decision making, for which time and money need to be spent, which might be another reason why the practice of evaluation differs. Theories expanded over the 20th century, but the value of evaluation was also combined with the theories about truth. Truth in a scientific context is much older than evaluation and has a different perspective. Noteworthy scholars on truth include Nitzsche, Kant, Sartre, Wittgenstein and Foucault (Lee, 2000).

In contemporary ET various purposes exist such as measuring the quality of something, improving decision making, generating knowledge about social problems and organizational discussions. In practice, methods overlap for decision making, empowerment or democratic evaluation. However, evaluation can be either used summative or formative. Summative evaluation, which makes a decision about the end product (results) if it shall continue, be removed or changed. Formative evaluation, which continuously evaluates the whole process, for instance implementation of a program (Beywl, 1988; Wottawa & Thierau, 2003; Flick, 2006; Mark et al., 2013).

It should be noted that there is a comparable evaluation approach in our daily work, the controlling tool or quality management ISO-EN-DIN 9000, which has a different basis but aims to achieve the same outcome. The terminology for controlling and quality management differs, because the process with bureaucratic items and behaviour control is different (Wottawa & Thierau, 2003).

Methods must fit the purpose of the evaluation, otherwise the purpose will not be achieved and the results may be wrong (Stockmann, 2000). Therefore, we learn more about the methods in the next chapter.

3.1 METHODS IN SOCIAL RESEARCH

In this subchapter, different social research methodologies and the steps of empirical research conduction will be described. Furthermore, I will outline how in detail a survey is constructed, and how the process looks like. The following list presents the general process of social research. According to Popper, this process can be used for conducting both, deductive empirical scientific research as well as inductive empirical research. Moreover, there is a difference between the inductive way or the deductive way (Raithel, 2008).

1. Defining the research issue/question: What, in concrete, is the central interest of the research? (precise and short) What is an adequate instrument to answer this question?
2. Theory: Is it an existing theory or is there a need to develop a new theory? A hypothesis needs to be stated. Inductive or deductive? Deductive targets quantitative standardized

data and inductive strives for qualitative and open results, as it is the case in grounded theory.

3. Operationalization: The research question of the survey does not correspond with the question in the questionnaire, observation, etc. The research question gets operationalized by transforming it into numerous questions for instance in the questionnaire. There is a circle between the theory in the research question and the empery in the questionnaire with the measurable variable itself. Variables are features of expression.

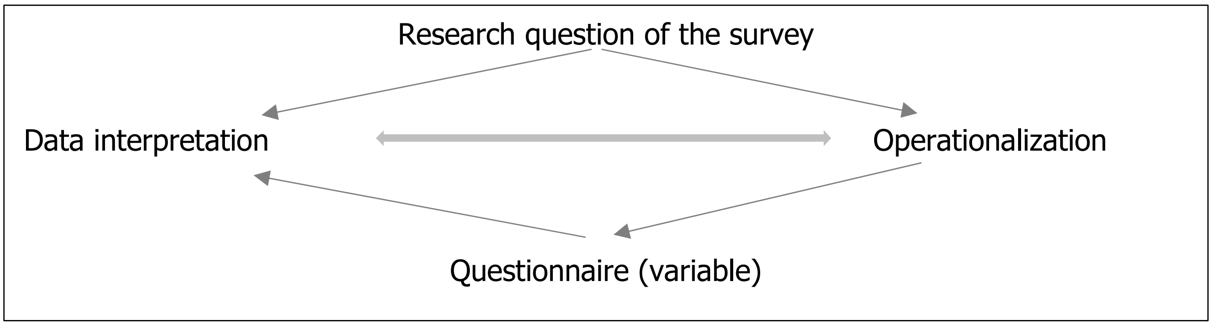


Figure 4: Concept of Operationalization according to Scholl, 2018 p. 144

4. Population: It is necessary to identify a valid target population to ensure that the random sample is representative for the research.
5. Data collection: Via observation, questionnaire or experiment. Prior to data collection, a pretest must always be conducted to ensure quality. This pilot test creates a complex dual role of the interviewer and the observer, which can make it difficult for the interviewer to perform two roles at the same time. Further information on this topic can be found in the next section.
6. Data gathering: Structured data collection is frequently used with data coding. Afterwards data cleaning needs to be done, is the data plausible or does the data contain errors (incomplete because data is missing etc.)? An SPSS program can aid in this process.
7. Data analysis: Is the hypothesis wrong or valid? Is the data reliable? Reliable in this context means for example if the same person fills out the same questionnaire a few times the results should correlate. Is the questionnaire valid? For instance, a questionnaire is valid when it is ensured that it measures what it intends to measure, and the results are meaningful. Is the question objective? Hence, does every interviewee understand it more or less in the same way?
8. Presentation of the research and in the field of inductive qualitative research generating a new theory. Publications may follow after this.

(Atteslander & Cromm, 2010; Schnell et al., 2018)

Qualitative/inductive and quantitative/deductive research have traditionally been separated. The research species often competed with one another like in a "paradigm war". Nowadays it is legitimized to mix both methods named with a lot of terms: mixed methods research, multitrait-multimethod research in the psychological field or triangulation in the German-speaking area. Mixing both methods means that the research becomes more complex and can often take longer. One of the classic mixed methods studies is the "Marienthal-Studie" by Johada, Lazarsfeld and Zeisel. The integration of both methods bears certain advantages such as the research is done from multiple perspectives and weaknesses of one method are the strengths of the other method and vice versa. Well-known scholars are Creswell and Flick, who tried to find a definition but still, there is an ongoing discussion regarding these definitions, the conceptualization and whether mixed methods will start a new transformative paradigm. Mostly debated is the issue of whether to talk about an approach or a paradigm (Döring et al., 2015; Mey & Mruck, 2020).

3.2 Data collection at a glance

In this section, I will present the distinct methods of data collection used in qualitative and quantitative research. Firstly, I will give a brief explanation about the three methods: experiment, observation and survey/questionnaire. My primary focus in this subchapter will be on the last and in line with the research object of my thesis. In the final section I will provide golden rules for structuring a questionnaire and creating good questions, because "[i]deally, they should mean the same thing to all respondents, and they should mean the same thing to respondents as the researcher, the person who will interpret the answers" (Fowler, 1992, p. 218).

<u>Experiment:</u>

An experiment is a research approach/method in a controlled setting, where variables are manipulated to study their implication onto the target either in a quantitatively or qualitatively way. In an experiment, a survey or an observation can be used, but this does not mean that a survey or observation is an experiment in itself. Experiments can also be case studies, product tests and many more like field experiments, which are famous examples.

Pros:

- Researchers can establish a cause-and-effect relationship between variables, they can change variables quicker than in reality and find out relationships of variables easier.
- The controlled environment increases the validity of the findings.

Cons:

- However, as the experiment takes place without external real-world conditions, the generalizability of findings may be limited.
- The ethical aspect must be correct for the well-being of the participants in an experiment, because a manipulation can cause risks. So, every participant must be informed about the manipulation.

(Shadish et al., 2001; Gliner et al., 2017)

<u>Observation:</u>

There are numerous different mixed observations possible. Fundamentally, it is about the systematic collection of data about predefined variables. For example, the observation of verbal behaviour in natural settings or narratives in texts can be defined as a variable. There can be either structured or non-structured observation – which means the structured follows a protocol in which variables need to be observed whereas the non-structured ones only collect data. Each of them can be further divided into open or covered observations. This refers to whether the observed individuals are aware of being watched or not. Another difference is whether the observer participates actively/directly or passively/indirectly/covered. A commonly used method for example is by using cameras and software to observe facial expressions.

Pros:

- Can be used in different areas for example in corporations or in sport competitions.
- An indirect observation has the advantage that there is no time consuming need to find/ask people to participate.

Cons:

- An open observation poses the risk of the negative Hawthorne effect which occurs when the subject alters their behaviour because they were informed of the observation.
- There is a risk of ethnocentrism because an observer can interpret observations according to their own life view and culture.
- The indirect observation makes it difficult to gain data with the same external environment, also it has ethical concerns about the indirect observation of human behaviour.

(Beller, 2008; Schirmer, 2009)

Survey/Questionnaire:

In a survey scientific communication is done in a discourse, which means questions are posed according to the research object. The beginning of surveys dates back to the end of the 18th century, marking the start of a modern and democratic society. A survey only works one way and that is by posing questions to an interviewee and receiving and collecting answers/data. Two significant figures in this area were Max Weber and Karl Marx, who used questionnaires to gather information on working conditions in 1880, the questionnaire was called "Fragebogen für Arbeiter". Initially, there were pencil and paper (self-administered questionnaires) surveys, followed by phone surveys because more and more people had access to a phone. The phone book was a random sampler and nowadays mail addresses are commonly used to generate random samples. In a later context, Larzarsfeld and the "Marienthal" study became prominent in communication science and with a more face-to-face survey approach. This research methodology developed further, becoming increasingly prominent in surveys on voting behaviour, commonly known as "straw polls". Voting behaviour surveys originated in the US context and subsequently spread to Europe. Georg Gallup attempted to merge surveys and the results of straw polls with statistics and validity/reliability techniques and was one of the founders of the "American Institute of Public Opinion". Gallup is a pioneer in evaluation research about political topics and therefore is often the namesake for institutions like the Austrian Gallup Institute for public polls till today. In Europe, more precisely in Cologne (Germany), the first institute for empirical research was founded in 1918. That was the beginning of many institutes and networks about surveys with different perspectives (pragmatism, etc.). Over time, platforms such as the EVAL Talk, GESIS (previously known as ZUMA) and various journals like the American Journal of Evaluation evolved. Besides these institutes with mostly university backgrounds there are also existing competitors in the private sector with an economically driven and financed motivated output which leads to a conflict of objectives between costs, quality, and objectivity. In recent decades with the revolution of the internet, online surveys have become increasingly popular, because they are global, cost-efficient and effective. Real-time feedback is one example of the benefits of using online surveys (Scholl, 2018).

A survey or also called a questionnaire or poll can be taken by a face-to-face interview, via a phone call, online or in a personal meeting. It is important to note that the situation in which the interview takes place is kind of artificial because the interviewee and the interviewer are previously unknown to each other. Hence, it cannot be compared to a normal dialogue or discussion. In a survey, the situation is kind of asymmetrical since one person the interviewer poses the questions and the other person the interviewee (there also can be more people), is solely answering the questions (Lüdders, 2016; Scholl, 2018).

Collecting data by interviewing people requires training for the interviewer. Being trained means, first and foremost, that it must be evident that the interaction is not an ordinary conversation. This is a kind of one-way communication, meaning neither the interviewer nor the interviewee is allowed to sanction the opinion of the other because it is all about volunteering the participation. The training needs to include "impression management" which means an interviewer needs to show a minimum of biasing behaviour, punctuality and cannot be acting in a provocative way to bias the survey atmosphere. The atmosphere facilitates that the interviewee answers with authentic, reliable and valid information. While the interviewer needs to be reliable and flexible. Sometimes to conduct a survey, for instance about a political subject, the approval/permission of an official office is needed. A questionnaire should be content-wise valid but also for an efficient study the questionnaire needs to be feasible without misunderstandings (Beller, 2008; Scholl, 2018).

We have learned that surveys can be of different types for example fact-to-face (online/offline), via phone, pencil and paper (online/offline), etc. Every type bears different advantages and disadvantages. For example, the presence of an interviewer can provide the advantage that he/she can interrupt in an unbiased way if the interviewee does not understand the question, but on the other side that could be biased which cannot happen in a pencil and paper survey. In the following, I want to point out general advantages and disadvantages mixed with detailed ones for special types of surveys to give you a grasp of the limits of this method. For instance, the controllability is much higher in face-to face polls in comparison with a pencil and paper survey. Other implications that could differ are the anonymity, costs, complexity of the subject and question, sensitivity of the question and the bindingness between the interviewee and the survey (Lüdders, 2016).

The benefit of a survey, especially in a face-to-face or phone setting is that a trained interviewer can realize that the participant is lying or misunderstanding the question and interrupt in an impartial manner. This requires a well-trained interviewer who knows the area of the survey being conducted. Face-to-face or phone surveys have the advantage that they can also be recorded, another bonus of a face-to-face interview is that gestures can be seen. Pencil and paper surveys or phone surveys have a huge range to reach participants and do not have the bias options of a personal interview. Face-to-face or phone surveys do not have the problem of non-response, but it takes a while to find participants because these surveys mostly take longer. Personal interviews also have the advantage that contradictions can be discussed when the interviewer is well-trained and knows a lot about the subject. With that input, the data will be usable, whereas offline surveys might be non-useable because the data is not there. Surveys have a good range to reach diverse populations and geographics. The collected data of a survey could be standardized according to the grades of standardization in the survey, which leads to good data analysability and comparability. A survey can be used for both qualitative and quantitative approaches. Standardized in this context means the grades of possibilities by a questionnaire are highly standardized when it is easy to evaluate for example with a computer program. Half-standardized or non-standardized surveys have fewer possibilities for quick evaluation (Schnell, 2019).

A disadvantage of half-standardized and non-standardized surveys is that not so many surveys can be conducted with a standardized survey, therefore standardized surveys are much cheaper and less time-consuming. Surveys conducted in person or by telephone can have relative effects on the researcher and the participant, especially in semi-standardised and non-standardised surveys, which are often asymmetrical. It is still not a neutral setting. The surroundings in which a questionnaire is taken can have a bias for instance when the interviewee is stressed or irritated by the interview setting. Questionnaires can be easily faked because there it is little evidence proven how to answer the questions correctly. Questionnaires can also be used for "tricky and touchy" subjects. Often a poll has to deal with non-reachability of people or low response rates. Depending on the subject, surveys can be limited in their depth, particularly when the topic is private or personal (Lüdders, 2016; Scholl, 2018; Schnell, 2019).

