

TALENT MANAGEMENT IN HUNGARY – AN EMPIRICAL STUDY AND SUGGESTION FOR A PROCESS-BASED APPROACH

TEHETSÉGMENEDZSMENT MAGYARORSZÁGON – EGY EMPIRIKUS TANULMÁNY ÉS EGY FOLYAMATALAPÚ MEGKÖZELÍTÉS JAVASLATA

This research aimed to examine the status quo of talent management (TM) in Hungary through an online questionnaire. According to responding companies (n=75), talented employees are interpreted fully/partially by some competencies. The need for talent segmentation seemed to be significant – mainly concentrating on employees with critical skills, graduate/Gen Z talents, high potentials, managerial talents, and trainee talents. Related to the TM, the respondents' approaches varied, but four processes typically appeared as components of TM practices – attraction, selection, development, and retention. All of them turned out to be very important, but the respondents experienced difficulties related to each process. Based on the findings, the implementation of a process-based TM model has been proposed. The model suggests interpreting so-called talent potentials, who participate in the entire TM process, along with Spencer and Spencer's (1993) competency clusters, through which they become the members of particular talent segments.

Keywords: talent management, talent segmentation, human resource management (HRM), competency, questionnaire

A kutatás célja a tehetségmenedzsment (TM) magyarországi állapotának vizsgálata volt egy online kérdőíves felmérés révén. A válaszadó vállalatok (n=75) a tehetséges munkatársakat teljes mértékben/részben bizonyos kompetenciák mentén értelmezik. A válaszok alapján a tehetségszegmentálás iránti igény jelentősnek bizonyult – főként a kritikus képességekkel rendelkező munkatársakra, a diplomás/Z-generációs tehetségekre, a magas potenciállal rendelkező tehetségekre, vezetői tehetségekre és a gyakornok tehetségekre koncentrálva. A TM-hez kapcsolódóan a válaszadók megközelítései változatosak voltak, de a TM-gyakorlatok részeként általában négy folyamat jelent meg: vonzás, kiválasztás, fejlesztés és megtartás. Mindegyik nagyon fontosnak bizonyult, de a válaszadók nehézségeket tapasztaltak az egyes folyamatokkal kapcsolatban. Az eredmények alapján egy folyamatalapú TM-modell használata javasolt. A modell az úgynevezett tehetségpotenciálok értelmezését Spencer és Spencer (1993) kompetenciaklaszterei mentén ajánlja. Ők részt vesznek a teljes TM-folyamatban, amely révén bizonyos tehetségszegmensek tagjaivá válnak.

Kulcsszavak: tehetségmenedzsment, tehetségszegmentáció, emberierőforrás-menedzsment (EEM), kompetencia, kérdőíves felmérés

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The term talent has evolved since ancient times. The Greek “talanton” (τάλαντον [talent]) originally meant “balance, weight, sum of money” (Hoad, 1996). Later on, talent became an extremely valuable coin (Howatson, 2011); thus, only a few people could possess talents

– exclusively rich people (Gallardo-Gallardo et al., 2013). Since then, many have dealt with talents generally and in the world of work (e.g., Dries, 2013; Meyers et al., 2013). In the field of human resource management (HRM), it can be considered a turning point when the so-called