Additionally, be aware, that some interviewees might be biased due to their potential sponsorship and may therefore falsify responses due to their awareness of the purpose of the survey (sponsorship bias/impression management). Below are some useful rules on how to create a questionnaire. However, a well-constructed questionnaire is rendered ineffective if not appropriately conducted. To ensure a successful survey, the following steps are recommended when constructing a questionnaire:

1. Opening part: As a first step the interviewer will explain the reason and purpose of the survey and will talk about the discreteness of the data (if it is an anonymous survey). This structure is designed to create a welcoming and comfortable atmosphere, which is crucial for the conduct of the survey. An icebreaker question can be helpful. Also,

necessary information like the date of the survey, position of the respondent person and necessary demographic data should be collected.

2. Main part: During the survey, the speech volume and speed need to be adequate for the interviewee as well as clear pronunciation is needed. Question by question needs to be answered and the structure of the survey should be adhered to. The interviewer must listen carefully and is not allowed to interrupt with open questions. If the responder needs help in understanding, the interviewer may help in an unbiased way. If the interviewee does not take the questionnaire seriously, misunderstands the questions or is obviously lying the interviewer should interrupt.
3. Closing part: In conclusion, the interviewer expresses gratitude by saying "Thank you" to the participant for the time and attendance. Last of all, it is important to explain the next steps of the collected data.

(Beller, 2008; Raithel, 2008)

Golden rules for structuring a questionnaire:

There are the following three structure principles: First, general before special, because the interviewee shall stay motivated to answer and you as researcher need the relevant data. Second, familiar before unfamiliar and third, simple before complex. If you would put too difficult and sensitive questions at the beginning, it could lead to a demolition of the whole survey. Another rule is that questions shall not be repeated within the questionnaire. Moreover, the sequence of questions must be placed carefully, and must not affect the answers of an interviewee (for example not too many questions in a row where you expect a "yes" as an answer). This could lead to an unreflective attitude to answer the question and a so-called halo effect. It is always relevant to structure the questionnaire according to how the survey will be conducted (online, offline, face-to-face, etc.). If the questionnaire contains different topics or sub-topics it shall be structured in thematical sections. A new sub-topic shall be pleasantly transmitted. The structure of a questionnaire shall also contain a navigation tool. So that the respondent can keep track of when the survey ends or the next part begins. A consistent design also helps the respondent to take the questionnaire seriously (Konrad, 2007; Schnell, 2019).

Golden rules for creating effective questions:

In addition to the previous rules about the structure of a questionnaire, the following rules concern the creation of a questionnaire. Let me start with an example: "What is the average number of days each week you have butter?" [What´s the problem here?] "Does margarine count as butter?" (Fowler, 1992, p. 222). The point of this example is to show the ambiguity of terms in questions. Whether butter consumption contains margarine or not, a few interviewees would understand it in one way or another. "One good reason for identifying unclear questions is to alert researchers to places where they need to clarify their objectives" (Fowler, 1992, p. 229). Therefore, I want to provide some rules for effective question creating.

There is an existing guideline by Bortz and Döring (2002) on how to design good questions. One of the first rules is that a question should not be suggestive. Meaning that the questions shall not bias the answer so that the asked person does not tend to answer in a predetermined way. Also, a question needs to be short and simple (KISS-principle-keep it short and simple principle) to keep the participant engaged. Do not ask unnecessary questions which are not relevant to the goal/topic of the survey. Also, the respondent should not be confronted with several questions combined into one. Another rule is that a question shall be specific and not contain universal adverbs of frequency like always, never, rarely, sometimes or often. Furthermore, understandable questions shall not contain nontrivial technical terms and/or shortenings and/or inconsistent understanding of terms. This means by creating a questionnaire be aware that the questions shall not be overly difficult because it may lead to incomplete or inaccurate answers if the interviewee cannot answer, thus leading to a lack of data, and also ambiguity affects the quality of results. Questions should also not include hypothetical scenarios because it is difficult to give valid answers to assumed situations. Eliminate negations (for example "Don´t you understand?") in questions because most people get confused and they do not know whether they have to reply "yes" or "no". Also, the question should be designed specifically for the consulted group. Further, a question needs a defined temporal relation which means unconcreted time adverbs such as soon, lately, early, in the past and the near future shall not be in use. Finally, when crafting a question, always think about potential answers and the analysability of the data. If you want to gain more detailed answers, there is the possibility to ask questions with "yes" or "no" and which question has a sub-question to find out the underlying meaning (like a junction on the road) (Beller, 2008; Scholl, 2018; Mertens, 2020).

Questions in a questionnaire can be of different types, depending on the object of the survey. Standardized or non-standardized questions: Non-standardized questions are used in explorative studies which means that the research topic is not yet well researched and/or is a difficult topic. Standardized questions are more trivial and for a larger number of random samples. Examples are answers with rating scales or multiple-choice answer specifications.

In the following, I will give examples of open/closed and indirect/direct questions/answers.
Example of an open question/answer:

What are the advantages of the TM project for you?

Open questions/answers foster the exploration of knowledge and a flexible acceptance of answers. Additionally, misunderstandings are easily and quickly uncovered and confronted. On the negative side, the analysis is non trivial and sometimes data is generated that is not relevant and not analysable (Bortz & Döring, 2002).

Example of a closed question/answer:

Do you prefer an expert career or a managerial career?

Closed questions can be easily analysed as the data collected is coded. Nevertheless, it limits interviewees in their potential wish to explain their answers in more detail or the needed answer option is not available at all.

Closed and open questions can be combined as so-called hybrid questions. Hybrid questions can be used if the closed answer possibilities are too limited. Practically the closed question is answered first followed by the open question (like what would you like to add?) so that the researcher can check whether the answer options need to be adjusted (Scholl, 2018). Besides standardized and non-standardized questions there is another technique for asking direct and indirect questions.

Example of a direct question:

Do you have TM in your company?

The advantage of direct questions is to get simple answers, but the negative side is that the interviewee cannot explain the answer. Consequently, sometimes if the interviewee does not understand the questions or does not want to answer, he or she is not answering truly (Bortz & Döring, 2002).

Example of an indirect question:

Do you see aspects of TM in your company?

An indirect answer is not generating simple answers so there is the risk of not gaining analysable data (Scholl, 2018).

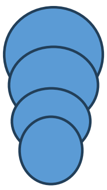
Answer possibilities with scales can be implemented differently in a survey. Scales can be metric and non-metric. This means that nonmetric scales are qualitative and metric scales are quantitative. Scales can be used to find comparisons out, to let the interviewee evaluate/think, to find out how often the interviewee is doing something and how satisfied or unsatisfied he/she is. Below you will find different forms of scales (Bortz & Döring, 2002; Scholl, 2018):
A view examples of scaled questions:

Uni-/bipolar with graphs:

How do you like TM?

Bipolar: 

Unipolar:

Much 

Less

Much  Less

Uni-/bipolar with numbers:

How do you like TM?

Unipolar: Much 1 2 3 4 Little

Bipolar: Much -2 -1 0 1 2 Little

Uni-/bipolar verbal:

How do you like TM?

Unipolar: really strong / strong / moderate / minimal

Bipolar: really strong / strong / moderate / minimal / nothing

It is a good possibility to mix up numbers or graphics with verbal examples in the questions. Normal scales range from three to seven grades. Unipolar scales with even numbers of steps do have no explicit and neutral middle point so the interviewee has to decide between negative and positive. Questions with a neutral middle point have the option for the participant to evade the question (implied denial/non attitude) by choosing the middle. The interviewee does not have to think about it and tends towards the middle. To avoid the tendency towards the middle it is necessary to formulate the questions in such a way that the answer is sometimes negative or sometimes positive. The more scale units, the more differentiable the answer. As more levels are provided, the scale becomes more accurate, but the selection of a particular level becomes less reliable and excessively selective due to the overwhelming number of choices available to the respondent. At last, the salience bias effect in questions is a cognitive tendency where the interviewee chooses an extreme or prominent answer. This often leads the interviewee to over- or underestimate the situation (Mummendey & Grau, 2008; Kallus, 2010; Lüdders, 2016).

Another extreme example of a scale has no steps at all, as shown in the figure below. This type of scale is not recommended because it is difficult to analyse and requires a ruler to be used as a measure.

How do you like TM? (please mark with a cross on the line)

Much ______________________________ Little

Be aware that scales can lead to different cognitive perceptions. For example, if you ask "How many hours did you spend preparing for a TSM meeting? And you only give answer possibilities with a range of up to three hours, most people will answer in the middle. But if you make the scale even bigger up to six hours, of course most people naturally will answer (as well) over the middle point but this would mean five hours instead of two hours, which was the result in the primary scale (Scholl, 2018).

Ranking questions: To get to know more details about the ranking.
Which preference do you have talk to about TM?
___ Learning session
___ Strategy
___ Key positions
___ A-players

Constant sum method: The interviewed person can allocate 100 points to different factors for one question.
For example: How important are the following characteristics in TM? (Please distribute 100 points to the following characteristics)

Management	XX points
Learning	XX points
Leadership	XX points
Humour	XX points

The positive aspect of this method is that as a result you can get statements on the relative comparability of the characteristics. The negative side of this method is, that it is not so easy and needs the active participation of the interviewed person and you need to check immediately after the questions whether the points in sum are counted correctly and if not, the question is invalid (a computer program can help). More details about the think out loud technique, paraphrasing, confidence rating, probing, sorting, behaviour coding, problem coding can be found in "Die Befragung" Scholl, 2018 p. 205 following pages onwards.

What we have learned so far, is that questions can have different forms (direct/indirect, etc.) and different intentions (asking about behaviour, asking about an opinion). At last, I would like to point out that there are different scaling methods in a scientific context. These are the Thurnstone scale, the Likert scale, the Guttman scale and the Rasch scale. Almost all of them were developed between 1920 and 1940. According to my research object, I want to describe the Guttman scale in more detail (Scholl, 2018).

Here multiple questions concerning a topic, so-called items, are posted with increasing intensity. The Guttmann scale assumes that if people endorse a specific item, they should also endorse with all previous items of lower intensity. The scale determines an individual's level of a latent trait by analysing how many items they agree with along the hierarchy (Schnell et al., 2018).

Which of these three statements do you agree with?

Statement 1: TM is useful.
Statement 2: It is useful to integrate TM into a company´s strategy.
Statement 3: It is useful if strategic TM is adopted in every work routine.

To be mentioned here is that this scale is mainly used and developed in a psychological context. The use of this scale can be time-consuming as a number of questions have to be answered beforehand in order to ensure reliability. But this method is significant, because if the interviewee does not understand the question in the right way the data shows this clearly (Döring et al., 2015; Lüdders, 2016).

In the following the pros and cons of a survey/questionnaire:

Pros:

- A survey can reach many participants in different regions and with different backgrounds.
- It is more trivial to conduct a survey instead of an observation or experiment.
- A standardized survey is very cost-efficient in comparison from input to output.

Cons:

- If the scale is not well chosen according to the topic and is not understandable for the interviewee there will be a tendency to the extreme points or a tendency to the middle which makes the results unrepresentative.
- The situation in a survey is an artificial one, which can lead to biased or untrue answers (in daily life the interviewee would answer differently) or sponsorship bias/impression management or non-response bias.
- Another obstacle could be cognitive because everyone can interpret a situation differently (please think of the butter and margarine example above).
  (Scholl, 2018)

In the following chapters you find the empirical research of my thesis.

4 Empirical Study

This section explains the empirical study of the thesis itself. Not only the empirical work is included, but also the procedure/structure and background of the TMI (research object). In the first subchapter, I will dive deeper into the TMI itself while in the second subchapter I will show how the TMI is collected/created. The third section includes the AS that I have developed, which helps to answer the first and second research question of this thesis. In the last section I will conclude with my analysis and findings, which means I will answer my two research questions.

4.1 The Research Object: Talent Management Index

For a better understanding of the TMI, the thesis will give information about the history, the structure and the findings of the survey.

The survey was developed by a small group of people in the summer of 2009. It was the time of the economic crisis in the EU and one of the affected branches had been the consulting business. Gerhard Graf, founder of the TMAG and members of the University of Innsbruck like Stephan Laske had the basic idea for the survey. The reason behind creating this survey in short has been the interest and curiosity about the topic of strategic TSM and how it is applied in companies to look behind "the curtains of window dressing" in this field. Hence, this survey aims to find out more about the status of TSM in companies. In more detail, the survey has a double intention. First, it was developed to represent the status quo about TSM in companies in different countries and second, it targeted to produce interesting results which can be used as a door opener for new topics with customers or to get in touch with new customers. The operative interview collection, preparation, evaluation of the survey/data analysis, bringing in contacts and the project management were and are still done under the authority of TMAG. The theoretical concepts and the ensuring of scientific foundation belong to the University of Innsbruck – Institute for Organization and Learning as well as the SDI - Internationale Hochschule / Sprachen & Dolmetscher Institut München (TMAG, 2021b; Prof. Dr. Laske, 2021; TMAG, 2022b). After some time, more people were involved with the survey, but it is still a small group of people who can use and can collect data for the survey. That keeps the standard and the compatibility of the survey high.

The survey is called PACE - Partnership of Advanced Career Evolvement (Talentpolitik auf dem Prüfstand). The PACE includes a quantitative benchmark question which results in a Talent

Management Index (TMI). The survey is mainly referred to as the TMI by its developers, therefore refers the TMI to the whole survey in this thesis. The international benchmark survey is practically oriented with an economic driven purpose. It is a semi-structured (mixed method) questionnaire with around 20-22 pages which takes between 90-120 minutes per interview. The questionnaire applies a mixed method approach. This means qualitative and quantitative questions are either in person (face-to-face) or via an online communication tool, for example MS-Teams, posed and answered. This thesis mainly focuses on the quantitative questions, that are scaled by an index (TMAG, 2021b, 2022b). The mix of qualitative questions includes open questions, hybrid questions (multiple and with the option for additional answering) and multiple-choice questions. This declaration is done according to Schnell et al. (2018). The questionnaire uses a normative approach, which means that the aim is to identify and learn about the current state of TSM in the respective organization and how it could be improved in the future as well as to identify the resources to achieve this progress by combining it with a benchmark. The benchmark is the scale of what is "between good and bad". Normative in the survey means that organizations with a higher index score are more mature than an organization with a lower index score that makes for example case by case decisions (Leedy & Ormrod, 2016; Werthern, 2020; TMAG, 2022a).