'war for talent' concept was published by McKinsey & Co. (Chambers et al., 1998; Michaels et al., 2001). In recent decades, talent management (TM) has garnered increasing attention and significance due to economic, demographic, environmental, and organizational changes (Hancock & Schaninger, 2020; Hatum, 2010; Poór, 2016; PwC, 2020; Stahl et al., 2012; Strack et al., 2018; Szabó, 2011; Wallenstein et al., 2019). Nowadays, talented employees are recognized as playing an important role in a company's success (Meyers, 2019; Tóthné Téglás, 2020), and according to some, acquiring and retaining talents are matters of survival for any organizations (Karoliny & Poór, 2019). However, managing talents is a significant challenge both globally (Deloitte Magyarország, 2017; Ruan et al., 2017) and in Hungary specifically (HRPortal.hu, 2020; Poór, Juhász et al., 2018; PwC Magyarország, 2013). According to a recent study, the attraction and selection of talented employees are the biggest HRM challenges currently in Hungary (Kincentric Team in Hungary, 2018). With respect to HRM issues, certain characteristics of the Hungarian labor market should be taken into consideration. First of all, the demographic trends – the Hungarian population has been naturally declining year by year since 1980, and it is aging (KSH, 2021f, 2021g). Though the economically active population has been increasing in roughly the last two decades, its number is still far below the late 1970s (KSH, 2021a). At the same time, not only by age group but also by highest educational qualification can different changes in the number of employed persons be observed in each year – they are also decreasing (KSH, 2021b, 2021c). Similarly, the number of unemployed persons varies by age group and by highest educational qualification per year (KSH, 2021d, 2021e). It has to be noted that besides unemployment, labor shortages, and talent shortages also characterize the Hungarian labor market in certain areas – e.g., in IT or health care sectors (Balogh & Karoliny, 2018; Héder, 2017; Szabó, 2011; Tóthné Téglás, 2020). Due to significant political and economic changes in Hungary, the 1990s brought huge transformation and development of the labor market (Tikhonova et al., 2018). According to some opinions, due to its regulations and HR practices, the Hungarian labor market can already be acknowledged as one of the most advanced ones in Central and Eastern Europe (Poór, Fehér et al., 2018). For example, it includes such state-of-the-art and highly recognized TM practices as MOL Group TM programs (Poór, Fehér et al., 2018).

The primary purpose of this paper is to contribute to the advancement of the existing TM knowledge by examining and analyzing the status quo of TM in Hungary. Moreover, the presentation of the results of the empirical study about TM in Hungarian companies might also help HRM practitioners to better operationalize TM and related efforts. The research presented in this article has three initial research questions (RQs). In order to answer these RQs, an online survey has been conducted, the responses to which have also been analyzed through relevant descriptive and inferential statistical methods.

RQ1: How is talent (a talented employee) viewed in Hungarian corporations? What are the similarities in the conceptualizations?

RQ2: Is there a need for differentiating more types of talent (segmenting)? If yes, what talent segments occur?

RQ3: In what ways are Hungarian companies concerned with TM? What characterizes their operation of TM? What are the common elements in Hungarian TM practices?

The article is structured as follows. First, a concise literature review presents the relevant talent tensions and TM approaches. Then, the methodology of data collection and information about the analyzed data take place. The following section is dedicated to the results of the analyses. The key findings and results are followed by practical implications, limitations, and future research questions.

Literature Review

Despite the growing interest in TM, one may still meet considerable uncertainties as different approaches and several practices of TM can be found. Likewise, opinions about talent definitions differ significantly too (Gallardo-Gallardo & Thunnissen, 2016; Thunnissen & Gallardo-Gallardo, 2019).

Viewpoints About Talents in the World of Work

Nowadays, regarding the interpretation of talent in the world of work, a wide variety of viewpoints and perspectives are presented in the HRM-related literature, which seems to agree on the scarcity of a universally accepted conceptualization of talent in scientific TM-themed works (Dries, 2013; Gallardo-Gallardo et al., 2013; Jayaraman et al., 2018; Savanevicienė & Vilciauskaitė, 2017; Stahl et al., 2012; Thunnissen & Van Arensbergen, 2015). Hereinafter, the key tensions of talented employees will be presented along with the fundamental sources.