The questionnaire development happened rather fast because it was at the time of the economic crisis, therefore the researchers could focus mainly on the creation of the questionnaire. The first interview was collected in early September 2009. The questionnaire was tested a few times in different companies with different locations. "Tested" refers to the duration of the questionnaire, understandability and technical usability (for example how it works using an online tool, how the evaluation of the results works, etc.). After the first samples had been gathered, the survey data started to grow with each added interview. Mainly the crew, that developed the survey collected the answers of the interviews. In 99% of the cases one person of the key developers analysed the TMI and one of the main developers presented the results in a 2-hour reflection talk to the company. With the reflection, the results are first evaluated and validated by the analyser and later with the feedback and the reactions in the reflection talk it gets validated from a different angle. One central advantage of the reflection talks is that the results are reflected and validated a second time. The second advantage for the interviewed organization and the TMAG is to get and give impulses for further development during the reflection talk. Some interviews are collected in English (5%) but most of the interviews are done in German (95%). Moreover, the interviews are conducted via MS-Teams (80%), personal interviews (15%) and phone calls (5%). The team members have regular feedback loops and exchange hours. Learning happened via cooperation and while writing articles together about the survey for scientific papers. A further event of the TMI was, that after five years the survey became a panel survey. The reason to start a panel survey resulted from a distinct growth of the TSM during the years 2009-2014 and the researchers wanted to capture the newly developed trend. Therefore, the survey now has two panel versions named TMI 1.0 and TMI 2.0. A panel survey means that the same questionnaire is repeated within the same organization after a few years. The purpose of panel surveys is mostly to evaluate the change under equal conditions after some time (Schirmer, 2009).

The panel system in the TMI survey means a repetition of the quantitative survey questions including some of the qualitative questions carried out approximately five years after the first interview. The TMI 2.0 has added a new topic named learning agility. Some of the quantitative questions are posed in the same way but some were changed. Two of the 18 quantitative in TMI 1.0 including the learning agility questions have been changed in the grammar and formulation of the question, but the content stays "nearly" the same. In the TMI 1.0 the question No. 1.5 gets repeated. In the TMI 2.0 there is no repetition of quantitative questions. More details in Table 2: Questions of TMI 1.0 and TMI 2.0 / Source: own creation. Moreover, nine new index/quantitative questions were added in the TMI 2.0. Therefore, it is not a 100% panel survey how it is stated in theory because only some questions from the first round reoccur. Further information is provided in Table 1, which shows the table of content/structure of both TMI 1.0 and TMI 2.0. The chapters have different headlines, but they serve the same purpose in the chapters. Today, it is still possible that companies are acquired for the TMI 1.0, but in all cases the company must and had to achieve the following sampling criteria:
Headquarters in the following regions:

- Germany
- Austria
- Switzerland

A minimal number of employees:

- 500 employees

The branches vary from the production industry to food suppliers. The company can be in the DAX, ATX and SMI. For ethical reasons, no one from the war industry or the cigarette industry was interviewed (TMAG, 2021a; Prof. Dr. Laske, 2021; TMAG, 2022b).

TMI 1.0	TMI 2.0
General information	General Information
1. Strategic direction	1. Strategic embedment of HR-work - Review
2. Identification	2. Strategic embedment of HR-work - Outlook
3. Measures	3. The strategic Talent and Succession Management process and its implemented instruments/methods
4. Measuring success and quality	4. Goal-oriented competence development in Talent and Succession Management
5. Learning Agility started for all further TMI 1.0 in June 2014 with the second round	5. Quality and Performance Evidence of Talent and Succession Management
6. Challenges / Future	6. Future Challenges

Table 1: Chapters of the TMI / Source: own creation

In the following, you find the quantitative questions of the survey. Question No. 13 and Question No. 15 are slightly different framed, but the meaning stays the same. The aim of the change was to phrase it more understandable according to feedback, which was collected during previous survey collections. Almost every quantitative question is assigned to a specific dimension/category: strategic, operative and methodical.

Question		TMI 1.0	TMI 2.0	Dimension
1	How do you identify Successors and Talents in your organization?	1.5/ 2.2	3.5	strategic
2	To what extent is T&SM an integral part of organization’s overall strategic orientation?	1.6	2.4	strategic
3	Are strategic business key positions identified in your organization?	1.7	2.9	strategic
4	Are there defined operational/strategic goals for strategic Talent and Succession Management?	1.9	2.7	strategic
5	Is Talent and Succession Management a fixed component of your organization´s/department´s budget?	1.11	2.14	strategic

6	How is the formal responsibility within Talent and Succession Management arranged?	1.12	2.13	strategic
7	How are Talent and Succession Management processes organized in your organization?	1.13	3.1	strategic
8	Are there specific guidelines for dealing with talents within your division?	1.16	3.13	strategic
9	How is the qualification of talent managers organized in your division?	1.17	2.15	strategic
10	Is the T&SM process effectively supported by the used methods / instruments?	3.4	3.9	operative
11	How is the process of Talent Relationship Management designed?	3.6	4.9	operative
12	How is the network among Talents organized?	3.7	4.10	operative
13	To what extent is the success of T & SM monitored in your organization?	4.1		methodical
	To what extent is the success/performance of Talent and Succession Management monitored in your organization?		5.2	methodical
14	How is the learning content for Talent development determined?	5.1	4.3	Learning Agility
15	How would you evaluate the quality of the learning concepts in your T & SM?	5.3		Learning Agility
	How would you evaluate the quality of the learning concepts in your strategic T&SM?		4.6	
16	How is learning cross-linked across topics in your organization?	5.4	4.7	Learning Agility
17	How would you assess the learning culture in your organization?	5.5	4.8	Learning Agility

Table 2: Questions of TMI 1.0 and TMI 2.0 / Source: own creation

18	To what extent is your HR-strategy aligned with the overall organization´s strategy?	2.3
19	How is the risk in terms of T&SM measured and presented?	2.5
20	How is headcount planning managed in your organization?	2.12
21	How is an “Expert Career” organized in your organization?	2.18

22	How does your organization secure the necessary expert knowledge?	2.19
23	Is there a common understanding of the term Talent/Successor in your organization?	3.2
24	How would you assess the quality of Talent/Successor identification process in your organization?	3.8
25	How is Performance Management organized?	3.11
26	Are you aware of the position which are the particular importance for developing strategically important competences (development positions, development passages)?	4.4

Table 3: Additional questions of TMI 2.0 / Source: own creation

The full questionnaire will not be shown in the appendix due to the protection of intellectual property reasons. The TMI 1.0 consists of originally 14 questions and later added with the section of learning agility so in sum it contains 18 quantitative questions and the TMI 2.0 survey consists of 26 quantitative questions. All questions are secured by trademark protection ®. Every ten years the survey is checked by the external committee if the trademark is still appropriate. The second trademark license started in 2020 and expires in 2030 (Information from an e-mail conversation with the developer of the survey, 22.06.2021). The entire survey has a strategic TSM background. It understands TSM how to develop talents according to the strategy of the company, based on this TSM idea on the concept of Collings and Mellahi in 2009 (TMAG, 2021b; Prof. Dr. Laske, 2021).

To focus on the quantitative questions, we have to dig deeper into the scale called index. The scale is based on the organizational maturity of an organization. According to the organizational maturity, every professionally managed organization thrives in development. In the development process the organization goes through consciously created phases/stages to cope with external and internal events (Schritt, 2011). The basic idea behind the scale reversed to Argyris and Schön and the stages of organizational learning in 1996. The index follows as we know a normative approach to find out the maturity level of strategic TSM in a company. Every stage/phase is called maturity level. Mostly the results have one decimal place because of the 26 questions an average is made (TMAG, 2022a).

The levels (in German "Reifegrad") are outlined in the following. The dominant language in use of the questionnaire is German because most of the survey is done in German so to get no errors because of translation issues the levels are quoted in both languages. The levels are quoted from the article by Schritt (2011) about the TMI:

Level I: Das Element wird situativ in der Organisation unterschiedlich eingesetzt.

➔ The element is used differently in the organization depending on the situation. Like an intuition on a trial- and- error basis and variable in different situations.

Level II: Es liegt eine Standardisierung vor, die Umsetzung erfolgt (noch) nicht immer einheitlich.

➔ There is a standardization rule for the regulative process, but implementation is not (yet) always uniform/consistent.

Level III: Das Element wird konsequent gemanagt und optimiert.

➔ The element is consistently managed and optimized.

Level IV: Das Element ist strategisch, zukunftsorientiert ausgerichtet.

➔ The element is strategic, aligned and future oriented.

(Schritt, 2011; TMAG, 2022a)

The next graph gives a better understanding of how a quantitative question in the survey looks like: the maturity levels are highlighted in green, the description can be found below and the index points are entered on the right of the chart. Below the question there is space to collect additional qualitative information.

1.5 How do you identify Successors and Talents in your organization?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
every manager is responsible for their respective identification	the selection process is defined and the identification criteria are determined	the selection process as well as the identification criteria are transparent and pursued	identification criteria are continuously checked for possible developments of the future, are continuously developed and aligned with the organization's strategy	

→ ...

→ ...

Figure 5: Question in the original study / Source: TMI Questionnaire

I experienced that the explained levels sounded a bit abstract. Therefore, I want to use an example while I learned and participated as a listener in an interview.

You as a HR-Manager write an E-mail to different departments in your company and you ask your colleagues: How is the term talent used in your company?

Answers to the mail in Level I: You get different answers back.

Answers to the mail in Level II: You get some answers showing that there is a document in the company which defines talent. But it is used differently.

Answers to the mail in Level III: You get the same answer about the term talent. There is a group of different people in the company responsible for TSM.

Answers to the mail in Level IV: You get the same answers and the term is embedded into the strategy of the company.

To sum up there are four levels. Starting with an initial/stationary level and growing up to a strategic future oriented level. For each of the four levels there is a two-point system. This means that every level has two-points which marks the early stage of a level and the matured stage of a level. The interviewee tells whether she/he categorized the organization more in an early or in a matured stage. For instance, it can be clearly shown whether a company is at the beginning of a level or closer to the end and nearly at the beginning of the next level. This system makes it more accurate and gives more space for a closer description of the status quo. In this context, the survey gathers more content. While the interviewee describes the status quo, the interviewer can take additional notes about the content and develop a deeper understanding of the status quo situation. The next table gives an overview.

Maturity Level	Points	Description
Level I	1 point	initial / situational
	2 points	
Level II	3 points	defined / standardized
	4 points	
Level III	5 points	integrated / optimized
	6 points	
Level IV	7 points	strategic / future-oriented
	8 points	

Table 4: Levels of the survey / Source: own creation

To get findings, the data must be analysed. All answers are collected in an Excel Sheet. Some open questions receive codes/categorized and some multiple-answer questions have codes like an SPSS. This means that for example if the answer is "Yes" it states a "1" and if the answer is "NO" it states a "2".

In the first interview round about 300 companies participated. In the second round there were about 71 (Germany: 30, Austria: 35, Swizz: 6) companies that were re-interviewed. Some examples of the interviewed companies need to be mentioned. For example, Strabag (building sector), voestalpine (production industry) and Migros (food branch) are participants in the survey. The findings of the survey will be presented in short because the focus is more on the critical discussion of the survey´s evaluation method. A short outtake from a press article published by the TMAG in June 2021 gives a good overview: „Das Thema steht seit zehn Jahren auf dem gleichen Fleck!" (TMAG, 2021a, p. 2). Translated, over the last 10 years the maturity level of TSM stayed nearly the same. So far, no company reached the highest maturity level and companies have nearly no KPIs in place or mostly no strategic goals for TSM. Many comparisons between branches and countries have been conducted.

Some outtakes of a recent published article:

- The 25% of the high-level companies have also a good KUNUNU evaluation (A platform for employer attractivity).
- There is a correlation between the turnover of a company and the strategic TSM. 25% of the best-interviewed companies with TSM in place have a 40% higher turnover than companies without TSM.
- Still, only a third of all talents are women, the rest are men.

(TMAG, 2021a)

These are the overall general findings up until now in a nutshell. Every company that participated in the survey received its results in comparison to their branch. Also, if the company is part of both panels TMI 1.0 and TMI 2.0 they get their index and they get the overall TMI result about the difference between TMI 1.0 and TMI 2.0 as you can see in the following graph.