The exclusive-inclusive and the subject-object talent tensions appear most frequently in the literature – the first one concerns whether some or all employees can be considered as talents, while the second one is about the interpretation of talent as people or as certain characteristics (Dries, 2013; Gallardo-Gallardo et al., 2013). Dries (2013) pointed out further perspectives on talent, such as innate-developable (focusing on how much talent can be developed), output-input (concerning the importance of efforts and results), and transferable-context dependent (highlighting dependence on the environment) tensions. Related to the two aforementioned common talent approaches, Gallardo-Gallardo et al. (2013) additionally distinguished talent as natural ability, as mastery, as commitment, and as fit subapproaches within the object approach, as well as high performers and high potentials subapproaches within the exclusive approach. In addition to addressing the exclusive-inclusive and innate-developable tensions, Meyers et al. (2013) presented five principal approaches to talent – talent as giftedness, as individu-

al strength, as (meta-)competencies, as high potential, and as high performance. Similarly, in Meyers and van Woerkom's (2014) work, the exclusive-inclusive and innate-developable perspectives appeared; furthermore, four talent philosophies were introduced by pairing them. These are the exclusive/stable, the exclusive/developable, the inclusive/stable, and the inclusive/developable philosophies. In their later studies, Urbancova and Vnouckova (2015) and Meyers et al. (2019) examined the prevalence of these four philosophies and found diversity regarding the consideration of talent in the examined companies. Thunnissen and Van Arensbergen (2015) touched briefly on the five talent tensions in line with Dries (2013) and proposed a multidimensional approach to talent applying the Differentiated Model of Giftedness and Talent (DMGT) by Gagné (2004, 2010). The authors distinguished an individual level (encompassing talents with their abilities, interpersonal characteristics, and performance) and an organizational level (including the TM system and TM actors). They highlighted that the organizational context and the actors involved in TM affected the interpretation of talent and stressed the need to contextualize talent.

TM Approaches

Regarding not only the conceptualization of talent but also TM, several opinions and streams can be found in the literature. Based on the seminal works about TM (Iles et al., 2010; Lewis & Heckman, 2006; Mellahi & Collings, 2010), four approaches emerged. In their essential article, Lewis and Heckman (2006) distinguished three streams. In the first one, TM is meant to be a set of typical HRM activities (e.g., attraction, selection, training and development, or career planning). According to the second stream, TM focuses on a selected group, developing a talent pool, and attaching paramount importance to HR planning and succession planning. In line with the third one, a comprehensive talent perspective, TM concentrates on talented employees, both exclusively and inclusively, and their performance. Collings and Mellahi (2009) cited the approaches mentioned above (excluding the inclusive side of the third one) and distinguished a fourth strategic approach in their well-known work. In this point of view, TM is about identifying key positions that are crucial to the company's comparative advantage and filling them with the members of the talent pool, who receive conscious training and development. Later, these four streams were presented by Sparrow et al. (2014, p. 36) as "1. People approach: talent management as a categorisation of people. 2. Practices approach: talent management as the presence of key HRM practices. 3. Position approach: talent management as the identification of pivotal positions 4. Strategic pools approach: talent management as internal talent pools and succession planning." In another frequently cited TM article, Iles et al. (2010) invoked the first three streams by Lewis and Heckman (2006), though they proposed the third one as concentrating on the talent flows through the organization and targeting competence development. In the wake of all these articles, the four substantial TM approaches can be summarized as follows: 1) a selection of

HRM activities relabeling HRM, 2) integrated HRM activities focusing on talent pools, 3) managing talent flows and targeted competence development, and 4) identifying positions and acknowledging strategic importance.

TM Processes and Talent Groups

Related to the operation of TM, opinions and practices are quite different about the (sub)processes that make up TM. Several viewpoints can be found; therefore, the number of TM processes executed varies. At the very least, two processes are usually distinguished – attraction and retention, as for example by Ready et al. (2008). Somewhat similarly, but supplementing the previous ones, Hatum (2010) and Oosthuizen et al. (2016) distinguished a triplet of attraction (recruitment), development, and retention. In both Stahl et al.'s (2007) and Scullion et al.'s (2010) works, a quartet of attraction, selection, development, and retention occurred. While referring to others, McDonnell (2011) already mentioned five TM processes – identification, development, appraisal, deployment, and retention. In the extreme, even more processes can be found in some sources, such as Sparrow et al. (2014) – identification of external talents, attraction, engagement and retention, identification of internal talents, management of talent flows, development, and performance management. Schiemann (2014) proposed a so-called talent life cycle – attraction, acquisition, onboarding, training, performance management, development and succession planning, retention, and recovering lost talents. Taking the common elements together, with respect to the acquisition of new talents, attraction and selection can be highlighted, while concerning the employment of existing talents, development and retention might play the key roles as four common processes in TM practices.