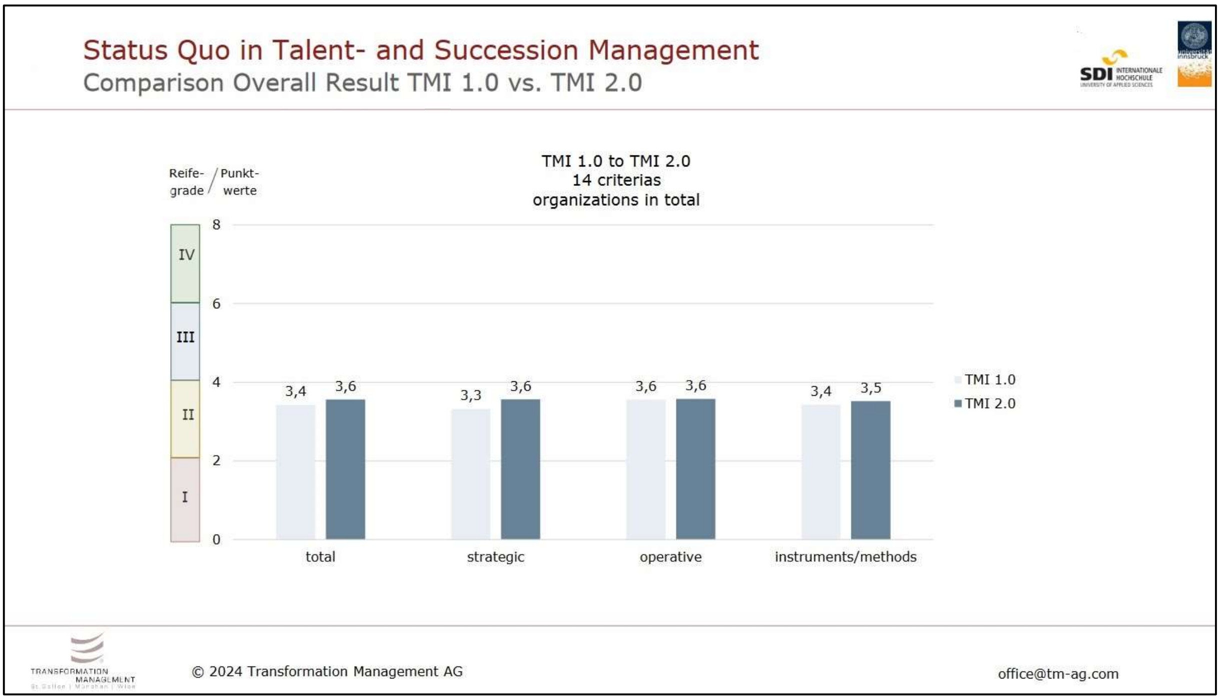


Figure 6: Comparison TMI 1.0 and TMI 2.0 / Source: Internal TMI Document

To sum up this part and to remember the aims of the survey again, you find a small summary in the following bullet points:

- Maturity level “benchmarking” of the company and the participated TSM,
- Generating results about current and future challenges of TSM,
- Giving recommendations for successful implementation of TSM,
- Creating company, industry and country benchmarks,
- Unplanned side effects and possible consequences,
- Showing different approaches for TSM.

(TMAG, 2021a)

4.2 DATA "COLLECTION"

In this chapter I will provide information about my data collection especially how I learned to conduct the survey interviews properly.

In the whole process of a successful interview collection, I was instructed by an advanced interviewer. Before getting in touch with the clients, either in person at events such as conferences, trade fairs or via phone I researched information and gathered knowledge about the respective company. Due to the outbreak of the pandemic interviews started taking place mainly via MS-Teams. Regardless, a background check was essential since certain survey criteria (headquarters in the DACH-region, over 500 employees, etc.) must be met by organizations in order to participate. Moreover, it demonstrates the seriosity and reliability of the survey which at the same time is a key success factor regarding the actual interview later in time. Especially in the case of the second part of the panel TMI 2.0, research is indispensable because the contact persons might have changed firm names, organizations merged or were acquired by another company.

The process auf the TMI is standardized, but every step cannot be clearly defined. Especially, during phone calls it is difficult to figure out how to draw and navigate the attention towards a positive outcome (interview is accepted) because every contact person obviously has their own personality. For documentation, TMAG uses an Excel Sheet in which all contact details are collected. This file strengthens the validity, quality and professionalism of the panel survey. For the acquisition call you need some information about the company. You need to know with whom you are calling and the position of the potential interviewee. I experienced that more information you collected beforehand the greater the success rate of arranging an interview. Further, a door opening question to gain the interest of the other person helped instead of asking straight for an interview. In literature it is recommended to use incentives to find interview partners. However, the TMI is not using incentives.

As mentioned above, I was first a silent listener in some surveys then I started to acquire interview partners as well as conducted some parts of the interviews itself. My Roadmap: four acquisition processes, two silent listening interviews in TMI 1.0 and one in TMI 2.0. Silent listener means that I facilitated the instruction of the survey but during the questionnaire part I only listened. After all, I did half of the interviews twice and four full interviews and I participated in all reflection and presentation talks. In the following table you find details about the interviewed companies during the data collection for this thesis.

Acquisition-process	Silent listener	Half interview	Full interview
Trumpf SE + Co. KG	Knorr-Bremse AG TMI 1.0 / 08.03.2021	Trumpf SE + Co. KG TMI 2.0 / 03.05.2021	CERATIZIT Business Service GmbH (subsidiary of PLANSEE Group) TMI 1.0 / 06.05.2021
HABA GmbH & Co. KG	Arbonia AG TMI 2.0 / 16.03.2021	HABA GmbH & Co. KG TMI 2.0 / 03.05.2021	Uhlmann Pac-Systeme GmbH & Co. KG TMI 1.0 / 13.07.2021
Haspa (Hamburger Sparkasse AG)	Zürich Insurance AG TMI 1.0 / 15.04.2021		Dachser SE TMI 2.0 / 16.07.2021
Dachser SE			Haspa (Hamburger Sparkasse AG) TMI 2.0 / 27.07.2021

Table 5: Overview Interviews collected for the thesis / Source: own creation

The survey demands reliability which only is given when you collect answers from the interviewees without manipulation. In my contract with TMAG, there was a paragraph where I affirmed to deal with the TMI carefully and truthfully. Moreover, companies that participated had to be anonymized. More information about the development and the history of the TMI conducted via an online narrative interview with one of the founders.

4.3 Analysis using an assessment scheme

Focusing on my first research question and based on the literature I consulted during my research, I developed an AS to assess whether the method in use is appropriate to find out more about the status quo of an applied TSM in different organizations. In the course of my research, I focused on finding a role model for such an AS, but it was not trivial to find one. Therefore, I selected some ideas from different sources such as Lüdders, the American Evaluation Association, etc. and created my own AS (Lüdders, 2016).

4.3.1 ANALYSIS REGARDING RESEARCH QUESTION ONE

To bring the reader back to my first research question. I repeat it below.

What is an appropriate method to evaluate the status quo of TSM in different organizations?

a. In terms of the whole survey?

b. Specifically, by the method in use for the quantitative questions (26 questions)?

Assessment Scheme to answer the first research question part a.):

In order to find out whether the method is appropriate in terms of the whole survey I created further sub-questions to answer part a.). These questions are designed to test the validity of the TMI according to the theory chapter in the first part of this thesis. These questions are mainly answerable with yes or no, but in the findings and discussion part I will give arguments and examples for my answer choice.

- Do the positive aspects of a questionnaire outweigh the negative ones?
  First, I will examine whether a questionnaire is an adequate and practical method for the topic of TSM. I will compare the methods of observation and experiment with the questionnaire.
- Is the target population valid?
  Secondly, I want to check the target population according to the topic and the field of the survey, also according to how many organizations participated in the survey.
- Is the generated data analysable?
  Third, how comfortable is the evaluation of the collected data.

To evaluate the structure of the TMI I would like to pose the following sub-questions, based on the "golden rules for structuring a questionnaire" which I described in chapter 3.2.

- Does the TMI have a navigation where you can see how long the questionnaire takes?
- Is a new topic/chapter/theme transferred well?
- Are the most important and familiar topics/questions at the beginning?
- Are there a lot of "yes" questions in a row?

Assessment Scheme to answer the first research question part b.):

Each of the 26 quantitative questions will be evaluated with the following self-developed scoring scheme. This scheme is designed to check the objectivity and representativity of the TMI. Also, the reproducibility of the TMI will be checked. My motivation/intention was to create an AS that could also be used for the evaluation purposes of other survey questions according to the sources of "golden rules for creating effective questions" in chapter 3.2.

1. Is the question related to the topic/aspects of the survey?
2. Is the question generalizable?

3. Is the question clearly formulated? Is the question easy to understand?
4. Is the question neutral? (no bias/leading language)
5. Are no universal adverbs of frequencies used? *
6. Are no time adverbs used? *
7. Is it not a suggestive question? *
8. Is the response scale/index understandable?
9. Is the answer scale/index appropriate to the question?
10. Is the question not repeated in the survey? *

* I know that the negotiation in the question with the asterisk (No. 5, 6, 7, 10) does not meet the requirements of good questions. I did this on purpose because in the next chapter, you will find my evaluation cumulated in a graph. I intend to evaluate the quantitative questions with a numerical score (how much was achieved in total?).

4.3.2 Analysis regarding research question two

It is worth to recall my second research question.
"What topics of TSM are relevant to evaluate the status quo of TSM in different organizations? Which topics need to be added in the future to follow up with the trend / to be up to date with TSM?"

The following sub-questions are designed to check the reliability of the TMI based on the concept of strategic TM from Collings and Mellahi (Collings & Mellahi, 2009) to reply to my second research question. These questions are mainly answerable with yes or no, but in the findings and discussion part I will give arguments and examples for my answer choice.
Assessment Scheme to answer the second research question:

- Is there a TMI question to find out if the TSM is intertwined with the strategy (business goals and objectives) of the organization?
- Has the TMI a part to learn about the identification of a key position?
- Does the TMI have a question to identify whether key positions exist outside of management positions?
- Is there a question to determine if the company has a talent pool solution?
- Is there a question about the HR architecture (programs, etc.) of the organization?

As a last question I want to pose "Which topics need to be added in the future to follow up with the trend / to be up to date with TSM?"

4.4 FINDINGS

In line with my first and second research question, I would like to present my findings in the following paragraph. For a better understanding, I separated each of the two research questions into an own subchapter.

4.4.1 FINDINGS REGARDING THE RESEARCH QUESTION ONE

In the following, I present my findings on the validity of the two questionnaires TMI 1.0 and TMI 2.0. I will structure my findings according to the posed question in the previous subchapter.

- Do the positive aspects of a questionnaire outweigh the negative ones?

I found out that the TMI has the following positive aspects:

- The TMI survey reaches a lot of companies and the right employees because there is no random sampling, only companies that meet the criteria (DACH and over 500 employees) can participate in the survey.
- For the TMAG as the executor of the acquisition it is easier to find companies/participants for a survey and conducting the interviews instead of an observation or an experiment. An observation and an experiment needs a lot more preparation time and cannot be done in addition to the regular work of the TMAG.
- The standardized survey takes about 90-120 minutes, which makes it practicable in a company´s normal day-to-day business. In contrast, this would not be so easy for an observation (due to legal and data protection regulations) or an experiment. In addition, the TMI questionnaire can be conducted via phone/MS-Teams or similar tools and therefore has a big advantage and can also be carried out in times such as pandemics like COVID-19.
- The online or offline questionnaire with 90-120 minutes allows some inquiries to be asked and answered easily in an unbiased way. Therefore, the results are representative and any tendency towards extremes or lying can be better controlled by the interviewer.

And the negatives are listed below:

- Taking part in a survey is an artificial situation for the interviewee. For example, without a nice and smooth start interviews might not be open for the TMI survey.

  - Even with control questions etc. there is a risk of biased answers (sponsorship biased) in a survey. With control questions and trained staff this can be is potentially prevented in the TMI.

- Is the population valid?

The survey is conducted in the DACH region. The interviews taken in the regions of Germany, Austria and Switzerland are not evenly distributed due to different basic conditions in these countries (politic, infrastructure, culture, landscape etc.). The different conditions lead to different interview numbers in each country. In addition, this leads to different relation between TMI 1.0 and TMI 2.0 attendants, because the survey is still ongoing. Especially, to acquire participants for the TMI 2.0 is more complex, because the interviewees from TMI 1.0 are not reachable or not employed with the company anymore. The interviewees of the companies are selected because of their function and knowledge. There is no interview done with an interviewee who is not working in the field of TSM and does not have the knowledge/power to answer the questions for an organization. This is verified by the TMAG member who carries out the acquisition for the survey participants.

- Is the generated data analysable?

The survey is a mixed method questionnaire which means that both quantitative and qualitative questions are asked. Different types of questions are used. For instance, questions with open or closed answers, questions with multiple choice possibilities, graphs to answer different stages or ranking scales. The quantitative questions are mainly in a scale of 1-8 points in four categories with two points each (lower or higher level). Some more quantitative questions are to be answered with numbers for example about "how many strategic positions the company has?". My findings about the scaling in the protected TMI questions is that the question scale has no middle point, so they are unipolar with eight points in use. If an interviewee wants to skip the question for example because the organization does not have the item requested or the interviewee cannot answer, it is not possible to indicate this in the scale, only in the open writing section below each quantitative question. This leads to the fact, that one point on the scale could mean that the organization does not have the object requested or only has a kind of the item requested. In the section below of each quantitative TMI question, these undefined responses are additionally commented/documented by the interviewer. In the end the scale is used to evaluate the organization's score and compare it with its industry, the total of respondents or the TMI 1.0. The positive aspect of the unipolar scale is, that unipolar scales have no middle point, which makes it impossible for an implied denial of the interviewee. The data is documented "neat and tidy" in an Excel Sheet.

<u>Findings regarding the structure:</u>

- Does the TMI have a navigation where you can see how long the questionnaire takes?

The questionnaire itself is divided into an opening section, a main section and a closing section. The trained interviewer creates a pleasant welcome. Unclear thoughts and questions of the interviewee are answered in an unbiased way (without leading or answering) and all answers of the respondent are documented. The questionnaire is either shared online or available in a printed version for a face-to-face interview. During the interview, the interviewer reads out loudly the question and guides the respondent, but the respondent cannot see which part of the survey they are in (start, main or end).

- Is a new topic/chapter/theme transferred well?

Each topic in the survey is nicely transferred by the interviewer (not written down in the questionnaire), but in practice there is a smooth way to move from subtopic to subtopic. The transmission is individual according to the atmosphere of the interview.

- Are the most important and familiar topics/questions at the beginning?

Each interview I participated in took round about 90-120 minutes. Sometimes the interviews lasted longer because of requests or deeper conversations about the TSM topic at the end. The time frame is the same for both TMI 1.0 and TMI 2.0. The survey starts with a simple introduction question to find out general information about the interviewee(s) and their organization. In TMI 1.0 the main part starts with qualitative and quantitative questions about strategic TSM, from this general part it moves on to more specific with questions about the identification of strategic TSM, measures and the extra part regarding learning agility. The main part of the TMI 2.0 starts with qualitative and quantitative questions concerning the strategic embeddedness of TSM as a recapitulation of the TMI 1.0. It then goes deeper into the new ways of TSM and into their strategic integration. In the third part of the main section, the questions are more specific about the process of TSM and the instruments/methods used for the implementation. In the fourth part of the main section questions about the topic of learning agility are installed. It starts with the goal-oriented competence development of TSM and ends with the specific topic of quality and performance evidence in TSM. Both surveys follow the approach from general to specific (more in-depth).

- Are there a lot of yes questions in a row?

Due to the mixed method concept/design and the different types of questions, there are no questions with the same answer category in a row.

In conclusion the theoretical introductions provided in chapter "golden rules for the structure" are applied almost one-to-one in practice in TMI. More about this in the discussion chapter.

The following findings relate to the objectivity and representativeness of the TMI 1.0 and TMI 2.0 questionnaires. The results presented below are the main findings of my research. The graph below provides an overview of the AS's responses to the first research question, part b), as discussed in the previous chapter. On the vertical axis are the questions from the TMI and on the horizontal axis, are the evaluation questions of the AS. After the graph, which looks like a minesweeper field (a famous computer game of the 1990s), you will find the answers in depth.

The symbols used are explained below:

icon	**Legend/Meaning**	**points**
	The AS question is answered with a "yes". This means the requirement is fully reached.	1 point
	The AS question is answered with a "no". So the requirement is not reached.	0 point
o	The AS question cannot be answered simply with "yes" or "no".	0,5 point
-	Answering the AS question is not possible.	0 point

	AS 1	AS 2	AS 3	AS 4	AS 5	AS 6	AS 7	AS 8	AS 9	AS 10	X/260
Q 1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	9,0/10
Q 2	✓	✓	o	✓	✓	✓	✓	✓	✓	✓	9,5/10
Q 3	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	9,0/10
Q 4	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	9,0/10
Q 5	✓	✓	o	✓	✓	✓	✓	✓	✗	✓	8,5/10
Q 6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10/10
Q 7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10/10
Q 8	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	9,0/10
Q 9	✓	✓	o	✓	✓	✓	✓	✓	✓	✓	9,5/10
Q 10	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	9,0/10
Q 11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10/10
Q 12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10/10
Q 13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10/10
Q14	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10/10
Q15	✓	✓	o	✓	✓	✓	✓	✓	✓	✓	9,5/10
Q16	o	✓	✓	✓	✓	✓	✓	✓	✓	✓	9,5/10
Q17	o	✓	✓	✓	✓	✓	✓	✓	✓	✓	9,5/10
SUBTOTAL											**161,0 / 170**
Q18	✓	✓	o	✓	✓	✓	✓	✓	✓	✓	9,5/10
Q19	✓	✓	o	✓	✓	✓	✓	✓	✗	✓	8,5/10
Q20	o	✓	✓	✓	✓	✓	✓	✓	✓	✓	9,5/10
Q21	o	✓	✓	✓	✓	✓	✓	✓	✓	✓	9,5/10
Q22	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10/10
Q23	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	9,0/10
Q24	✓	✓	o	✓	✓	✓	✓	✓	✓	✓	9,5/10
Q25	o	✓	✓	✓	✓	✓	✓	✓	✓	✓	9,5/10
Q26	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	9,0/10
SUBTOTAL											**84,0 / 90**
TOTAL											**245,0 / 260**

The first part scored 94,7% and the second part scored 93,3%. In sum, a score of 94,2% is reached.

In summary, most questions were posed affirmatively, with only two questions scoring 8,5 out of 10 points. A detailed description of all results will follow in the subsequent paragraph.

The headings have been modified to improve readability. The original labels TMI 1.0 and TMI 2.0 have been changed to TMI I and TMI II, respectively.

Nr. 1 TMI I 1.5 repeated in 2.2 / TMI II 3.5

1.5 How do you identify Successors and Talents in your organization?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
every manager is responsible for their respective identification	the selection process is defined and the identification criteria are determined	the selection process as well as the identification criteria are transparent and pursued	identification criteria are continuously checked for possible developments of the future, are continuously developed and aligned with the organization's strategy	

This TMI question scored 9 out of 10 because the question is repeated at a later point in the TMI 1.0 survey. There is no repetition of this question in the TMI 2.0. All other scoring criteria can be answered positively with a “yes”.

Nr. 2

TMI I 1.6 / TMI II 2.4

1.6 To what extend is T&SM an integral part of the organization's overall strategic orientation?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
T&SM are not included or considered in the overall strategic plan/orientation	T&SM are part of the functional HR-strategy	T&SM are a consistent part of the strategic planning process	T&SM are systematicall considered by the Top-Management when making strategic decisions	

This TMI question scored 9,5 points. The score was diminished by 0,5 points due to the ambiguity of the response to question No. 3 in the AS. The use of the word 'overall' (marked in yellow) is a bit perplexing, because strategic usually pertains to the entire organization. This lack of clarity makes the question difficult to understand. The remaining assessment questions were answered positively. For example, negotiations are not present, and there are no temporal adverbs or ambiguous/inappropriate TMI response options.

Nr. 3

TMI I 1.7 / TMI II 2.9

1.7 Are strategic business key positions identified in your organization?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
key positions are not identified	key positions are identified when necessary	strategic business key positions are periodically identified based on defined criteria and by a structured process	identified strategic business key positions are consistently aligned with the organization's future strategic requirements	

As I understand it, the TMI query "Are strategic business key positions identified in your organization?" requires a simple "yes" or "no" response, but the response options are not "yes" or "no". Therefore, the answer choices provided do not align with the TMI question, so the response to AS No. 9 is "no". All response options in the TMI index include the link words "key positions" and connect to the link words in the question. This links the question to the index. As a finding from the interviews I attended, I was not aware of answers with only "yes" or "no" to a quantitative TMI question which was posed as a yes or no question. The other questions in the assessment have been answered affirmatively.

Nr. 4

TMI I 1.9 / TMI II 2.7

1.9 Are there defined operational/strategic goals for strategic Talent- and Succession Management?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
no clear, consistent goals exist	operational/strategic goals exist	T&SM goals are assessed; if goals are not reached precise measures are taken	T&SM goals are directly derived from the organization's strategic orientation, are assessed and are considered for strategic decisions	

The question shares the same issue as the previous one and scored 9 out of 10. The answer scale is inappropriate for this "yes" and "no" TMI question. However, the keyword "goals" links the question to the potential answers. The rest of the assessment criteria have been validated.

Nr. 5

TMI I 1.11 / TMI II 2.14

1.11 Is Talent- and Succession Management a fixed component of your organization's /department's budget?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
depending on the organizational situation a T&SM budget is appointed to respective departments/division	T&SM is a fixed component of the HR-budget (centrally located)	T&SM is an integral part of the HR-/department's budget with superordinated HR-coordination	T&SM is an investment budget, the RoI is measured and aligned with strategic necessities	

This TMI question scored 8,5 points out of 10 points. Again, the question is a "yes" or "no" question, but the answer options are linked to the answer because of the keyword "budget". For the AS question No. 3 0,5 points are deducted, because the definition and description of budget in the question is unclear. The question asks about the organization´s/department´s budget, but those two are different and the interviewee might not be sure according to which one he/she/it shall answer.

Nr. 6

TMI I 1.12 / TMI II 2.13

1.12 How is the formal responsibility within Talent- and Succession Management arranged?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
there is no clear regulation; divisions/departments organize Talent Management independently	roles and functions for T&SM are defined, but are not followed consistently	an organisational division/function is formally responsible for the coordination of Talent- and Succession Management	roles, functions and tasks are defined, the ones responsible for Talent Management are consistently cooperating with top-management, act as consultants and actively manage the T&SM process	

This question fulfils all requirements of the AS.

Nr. 7

TMI I 1.13 / TMI II 3.1

1.13 How are Talent- and Succession Management processes organized in your organization?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
There is no structured or systemic approach to T&SM. They are two completely separate topics which are also not pursued systemically	a consistent T&SM process (from identification until placement) is defined and is partly pursued	the consistent T&SM process is an integral element of our HR-landscape, its functionality is continuously measured and adapted when necessary	the T&SM process is an integral element of our HR-landscape and transparently shapes the development of our organizational and leadership culture	

This question fulfils all requirements of the AS.

Nr. 8

TMI I 1.16 / TMI II 3.13

1.16 Are there specific guidelines for dealing with talents within your division?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
the way of dealing with talents is determined by the people and the situation, no uniformity	guidelines are defined and put into practice partially	guidelines are defined and put into practice by all leading members of the organization	the effectiveness of the guidelines is visible on the inside and the outside	

One point is deducted from this TMI question because the answer to assessment Scale No. 9 is 'no'. Although the TMI question is a “yes” or “no” question, the answer index provides a range of responses. However, the keyword 'guidelines' links the TMI question to the answer index.

Nr. 9

TMI I 1.17 / TMI II 2.15

1.17 How is the qualification of talent managers organized in your division?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
the qualification of talent managers is realized by classical trainings and further training seminars	the special quality of talent managers is defined and acknowledged by punctual trainings and development measures	the special challenges for talent managers are reflected within programs for the development of tailor-made learning concepts	trainings and further training programs of the talent managers are adapted to the strategic context of the overall organization	

Question 1.17/2.15 of TMI was deducted 0,5 points in the AS due to its unclear phrasing. Not every company has a talent manager. Although the question is posed correctly and fits the answer scale, during interviews some interviewees have responded with "I do not have a talent manager".

Nr. 10

TMI I 3.4 / TMI II 3.9

3.4 Is the T&SM process effectively supported by the used methods/instruments?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
different instruments and methods are used differently depending on the situation	defined standard instruments and methods are implemented	compatible instruments and methods are consistently used in the T&SM process, their effectiveness is evaluated and optimized	innovative T&SM instruments and methods are continuously developed, evaluated and purposefully employed	

This question is posed like it should only be answered with „yes" or „no". Therefore, the AS No. 9 is evaluated with "no". However, the keywords "methods/instruments" in the TMI question are linked to the four answer index possibilities.

Nr. 11

TMI I 3.6 / TMI II 4.9

3.6 How is the process of Talent Relationship Management designed?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
Talent Relationship Management is - if at all - organized on demand	Talent Relationship Management is defined as a part of Talent Management and the process is outlined	Talent Relationship Management is practiced in forms of partnerships	Talent Relationship Management is an important strategic element in the preparation of future top-employees	

This question fulfils all requirements of the AS.

Nr. 12

TMI I 3.7 / TMI II 4.10

3.7 How is the network among Talents organized?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
the network of Talents occurs mainly by their own efforts	a network is conceptually intended and defined, but its implementation depends on the Talents	a network of Talents is supported and systematically accompanied	the network of Talents is coordinated organization-wide and is strategically used for competence development with relevant, organization-wide projects	

This question fulfils all requirements of the AS.

Nr. 13

TMI I 4.1 / TMI II 5.2

4.1 To what extent is the success of T&SM monitored in your organization?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
a particular performance measurement is conducted on demand	there are defined success criteria which are not regularly or consistently conducted	defined success criteria are consistently conducted, are comparable across the years and precise measures are derived and monitored	defined success criteria are regularly evaluated and continuously developed towards future requirments	

This question fulfils all requirements of the AS.

Nr. 14

TMI I 5.1 / TMI II 4.3

5.1 How is the learning content for Talent development determined?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
there is a catalog of learning topics per hierarchy level, of which respective people can chose individually	there is a common catalog of offered learning topis, of which respective people can chose in consultation with their managers	learning content is specifically determined from managers and HR with regard to future challenges of possible new positions and the persons' need	learning content is constantly oriented towards future challenges of new tasks, towards state-of-the-art knowledge and towards the current competence level of the respective employee	

This question fulfils all requirements of the AS.

Nr. 15

TMI I 5.3 / TMI II 4.6

5.3 How would you evaluate the quality of the learning concepts in your T&SM?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
learning concepts mainly include classical trainings and seminars and are offered on demand	learning concepts are attuned and allow a comprehensible set of diverse learning opportunities	learning concepts are compatible with each other, are catered to different learning attitudes and needs; learning success is measurable	the chosen learning concepts are attuned to each other, include numerous different learning settings, in which new topics and behavioral patterns can be learned in alignment with the organizational strategy	

This TMI question score is reduced by 0,5 points at AS question No. 3. The term "quality" used in the TMI question is not universally applicable to all companies as each company may have a different definition of 'quality', making it difficult to provide a generalized answer. It is important to note that this question is seeking the personal opinion of the interviewee.

Nr. 16

TMI I 5.4 / TMI 4.7

5.4 How is learning cross-linked across topics in your organization?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
in our organization learning is mainly understood as an individual task; a learning concept aligned with strategic topics is momentarily not visible	there are isolated common learning focuses in which different content topics are interrelated with each other (e.g. reflectional learning when introducing SAP, simultaneously when optimizing business processes and improving sales)	There are regular formal structures which offer common learning of specific learning topics. There are regular cross-departmental learning situations organized so that all employees can understand their colleagues' functional tasks with their differences and similarities	In our organization, superordinate learning and development topics for common learning are an obvious part of our development and innovation strategy. Thereby our Top Managers are role models.	

On the first look this TMI question treats not a typical TSM topic. However, upon closer inspection, the topic of 'learning' is intertwined with TSM. It could be considered as a subtopic of TSM. The rest of the AS question can be answered affirmatively. This is the reason why AS question No.1 is deducted by 0,5 points.