Furthermore, related to the implementation of TM practices, talent segmentation might be an important aspect. Besides a comprehensive talent pool, several talent groups can be at the focus of TM practices, e.g., high potentials, key experts (critical skill employees), managerial talents, or fresh graduate talents (McCracken et al., 2016; McDonnell et al., 2011; Stahl et al., 2012).

Data and Methodology

As part of our comprehensive TM research, an online questionnaire was made to record and investigate corporate TM practices in Hungary. To the best of our knowledge, such an extensive study has not been conducted among the enterprises operating in Hungary. The questionnaire was originally written in Hungarian, and for the analysis, the author of this paper translated it to English along with the answers. The survey started with a question about the interpretation of talented employees (Q1) and was concerned with implementing talent segmentation and the talent segments (Q2–3) as well. Then, three questions focused on the operation of TM – the TM approach implemented, the form of TM, and the TM processes (Q4–6). Moreover, the importance, the target reaching, and the difficulty of each TM process were studied in detail (Q7–9). Finally, statistical data regarding the characteristics of the studied

companies were also collected (Q10–13). The questionnaire consisted of open-ended questions, multiple-choice questions, and ordinal questions.

To analyze the responses, relevant descriptive and inferential statistical methods (e.g., qualitative research methods, a histogram, median, mode, nonparametric hypothesis testing, association analysis, a chi-square test for independence, a proportion test, Mood's median test, a Mann-Whitney test, and Spearman's rank correlation) were used, depending on the types of questions (Hunyadi & Vita, 2006; Malhotra, 2016).

By the end of data collection (May 2020), 75 corporations out of the nearly 600 contacted responded. The questionnaire was completed by HRM specialists or top managers of the companies that had participated in the most prominent Hungarian job fairs in recent years since these jobs fairs are considered to be one of the most common tools to attract talented employees in Hungary. Company representatives were contacted in several ways (meeting them at job fairs, via emails and/or telephone) and asked to fill in the online survey. It should be noted that not all the questions were answered by all respondents; thus, the number of answers to each question varied. The responses arrived from companies of various sizes (with less than 100 and more than 10,000 employees), operating in the service sector and industry, from all regions of Hungary. Concerning the typical responding company, it can be stated that its average statistical headcount was between 50–249 employees, its main field of activity could be classified as the service sector, its domestic operating site was in Budapest, and it did not operate as a subsidiary.

Analyses and Findings

Talent

In connection with talented employees, the participants were asked about their own definition and differentiation (segmentation).

Talent Interpretation

To the open-ended question regarding the interpretation of talent (Q1), 72 substantive answers were recorded, while three respondents did not answer. Analyzing the responses (n=72), we found it quite remarkable that all of them specified talented employees fully/partially as having certain competencies. For instance, “A talented employee invents himself in every situation, takes a proactive approach to things, and inspires others by setting an example” or “who exceeds the expected level of competence in the job, voluntarily takes on tasks, enjoys their solution and inspires others.” Examining the content of these talent interpretations, we could classify the vast majority (69) of them according to Spencer and Spencer's (1993) prominent model, except for three answers which focused on competencies but did not detail them (e.g., “outstanding skills and abilities”). Based on the original specification of Spencer and Spencer's (1993) competency dictionary with 100 competencies in six clusters, we examined the presence of all the six competency clusters in the talent

interpretations. The results of classifying the 69 detailed competency-based talent interpretations into the six competency clusters revealed that the achievement and action cluster dominated (with 62 classifications, which is 86% of all the 72 answers). The personal effectiveness (51; 71%) and cognitive clusters (49; 68%) also excelled, while the managerial and impact and influence clusters seemed to be much less critical (22; 31%, and 19; 26%, respectively). The helping and human service cluster occurred in just a few cases (8; 11%: see section RQ1 in Figure 7).