Nr. 17

TMI I 5.5 / TMI II 4.8

5.5 How would you assess the learning culture in your organization?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
"learning as a diligent task!" learning takes place ad hoc and on demand, rather individualistic, mostly concerned with the respective field, less aligned with realistic changes	learning as a "must-do" or chore/"stock-up learning" Learning mostly takes place in basic programs, is more focused on development than on actual implementation possibilities. Managers are hardly involved in collective learning.	"learning as a commitment" executives and management actively support a learning culture; critical employees are really valued, not only within lip services; there are structural approaches for collective learning and systemic knowledge management	"learning as self-conception" - "learning is the future" organizational learning is a consistent culture element and is seen as an inevitable element of active and creative future design; there is a positive failure culture; systematic challenging of routines is understood as an innovation driver	

The topic of „learning culture" is related to the TSM topic, but it is not a typical /general/ standardized/usual topic in TSM, therefore 0,5 points are deducted in AS No. 1. The other question of the AS can all be answered with a „yes".

Nr. 18

TMI II 2.3

2.3 To what extent is your HR-strategy aligned with the overall organization's strategy?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
HR-strategy is implicitly assumed; does not exist	HR-strategy is defined	The HR-strategy is derived from the division's strategy, is operationalized and is followed by all HR-employees	HR is an integral part of the division's strategy development process and actively involved	

This TMI question scored 9,5 points. However, the score is deducted by 0,5 points due to the ambiguity of the response to question No. 3 in the AS. The use of the word 'overall' (highlighted in yellow) is a bit unnecessary as strategy typically pertains to the entire organization. The remaining questions of the AS are answered with "yes".

Nr. 19

TMI II 2.5

2.5 How is the risk in terms of T&SM measured and presented?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
successors are determined when needed	a potential successor is defined per position	a systematic succession plan is implemented	aligned with the strategic guidelines a systemic Succession-Risk-Matrix is created	

The TMI question pertains on how "the risk in terms of T&SM is measured and presented". In T&SM there are many risks present. So, it is kind of unclearly formulated that this TMI question relates to the risk of succession management, when an open successor position is reoccupied. Therefore, AS question No. 3 is reduced by 0,5 point. Also because of AS No. 9 I deducted by a whole point because the question does not suit to the answer scale.

Nr. 20

TMI II 2.12

2.12 How is headcount planning managed in your organization?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
headcount planning is only conducted on demand	there is a short term (yearly), general, primarily quantitative headcount planning	headcount planning is aligned with the strategic organizational development and is implemented for the midterm (2-3 years)	headcount planning is an integral part of the strategy development process and is basis for strategic Talent- and Succession Management	

This TMI question is scored by 9,5 points out of 10. The reason for this is that the topic of the question is not a standard topic of TSM. Headcount planning is mostly a more general part of HR tasks, according to the concept of Collings and Mellahi (Collings & Mellahi, 2009).

Nr. 21

TMI II 2.18

2.18 How is an "Expert Career" organized in your organization?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
only selectively and rather person dependent; in our organization we definitly focus on management careers	expert careers are established; our employees rather see it as a "second choice career" and therefore have a somewhat limited acceptance	the integrated development of expert careers leads to a high acceptance of expert careers in our organization	expert careers in our organization are an obvious way of securing strategic knowledge for key positions	

This TMI question received a score of 9,5 points out of 10 points. The reason for the 0,5 points deduction based on AS question No. 1. An Expert Career is considered as a subtopic rather than a main topic of TSM. During the interviews I heard that companies answered here with "I do not have an "Expert Career" but the Maturity Level I aligns with that position.

Nr. 22

TMI II 2.19

2.19 How does your organization secure the necessary expert knowledge?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
generally we know our experts and try to keep them	we know our experts, are aware of their specific knowledge and have respective successors in place	the central fields of knowledge are derived from our core competences; we know on which positions these are required (expert positions) and purposefully develop the knowledge required for these positions	we continuously work on the strategic expertise for our organization, know on which positions this is required; this expertise is constantly considered in strategic decisions made by the executive management	

This question fulfils all requirements of the AS.

Nr. 23

TMI II 3.2

3.2 Is there a common understanding of the term Talent/Successor in your organization?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
there is no common understanding, everyone defines Successor/Talent separately	there is a common and coordinated definition of Successors/Talents	the organization and all managers are consistently aware of the common, coordinated understanding of Successors/Talents	understanding of Successors/Talents is consistently aligned with the strategic requirements	

The answer index is not suitable for the question because the TMI question is a “yes” or “no” question. Hence, AS question No. 9 gets answered with “no”. However, the link words “Talent/Successor” are mentioned both the TMI question and in the answer scale.

Nr. 24

TMI II 3.8

3.8 How would you assess the quality of the Talent/Successor identification process in your organization?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
managers and employees are rather desultorily and unwillingly involved in the process (passive resistance)	managers and employees execute the guidelines more or less competently	Managers and employees take part in the offered trainings on their own responsibility and deliver a sustainable, comprehensible result.	managers and employees are aware of the process' importance and are collectively and constructively working on the high quality of results	

The term “quality” is not appropriate for this question as it is ambiguous. Therefore, 0,5 points will be deducted from AS No. 3. The term is in my opinion ambiguous because the quality of a process can be designed differently in every company.

Nr. 25

TMI 3.11

3.11 How is Performance Management organized?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
performance evaluation depends on the situation and takes place unsystematically	performance is evaluated on the achievement of quantitative goals	performance is consistently evaluated on quantitative and qualitative goals	The quality of work of managers and employees is assessed on the basis of a management/performance record and used as a key decision-making criterion of the variable part of salaries and nominating talents and successors	

The AS question No. 1 was reduced by 0,5 points as Performance Management is a subtopic of TSM. The remaining questions were answered affirmatively.

Nr. 26

TMI II 4.4

4.4 Are you aware of the positions which are of particular importance for developing strategically important competences (development positions, development passages)?

Maturity Level 1 initial/situational 1 - 2 points	Maturity Level II defined/standardized 3 - 4 points	Maturity Level III integrated/optimized 5 - 6 points	Maturity Level IV strategic/future-oriented 7 - 8 points	Score
positions with a strategic competence profile are not defined in our organization	we are aware of development positions which offer aimed strategic competence development	development positions are effectively used for strategic competence development; competence development is monitored and successively improved	development positions are identified based on strategic requirements and demonstrably used as central elements for strategic competence development	

The final quantitative TMI question is marked with 9 points out of 10 points. The AS question No. 9 scored "no". The reason for this is, that the question is a "yes" or "no" question, therefore it does not fit into the answer index. The link between the TMI question and the answer scale are the keywords "strategical competences" which occur in both.

4.4.2 Findings regarding the research question two

In this subchapter, I will answer the second research question according to my self-developed AS. As in the previous chapter I will first answer the questions in the AS and then conclude in the discussion chapter. I will structure my findings according to the posed question in the chapter 4.3.2.

- Is there a TMI question to find out if the TSM is intertwined with the strategy (business goals and objectives) of the organization?

By looking at the quantitative questions of the TMI, we can see that one-fifth of the questions are about the link between TSM and the organization´s strategy. This is followed by the remaining questions of the TMI. The first part of the TMI 1.0 deals with the dimension "strategy direction" as a topic. In this section, the TMI 1.0 assesses specially how mature/embedded

TSM is in the organization's strategy. The TMI 2.0 also has two chapters on the strategic embeddedness of HR work. Firstly, there is a review of what has happened to strategic embeddedness since TMI 1.0 and secondly, there is a look at what the plan is for TSM according to the organization's strategy. Throughout the questionnaire there are questions in line with the strategy, for example the link between identifying TSM, measuring TSM, learning agility and the challenges of TSM.

- Has the TMI a part to learn about the identification of a key position?

The quantitative TMI question "Are strategic business key positions identified in your organization?" is the door opener to the topic of key position identification. In the remaining survey, there are many mixed questions on the topic of key position identification. For example, about the relationship between key positions and the total workforce.

- Does the TMI have a question to identify whether key positions exist outside of management positions?

In the TMI 2.0, there is a question about whether the organization has the option of an expert career instead of a management career. But in both questionnaires, there is no link to key positions outside management.

- Is there a question to determine if the company has a talent pool solution?

In the TMI 1.0 there is no question about a talent pool solution, but in the TMI 2.0 there is a closed question with two possible answers. The question is "Are talents or successors nominated for specific potential position transfers (in 18-30 months) or do you make use of pooling? and the answers are "Pooling" and "Placing". The interviewee has to give an argument about the reasons afterward.

- Is there a question about the HR architecture (programs, etc.) of the organization?

According to the theory of strategic TM from Collings and Mellahi (2009) HR architecture is intertwined with strategic TM. Both questionnaires have questions about the embeddedness of TSM in the HR architecture.

As a final question, I want to pose "Which topics need to be added in the future to follow up with the trend / to be up to date with TSM?"

The core topic of TSM has not changed, so I consider the TMI is still up to date. Subtopics such as new work, digitalization and artificial intelligence will have an impact on the company´s TSM, but not on the core structure of strategic TM at the time of the research. The trend of learning agility has already been added to the questionnaire.

All in all, the relevant topics of TSM are embedded in the questionnaire and get queried in multiple ways (mixed method).

5 Discussion

In the following I will summarize and interpret the significance of the main findings of my study. I want to recap that findings and discussions can be interpreted from different angles. I try to be as objective as possible.

5.1 Discussion regarding the research question one

Because I want to stick to the structure used for the findings and analysis it is not possible to put the strongest argument first in this discussion as it is usually done. Therefore, I will not start with the strongest argument and finishing with the weakest one.

My main focus lies on the 26 quantitative questions of the TMI. However, in order to reflect and evaluate them, I will briefly look at the whole survey to recapitulate and see if the 26 quantitative questions are well embedded. I want to go deeper and evaluate whether the questionnaire has the right structure that meets the requirements of scientific evaluation. First of all, the TMI starts with an opening part asking basic questions (demographic/background questions) about the organization: name, position and name of the interviewee etc. This creates a trustful atmosphere and creates a less artificial environment, also the interview can adapt to the interviewee. After this, the TMI interviewer explains the structure of the survey, the purpose and function of the index. The main part is followed by a more in-depth evaluation with the following questions and the closing part completes the questionnaire.

<u>Discussion of part a.)</u>

- Do the positive aspects of a questionnaire outweigh the negative ones? → Yes
- Is the target population valid? → Yes
- Is the generated data analysable? → Yes

The reasoning of the three arguments will be debated in the following paragraphs.

As you already know, the TMI is a questionnaire with multiple types of questions. This is first of all convenient and scientific valuable, because with different types of questions, multiple types of people will be attracted and many pros and cons of questions will help to address the full picture of TSM in the TMI. In my opinion, a questionnaire is the best choice for evaluating different organizations, because it has the advantage that organizations from different regions and industries can be compared to each other – as it is properly done in the TMI. A questionnaire is much easier to construct and set up than an observation or an experiment. Additionally, an experiment and an observation will not work for such an amount of interviews, because an experiment or an observation cannot be done as standardized as a questionnaire. The setting and operationalization would require far too much work for the analysis of different organizations. I got to know by myself that an interview situation is not a natural setting, but the TMI with the specific interviewees in the research field is well guided by the structure (beginning, main part and ending). In my opinion, the setting in the TMI is much more normal and realistic than it would be in an observation or an experiment, because the people know the purpose of the questionnaire. The different types of questions make it possible that the interviewee has less chances to answer with a tendency towards the middle which makes the survey more complete. I would like to point out that cognitive effects can occur in a questionnaire and also in the TMI, but the TMI is conducted face-to-face which relates this bias effect. In the face-to-face situation, interviewers are trained to clear up misunderstandings in an unbiased way.

All in all, if I would be in the situation to choose the method for the TMI I would choose a questionnaire again, because of the above-mentioned arguments.

All of the interviewed organizations meet the requirements (more than 500 employees and in the DACH region). This makes the population of the TMI valid. The collected data is gathered in an Excel Sheet, which makes the analysis easy.

<u>Discussion regarding the structure:</u>

- Does the TMI have a navigation where you can see how long the questionnaire takes? → No
- Is a new topic/chapter/theme transferred well? → Yes
- Are the most important and familiar topics/questions at the beginning? → Yes
- Are there a lot of "yes" questions in a row? → No

The reasoning of the four arguments will be debated in the following paragraphs.

As previously noted, the TMI does not have a navigation toolbar, but this does not matter, because it is not a pencil and paper questionnaire, which means that during the interview there is always a person from the TMI crew present. As figured out in the findings, each new topic/chapter in the TMI is nicely transmitted to keep it interesting for the participant and to keep the attention high. The different topics start with the important part at the beginning and then move on to subtopics, which helps the participant to focus on each section and getting more useful data. There are no questions that have to be answered with "yes" in a row. This, according to the theory of Schnell (2019) prevents, that the interviewee gets "bored" during the interview and only answers with "yes", not losing focus during the execution. In sum, the structure of the whole survey is well designed.

Discussion regarding part b.)
All in all, you see according to this AS that the TMI reaches a high level of objectivity and representativity. Nearly 95% (245 points out of 260 points are reached). In the following I want to discuss the TMI question one after another.

Eight questions fail question No. 9 of the AS because they are posed as "yes" or "no" questions, but for the analysability of the TMI four answer possibilities are needed. Since the questions are posted with the four answer possibilities it should be clear that they are not meant as simple yes/no questions, but a different formulation would be better. In the following I will give suggestions on how it can be phrased differently. I want to mention here that during my interview collection I never experienced that a participant repaid "yes" or "no". Also, I had the intention that most interviewees focused more on the answer scale instead of the question.

<u>Question No.1:</u>
My results indicate that the TMI question No. 1 achieved a score of 9 out of 10 points. The duplication in TMI 1.0 is the cause for this discrepancy. Here, I would like to note that this question in the TMI 1.0 is repeated to test whether the respondent answers consistently or not. It serves as a control question.

<u>Question No. 2:</u>
The question causes a 0,5 point "penalty" due to the unclear use of the word "overall". Nonetheless, the question can still be answered with some common sense. The word "overall" only emphasizes/confirms once again that the strategy is everywhere in a company. This finding has been supported by my own conducted interviews.

Question No. 3:

The response options are inappropriate for a "yes" / "no" question. It would be more appropriate to ask a question that corresponds better to the response scale, such as a question using the interrogative pronoun "how". My suggestion would be: "How do you identify key strategic business positions in your organization? During my participation in the interviews, I found out that most respondents concentrate on the provided answer scale instead of the TMI question itself. This means that the TMI question and the answer index are linked by the keyword, this makes it easier to answer the question according to the answer scale, even if the question can only be answered with "yes" or "no". As this is the third quantitative TMI question, the respondents are used to the logic of the answer scale and the keywords make it easy to answer in the index scale.

Question No. 4:

Like the previous question, this is a "yes" or "no" question. It would be better to use the interrogative pronoun "how" or "To what extent" to formulate the question. Thus, I would revise the question as follows: "How are operational/strategic goals for strategic Talent and Succession Management defined?" or "To what extent are operational/strategic goals for strategic Talent and Succession Management defined?". However, as I argued previously, I believe that the participant´s focus is on responses that contain the given keywords. For clarification, it would be beneficial to include the keywords "operational/strategic goals" in the answer for the first Maturity Level. For instance, "no clear, consistent operational/strategical goals exist".

Question No. 5:

Again, we have a question that is answerable with "yes" or "no". To link it better to the answer scale, it could be phrased as follows: "How is the talent management component fixed in the budget?". In addition, the answer choices here do not have a clear keyword link to the question. The only relation is the word "budget". So, from my understanding and experience of interviewing it was not as easy to link the question to the possible answers as it would be with a how question and answers which have clear keywords in common with the question. For instance, a general budget definition. It is also not clear to the interviewee whether it is the organization's budget or the department´s budget. As in the answer scale it is also different according to the maturity mentioned. It would be easier to pose the question for the general/overall budget, instead of a defined budget.

Question No. 8:

Here also the answer options are unsuitable for a "yes" / "no" question. It would be more appropriate to ask a question that corresponds better to the response scale, such as a question using the interrogative pronoun "how". My suggestion would be: "How defined are specific guidelines for dealing with talents within your division?" As mentioned by discussion of question No. 3 above. The answer has the same keywords "key positions" as the question, so it is quite clear to the candidate because they focus more on the answers. For a better clarification, it would be beneficial to include the keyword "guidelines" in the answer for the first Maturity Level. For instance, "the way of dealing with talents is determined by the people and the situation, no uniformity, no guidelines".

Question No. 9:

The TMI question scored 9,5 out of 10 points. Because it is not generalizable that every company has a talent manager. This makes the question unanswerable sometimes. The term "talent manager" could be changed to "a responsible person for TSM".

Question No. 10:

Again, the response options are unsuitable for a "yes" / "no" question. It would be more appropriate to ask a question that corresponds better to the response scale, such as a question using the interrogative pronoun "how". My suggestion would be: "How effectively is the T&SM process supported by the methods/instruments used?" As mentioned by discussion of question No. 3 above. The answer has the same keywords "methods/instruments" as the question, so it is quite clear to the candidate because they focus more on the answers.

Question No. 15:

The word "quality" of learning concepts in the TMI question is not generalizable overall companies. Here, for instance, the term "content" instead of "quality" would make the TMI question generalizable and the index response options would suit the question better.

Question No. 16:

The question relates to the previous TMI question No. 15. The topic of the question "How is learning cross-linked across topics in your organization?" is intertwined with TSM, but it is more or less a subtopic and therefore in my opinion more appropriate for a sub-question. Hence, I deducted the AS No. 1 with 0,5 a point. Because questions which do not relate 100% with the topic could lead to a flattening in the average of the overall TMI results.

Question No. 17:

The question is well stated and the answer index scale is appropriate to the question. However, the topic "learning culture" is more or less a subtopic of TSM. To my understanding, it is not a 100% standard TSM topic which makes the TMI less informative. As it is in some way related to the topic, I have deducted 0.5 points from the question.

Question No. 18:

The TMI question contains the term "overall organization´s strategy" which makes the question less clear. I think it would be clearer to the interviewee without the term "overall" because a strategy is usually addressing the entire organization. I think it makes the TMI not better or worse. Even if all the rest of the question is well posed, for me it is kind of a sub-question in the field of TSM. In my opinion a question which would set the ratio of the TSM strategy to the HR strategy would make more sense.

Question No. 19:

The question scored 8,5 out of 10 points, because the answer scale is not appropriate to the question, therefore AS No. 9 is answered with "no". During the interviews I felt that interviewees often did not understand the purpose behind the question but when they read the answer index, they answered the question immediately. The question asks for risks of TSM measurement & presentation, but the answers are about the risk of a reoccupied successor position. Because the interviewees focused on the answer scale this makes the question still answerable.

Question No. 20:

This TMI question and answer scale fulfilled the requirements for a good scale question. But the topic of the question is not a standard in TSM. It is more a general HR topic, so it is kind of too detailed for TSM and is more or less a sub-question. From a general perspective, any question that is not related to the topic will flatten the results of a questionnaire. In this case it has to be put into perspective, because it is "only" a subtopic of TSM. As we have learned in theory, TSM is not as clearly/uniformly formulated, so it does not make the TMI results less meaningful.

Question No. 21:

Again, this TMI question about "Expert Career" has been deducted in AS question No. 1. An "Expert Career" is kind of a subtopic in TSM and does not play such a big role. With this question it has to be put into perspective that it is not about a main topic of TSM but a subtopic, therefore the generalizability of the TMI is still given.

Question No. 23:

The last quantitative question of the TMI “fails” at the AS No. 9. The posed TMI question could be answered with “yes” or “no” instead of the provided choices from the answer scale. As mentioned before, the keywords “Talent/Successor” help for the comprehensibility and the answerability of this TMI question, because they are mentioned in the TMI question and the answer scale. My suggestion would be to change the question to: "How is the common understanding of the term Talent/Successor in your organization define?”

Question No. 24:

The word “quality” of a Talent/Successor identification in the TMI question is not generalizable across all companies. Here, for instance, the term “describe” instead of “quality” would suit better in the question. The question could be posed like this “How would you describe the identifying process for Talents/ Successors in your organization?”. This would make the TMI question generalizable and the index response options would fit to the question better.

Question No. 25:

This TMI question about “Performance Management” has been deducted in AS question No. 1, because “Performance Management” is more of a subtopic in TSM and does not play such a big role. As mentioned above, for this question it has to be put into perspective that it is not a main topic of TSM but a subtopic, so the generalizability of the TMI is still given.

Question No. 26:

The last quantitative question of the TMI “fails” at the AS No. 9. The posed TMI question could be answered with “yes” or “no” instead of the provided choices from the answer scale. As mentioned before, the keywords “strategically competences” help for the comprehensibility and the answerability of this TMI question, because they are mentioned in the TMI question and the answer scale. My suggestion would be to change the question to: "How does your organization define the importance of strategically important competencies?”

The remaining questions (question No. 6, 7, 11, 12, 13, 14, 22) scored 10 out of 10 points so there is no need for a discussion because all requirements of the AS are fulfilled. The questions are necessary, they are understandable and generalizable, are not closed questions, have no negotiation, no adverbs of time or universal frequencies and fit to the provided answer scale.

To conclude my first research question "What is an appropriate method to evaluate the status quo of TSM in different organizations?" Yes, because of the mentioned arguments the method is right in use and appropriate for the status quo of TSM in different organizations.

5.2 DISCUSSION REGARDING THE RESEARCH QUESTION TWO

- Is there a TMI question to find out if the TSM is intertwined with the strategy (business goals and objectives) of the organization? → Yes
- Has the TMI a part to learn about the identification of a key position? → Yes
- Does the TMI have a question to identify whether key positions exist outside of management positions? → No
- Is there a question to determine if the company has a talent pool solution? → Yes
- Is there a question about the HR architecture (programs, etc.) of the organization? → Yes

The reasoning of the five arguments will be debated in the following paragraphs.

As can be seen from the results, the TMI questions fulfil almost all the requirements posed by the AS to check whether the TMI can evaluate the status quo of the relevant topics of TSM in organizations. The AS question about whether there are key positions outside of management positions are identified is answered with "no", because this is not asked in the TMI. It would be interesting to pose and to evaluate but it is not a priority question, so therefore the results of the AS question two are satisfactory. The TMI is based on Collings and Mellahi´s (2009) understanding about TSM. In my opinion, the TMI asked the relevant questions and sub questions about the three main components of strategic TM. Identifying pivotal talent positions, developing a talent pool and creating a differentiated HR architecture are illustrated in different types of questions. Therefore, the status quo of TM in different organizations is well assessed.

As a last question I want to pose "Which topics need to be added in the future to follow up with the trend / to be up to date with TSM?"

Nowadays workplaces and work in general are becoming more and more dynamic and complex. This is described in the artificial word dynaxity. The core topic according to the status quo of the scientific research in TSM is and will probably remain similar. New trends like New work, digitalization, sustainability, etc. Because of this more dynamic world I would recommend sending out a TMI 3.0 questionnaire containing only the quantitative questions to the collected mail addresses of the TMI 2.0 participants with a cover letter. To lower the barrier and to reduce the time needed to participate. By doing this it has to be considered that the collection method differs to the previous collected TMI 1.0 and 2.0 results and therefore the results from the suggested TMI 3.0 might be not fully comparable with the prior results. Nevertheless, the suggested TMI 3.0 collection would be an efficient method to gain actual data abut the maturity of TSM in different organizations.

To summarize the discussion chapter. The results indicate that the research object named TMI is an appropriate method to evaluate the status quo of TSM in different organizations. Because the questionnaire is a simple tool to evaluate a topic and has more advantages than other possible tools. The TSM contains the status quo topics of TSM. Therefore, the TMI fulfils both research questions. This has the positive implication, that the TMI (especially the quantitative questions) can be used as a tool to measure the maturity of strategic TM in an organization. This thesis has a limitation because not every question of the survey is evaluated in detail. The quantitative questions are only a mosaic part of the TMI. Another contradiction is to mention that I was part of the TMAG TMI crew for a short period of time. This was necessary to get access to the data and experience the conduction of an interview but might potentially lead to biases because I had the inside (nutshell) experience.

Further research could be done about the qualitative (non-index) questions and the interpretation of the results of the TMI. Also, the perspective from a key position (talent) or non-key position ("non-talent") about the TMI could be added as a research aspect similar to 360-degree feedback.

6 Conclusion

The research object (TMI) is a practical oriented survey on strategic TSM, which is used to find out about the status quo/maturity of TSM in various organizations. In this thesis, an AS has been developed to evaluate the validity/reliability and objectivity of the TMI. This tool can also be used for every questionnaire, especially for quantitative questions.

The research aims to evaluate the method used by the research object and whether this is appropriate to assess the status of TSM in various organizations or not. Furthermore, the thesis wants to give answers to what topics of TSM need to be evaluated in order to find out about the maturity of TSM in organizations.

The research presents a theoretical discourse of the ambiguous theories for ET and TSM. This is followed by the discussion of the evaluation methods (questionnaire, observation and experiment) in ET from different perspectives with their advantages and disadvantages. Both theories are combined in an AS, which is used to evaluate the practical TMI.

This Assessment Scheme contributes that:

- The method of the TMI (questionnaire) is an appropriate method to find out about the status quo of TSM because a survey is practical for the topic compared to the approaches experiment or observation.
- According to the AS the quantitative questions (26 items) are correctly posed and scored in the AS with 94,2% out of 100%.
- Based on Collings and Mellahi (2009) the theory of TM is relevant for identifying key positions, developing a talent pool and creating a differentiated HR architecture. These relevant core topics about strategic TSM are taken into account in the TMI, which makes the TMI to a complete questionnaire with all relevant TSM topics.

The TMI adds great value and awareness to the field of TSM and collects data that provides feedback and reflection for organizations. There are many opportunities for future research aspects out of the TMI and it remains an interesting and up to date topic even in changing times. As this quote sums it up: "Talent management is a journey, not a destination." (Graf et al., 2010, p. 20)

7 REFERENCES

Alkin, M., & Christie, C. (2013). An evaluation theory tree. *Evaluation Roots: A Wider Perspective of Theorists' Views and Influences*.

Atteslander, P., & Cromm, J. (2010). *Methoden der empirischen Sozialforschung* (13., neu bearb. und erw. Aufl.). *ESV basics*. Erich Schmidt.

Beller, S. (2008). *Empirisch forschen lernen: Konzepte, Methoden, Fallbeispiele, Tipps* [Online-ausg.]. *Psychologie Lehrtexte*. Huber.

Beywl, W. (1988). *Zur Weiterentwicklung der Evaluationsmethodologie: Grundlegung, Konzeption und Anwendung eines Modells der responsiven Evaluation*. *Europäische Hochschulschriften. Reihe XXII, Soziologie Publications universitaires européennes. Série XXII, Sociologie: vol. 174*. Peter Lang GmbH.

Bolander, P., Asplund, K., & Werr, A [Andreas.] (2014). Talent Management in a Collectivistic and Egalitarian Context – The Swedish Case, *2*.

Bolander, P., Werr, A [Andreas], & Asplund, K. (2017). The practice of talent management: a framework and typology. *Personnel Review*, *46*(8), 1523–1551. https://doi.org/10.1108/PR-02-2016-0037

Bortz, & Döring. (2002). *Forschungsmethoden und Evaluation: Für Human- und Sozialwissenschaftler ; mit 70 Tabellen* (3., überarb. Aufl., Nachdr). *Springer-Lehrbuch*. Springer Berlin Heidelberg.