To sum up, the respondents interpreted talented employees fully/partially as having certain competencies, which could be classified according to Spencer and Spencer's (1993) competency model. The results suggest that nonmanagerial competencies are significant – the dominance of the achievement and action cluster and the importance of the personal effectiveness and cognitive clusters in the participants' talent definitions are quite understandable due to the high (performance) expectations towards talented employees in general. However, the significantly reduced importance of the managerial, the impact and influence, and the helping and human service clusters was not expected. These competencies might be of greater importance to only certain management-related talent groups (e.g., leadership talents, potential managerial talents), not for all talents. In light of the results, it may be worth further examining the interpretations according to different talent segments.

Talent Segmentation

In connection with differentiating talented employees at the companies, 68 respondents gave answers to the single-select multiple-choice question (Q2) – the majority (51; 75%) of them were in favor of talent segmentation (TS; implementing it already or reckoning it was necessary), while the minority (17; 25%) did not consider it necessary. Seven participants did not want to/could not answer regarding talent segmentation. Of the 51 respondents who were in favor of differentiating talented employees, 35 opted for segmenting several groups of talents, while according to 16, it was sufficient to establish a single, comprehensive, general group of talented employees.

Segments. Those respondents who were in favor of TS with several different segments (being distinguished or that needed to be distinguished: n=35) most often mentioned three in response to the respective question (Q3). The following five segments appeared repeatedly in the 35 responses: critical skills employees (CSEs: 28; 80%), high potentials or potential managerial talents (25; 71%), graduate/Gen Z talents (23; 66%), managerial/leadership talents (19; 54%), and trainee talents (7; 20%: see section RQ2 in Figure 7). Moreover, a comprehensive talent group, students with corporate scholarships, project talents, and other talents were mentioned once (3% each). It is worth noting that professional talent segments occurred more often in the responses than management-related talent segments. This is in line with the findings regarding the talent interpretations and competency clusters. Thus, the results showed a notable necessity for TS in Hungary, most im-

portantly focusing on CSEs, graduate/Gen Z talents, high potentials or potential managerial talents, managerial talents, and trainee talents.

Talent Management

Related to managing talented employees, the participants were asked about how they deal with TM and the approach of TM, along with certain characteristics of the operationalization of TM as well.

TM Form

Regarding how the companies deal with TM (Q4), the 73 responses to this single-select multiple-choice question varied, but the vast majority (63; 86%) seemed to deal with TM – formally or deliberately. Twenty-eight (38%) of the 73 respondents conducted a formal TM program(s), and a further seven (10%) corporations were concerned with TM (deliberately) but intended to start a formal TM program(s). Twenty-eight (38%) respondents were concerned with TM (deliberately) but did not operate any formal TM programs. Simultaneously, approximately every seventh respondent (10; 14%) did not deal with TM.

TM Form and the Talent Interpretations. Afterward, association studies were conducted to examine the connection between the form of TM and the talent interpretations, i.e., the occurrence of competency clusters from Spencer and Spencer (1993) related to the form of TM. In line with preliminary assumptions, six chi-square tests of independence were used to test whether the occurrence of the given cluster (achievement and action, helping and human service, impact and influence, managerial, cognitive, and personal effectiveness) and the form of TM (formal TM/deliberate TM/no TM) were associated. The Cramer V-square statistic was used to measure the strength of the associations.