Boudreau, J. W., & Ramstad, P. M. (2005). Talentship, talent segmentation, and sustainability: A new HR decision science paradigm for a new strategy definition. *Human Resource Management*, *44*(2), 129–136. https://doi.org/10.1002/hrm.20054

Boxall, P., & Purcell, J. (2000). Strategic human resource management: where have we come from and where should we be going? *International Journal of Management Reviews*, *2*(2), 183–203. https://doi.org/10.1111/1468-2370.00037

Cappeli, P. (2009). A Supply Chain Approach to Workforce Planning. *Organizational Dynamics*, *38*(1), 8–15. https://doi.org/10.1016/j.orgdyn.2008.10.004

Chandler, A. D. (1962). *Strategy and structure: Chapters in the history of the American industrial enterprise*. Beard Book.

Collings, D. G., & Mellahi, K. (2009). Strategic talent management: A review and research agenda. *Human Resource Management Review*, *19*(4), 304–313. https://doi.org/10.1016/j.hrmr.2009.04.001

Collings, D. G., & Mellahi, K. (2013). Commentary on: "Talent—innate or acquired? Theoretical considerations and their implications for talent management". *Human*

Resource Management Review, *23*(4), 322–325. https://doi.org/10.1016/j.hrmr.2013.08.003

Collings, D. G., Mellahi, K., & Cascio, W. F. (2017). *The Oxford handbook of talent management* (First edition). *Oxford handbooks*. Oxford University Press.

Collings, D. G., Scullion, H., & Caligiuri, P. (Eds.). (2018). *Global HRM*. *Global talent management* (Second edition / edited by David G. Collings, Hugh Scullion, Paula Caligiuri). Routledge.

Dey, I. (2005). *Qualitative data analysis: A user-friendly guide for social scientists*. Taylor & Francis e-Library.

Döring, N., Bortz, J., Pöschl, S., Werner, C. S., Schermelleh-Engel, K., Gerhard, C., & Gäde, J. C. (2015). *Forschungsmethoden und Evaluation in den Sozial- und Humanwissenschaften* (Fifth edition). *Springer-Lehrbuch*. Springer.

Fabritius, F., & Hagemann, H. W. (2017). *The leading brain: Powerful science-based strategies for achieving peak performance* (First trade paperback edition). TarcherPerigee, an imprint of Penguin Random House LLC.

Flick, U. (2006). *Qualitative Evaluationsforschung: Konzepte, Methoden, Umsetzung*. *Rororo: Vol. 55674*. Rowohlt-Taschenbuch-Verlag.

Fowler, F. J. (1992). How unclear terms affect survey data. *Public Opinion Quarterly*, *56*(2), 218–231. https://doi.org/10.1086/269312

Gallardo-Gallardo, E. (2018). The Meaning of Talent in the World of Work. In D. G. Collings, H. Scullion, & P. Caligiuri (Eds.), *Global HRM. Global talent management* (pp. 33–56). Routledge.

Gallardo-Gallardo, E., Dries, N., & González-Cruz, T. F. (2013). What is the meaning of 'talent' in the world of work? *Human Resource Management Review*, *23*(4), 290–300. https://doi.org/10.1016/j.hrmr.2013.05.002

Gallardo-Gallardo, E., Nijs, S., Dries, N., & Gallo, P. (2015). Towards an understanding of talent management as a phenomenon-driven field using bibliometric and content analysis. *Human Resource Management Review*, *25*(3), 264–279. https://doi.org/10.1016/j.hrmr.2015.04.003

Gallardo-Gallardo, E., Thunnissen, M., & Scullion, H. (2020). Talent management: context matters. *The International Journal of Human Resource Management*, *31*(4), 457–473. https://doi.org/10.1080/09585192.2019.1642645

Gliner, J. A., Morgan, G. A., & Leech, N. L. (2017). *Research methods in applied settings: An integrated approach to design and analysis* (Third edition). Routledge Taylor & Francis Group.

Graf, G., Laske, S., & Tschofen, D. (2010). Konzeptionelle Überlegungen zum strategischen Talentmanagement: Talentmanagement is a journey, not a destination, 1–28.

Hengstschläger, M. (2012). *Die Durchschnittsfalle: Gene - Talente - Chancen*. Ecowin.

Jayaraman, S., Talib, P., & Khan, A. F. (2018). Integrated Talent Management Scale: Construction and Initial Validation. *SAGE Open*, *8*(3), 215824401878096. https://doi.org/10.1177/2158244018780965

Kallus, K. W. (2010). *Erstellung von Fragebogen*. *UTB: Vol. 3277*. Ulmer.

Konrad, K. (2007). *Mündliche und schriftliche Befragung: Ein Lehrbuch* ((5., überarb. Aufl.)). *Forschung, Statistik & Methoden: Bd. 4*. Empirische Pädagogik e.V.

Lee, B. (2000). Theories of Evaluation. In R. Stockmann (Ed.), *Sozialwissenschaftliche Evaluationsforschung: Vol. 1. Evaluationsforschung: Grundlagen und ausgewählte Forschungsfelder* (pp. 127–164). VS Verlag für Sozialwissenschaften; Imprint.

Leedy, P. D., & Ormrod, J. E. (2016). *Practical research: Planning and design* (Eleventh edition). Pearson.

Lepak, D. P., & Snell, S. A. (2002). Examining the Human Resource Architecture: The Relationships Among Human Capital, Employment, and Human Resource Configurations. *Journal of Management*, *28*(4), 517–543. https://doi.org/10.1177/014920630202800403

Lewis, R. E., & Heckman, R. J. (2006). Talent management: A critical review. *Human Resource Management Review*, *16*(2), 139–154. https://doi.org/10.1016/j.hrmr.2006.03.001

Lüdders, L. (2016). *Fragebogen- und Leitfadenkonstruktion: Ein Handbuch für Studium und Berufspraxis* (1. Auflage). *Methodenbuch*. Apollon University Press.

Mackensen, L. (2013). *Ursprung der Wörter: Etymologisches Wörterbuch der deutschen Sprache*. Bassermann.

Mahajan, A. (2019a). Relationship of Talent Management with Organizational Culture: A Discussion Paper.

Mahajan, A. (2019b). Talent Management – Reviewing Philosophies, Approaches & Challenges.

Mark, M. M., Greene, J. C., & Shaw, I. (2013). The Evaluation of Policies, Programs, and Practices. In I. Shaw, J. C. Greene, & M. M. Mark (Eds.), *Handbook of evaluation: Policies, programs and practices / edited by Ian F. Shaw, Jennifer C. Greene, Melvin M. Mark* (pp. 1–30). SAGE.

McDonnell, A., Hickey, C., & Gunnigle, P. (2011). Global talent management: exploring talent identification in the multinational enterprise. *European J. Of International Management*, *5*(2), Article 38816, 174. https://doi.org/10.1504/EJIM.2011.038816

Mertens, D. M. (2018). Mixed Methods Design in Evaluation. Advance online publication. https://doi.org/10.4135/9781506330631

Mertens, D. M. (2020). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods / Donna M. Mertens, Gallaudet University* (5 edition). SAGE.

Mey, & Mruck. (2020). *Handbuch Qualitative Forschung in der Psychologie: Band 2: Designs und Verfahren* (2. Auflage 2020). Springer Fachmedien Wiesbaden GmbH; Springer.

Meyers, M., van Woerkom, M., & Dries, N. (2013). Talent — Innate or acquired? Theoretical considerations and their implications for talent management. *Human Resource Management Review*, *23*(4), 305–321. https://doi.org/10.1016/j.hrmr.2013.05.003

Meyers, M., van Woerkom, M., Paauwe, J., & Dries, N. (2020). HR managers' talent philosophies: prevalence and relationships with perceived talent management practices. *The International Journal of Human Resource Management*, *31*(4), 562–588. https://doi.org/10.1080/09585192.2019.1579747

Michaels, E., Handfield-Jones, H., & Axelrod, B. (2001). *The war for talent*. Harvard Business School Press.

Mummendey, H. D., & Grau, I. (2008). *Die Fragebogen-Methode* (5., überarb. und erw. Aufl.). Hogrefe.

Nagler, S., & Löffler, G. (2017). *Strategisches Talentmanagement: Die besten Mitarbeiter finden, fördern und binden* (1. Auflage). Beltz.

Nijs, S., Gallardo-Gallardo, E., Dries, N., & Sels, L. (2014). A multidisciplinary review into the definition, operationalization, and measurement of talent. *Journal of World Business*, *49*(2), 180–191. https://doi.org/10.1016/j.jwb.2013.11.002

Pfeffer, J. (1994). *Competitive advantage through people: Unleashing the power of the work force: Unlashing th power of the workforce.* Harvard Business School Press. https://scholar.google.com/citations?user=vupqd7saaaaj&hl=de&oi=sra

Prof. Dr. Laske, S. (2021, June 4). Interview by A.-K. Nowottnick.

Raithel, J. (2008). *Quantitative Forschung: Ein Praxiskurs* (2., durchges. Aufl.). *Lehrbuch*. VS, Verl. für Sozialwiss.

Schirmer, D. (2009). *Empirische Methoden der Sozialforschung: Grundlagen und Techniken*. *UTB Soziologie: Vol. 3175*. W. Fink.

Schnell, R. (2019). *Survey-Interviews*. Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-531-19901-6

Schnell, R., Hill, P. B., & Esser, E. (2018). *Methoden der empirischen Sozialforschung* (11., überarbeitete Auflage). De Gruyter Oldenbourg.

Scholl, A. (2018). *Die Befragung* (4., bearbeitete Auflage). *UTB: 2413. Sozialwissenschaften, Wirtschaftswissenschaften*. UVK Verlagsgesellschaft mbH; UVK/Lucius.

Schritt, S. (2011). Eine Goldfischmentalität völlig fehl am Platz, *2/11*, 3. https://www.yumpu.com/de/document/read/35227031/talent-management-2011-tmagch

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2001). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton Mifflin.

Shaw, I., Greene, J. C., & Mark, M. M. (Eds.). (2013). *Handbook of evaluation: Policies, programs and practices / edited by Ian F. Shaw, Jennifer C. Greene, Melvin M. Mark*. SAGE.

Stahl, G. K., Bjorkman, I., Farndale, E., Morris, S. S., Paawe, J., Stiles, P., Trevor, J., & Wright, P. (2016). Six principles of effective global talent management. *IEEE Engineering Management Review*, *44*(3), 112–119. https://doi.org/10.1109/EMR.2016.7559058

Stockmann. (2000). *Evaluationsforschung*. VS Verlag für Sozialwissenschaften.

Swailes, S. (2013). The ethics of talent management. *Business Ethics: A European Review*, *22*(1), 32–46. https://doi.org/10.1111/beer.12007

Swailes, S., & Blackburn, M. (2016). Employee reactions to talent pool membership. *Employee Relations*, *38*(1), 3–31. https://doi.org/10.1108/ER-02-2015-0030

Tansley, C. (2011). *What do we mean by the term "talent" in talent management?* (Vol. 43). https://doi.org/10.1108/00197851111145853

Thunnissen, M., Boselie, P., & Fruytier, B. (2013). A review of talent management: 'infancy or adolescence?'. *The International Journal of Human Resource Management*, *24*(9), 1744–1761. https://doi.org/10.1080/09585192.2013.777543

TMAG (2013). Auf Schatzsuche. Talente in KMUs.: Wie man mit dem Problem knapper Fachkräfte intelligent umgehen kann., 2.

TMAG (2021a). Babyboomer ade - Was bleibt? Und wer? (Langversion), 3.

TMAG (2021b). Fact Sheet TMI® 2.0-Studie, 2021, 5.

TMAG. (2022a). *Talent Management Index®*. https://www.tmag.ch/en/talent-management/talent-management-indexsupsup

TMAG. (2022b, March 7). *Talent Management Study - tmag.ch*. https://www.tmag.ch/en/know-how/talent-management-study

Werthern, A. von. (2020). *Theoriebasierte Evaluation: Entwicklung und Anwendung eines Verfahrensmodells zur Programmtheoriekonstruktion*. *Research (Wiesbaden, Germany)*. Springer VS, Springer Fachmedien Wiesbaden.

Wottawa, H., & Thierau, H. (2003). *Lehrbuch Evaluation* (3., korrigierte Aufl.). *Aus dem Programm Huber: Psychologie-Lehrbuch*. Bern [u.a.]: Huber. https://bibsearch.uibk.ac.at/AC03892579

APPENDIX

Interview Guideline

Date: 04.06.2021 at 9 am

Duration: 1 hour 40 minutes

Interviewer: Ann-Kathrin Nowottnick (AN)

Interviewee: Prof. Dr. Stephan Laske (SL)

Check list/To Do before interview: Introduction (time, agreement of recording, technique check)

Introduction/Research interest:

I am writing my master thesis about the topic Talent and Succession management. In the first part of my study I will look into the state of the art of Talent and Succession management in the literature and after that I will present some methods to measure the quality of Talent and Succession management. In my empirical part I will conduct a critical method analysis about the Talent Management Index (TMI) a survey which exist round about 10 years. With the following interview I have the possibility to look behind the curtains how the survey was designed, developed etc. I will talk little in the interview and will not often interrupt you. Some yes/no and data questions are needed before we go in a narrative talk. I will take some notes, but also, I want to record the session. Is that, OK?

AN: The survey exist since round about 10 years…When you think back….Can you tell me some information's about the beginning. How did you come up with the idea of the survey? Who are the founders of the survey? And how long did it take to develop? What was your part in the team? Why did you decide to do that survey?

SL:

AN: What is/was the aim of the survey?

SL:

AN: How and why did you decide to choose the method of qualitative/quantitative questions?

SL:

AN: Now we are coming to the validity check of the survey…How did you integrate that in the survey for the interviewees?

SL:

AN: As I know there is a second round of the TMI? When did you decide to do it and why? How/how often do you reflect about the actuality of the survey?

SL:

Reflexive Questions:

AN: When you look back what was most interesting? (designing, interviewing - can be in every part)

SL:

AN: How did you learn in the group?

SL:

AN: What do you think about the future of the survey? Will there be an end? Will there be a third round?

SL:

Following up Questions:

AN: Do you want to add something?

SL:

After interview notes:

Anomalies during interview:

Confidential comments:

Other remarks:

THANK YOU