Table 1
Results of Chi-Square Tests of Independence Between the Form of TM and the Occurrence of the Competency Clusters

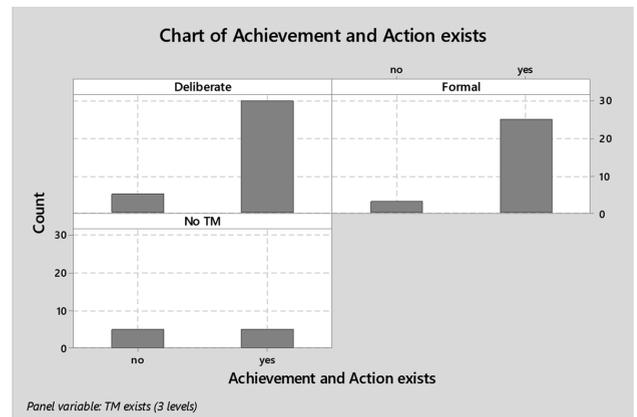
| Chi-square tests | p-value | Cramer's V-square value |
|---------------------------------------|---------|-------------------------|
| Achievement and action vs. TM form | 0.015 | 0.114 |
| Helping and human service vs. TM form | 0.767 | 0.007 |
| Impact and influence vs. TM form | 0.599 | 0.014 |
| Managerial vs. TM form | 0.214 | 0.042 |
| Cognitive vs. TM form | 0.462 | 0.021 |
| Personal effectiveness vs. TM form | 0.220 | 0.041 |

Source: Own calculation

Based on the p-values in Table 1, one associative relation was found at a significance level of 0.05. In the case of the achievement and action (AA) cluster, according to the p-value (0.015), there was an associative relation between

the AA cluster and the form of TM. (It should be noted that two cells with expected counts were less than five during the calculations.) Based on the Cramer V-square statistic (0.114), the associative relation of AA and TM form was weak. As shown in Figure 1, the AA cluster's presence was associated with the form of TM – AA is much more likely if formal or deliberate TM exists. In practical terms, in the case of formal or deliberate TM, the AA competencies' roles are significant.

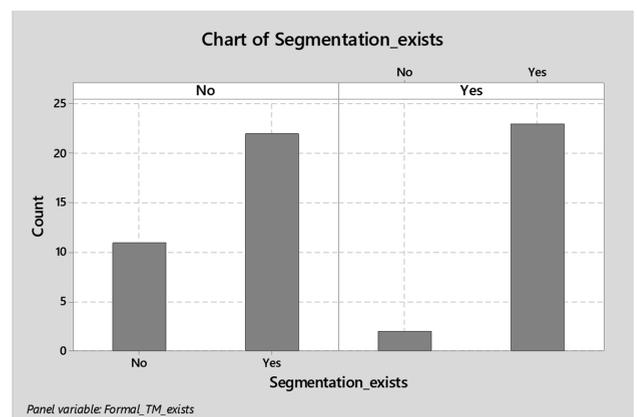
Figure 1
The Relation Between the Form of TM and the Existence of the Achievement and Action Cluster



Source: Own calculation

Beyond the AA cluster's associative relation, there were no associations revealed between any other competency clusters and the form of TM (Table 1). Thus, of the six competency clusters, only the AA cluster's occurrence seemed to be associated with the form of TM; thus, in the case of deliberate and formal TM, the AA cluster is very likely to occur.

Figure 2
The Relation Between the Existence of Formal TM and Talent Segmentation



Source: Own calculation

Existence of formal TM and TS. Focusing on the 63 participants who dealt with TM (deliberately or formally), further analysis was conducted related to talent segmenta-

tion. In the case of those respondents who dealt with TM and gave answers about TS ($n=58$), the relation between the existence of formal TM and the opinion about segmentation was examined through an association study (Figure 2). A chi-square test was conducted to assess whether the existence of formal TM and talent segmentation were associated, and the Cramer V-square statistic was used to measure the strength of the association.

At a significance level of 0.05, according to the p -value (0.022), there was an associative relation between the existence of formal TM and talent segmentation; however, the associative relation was weak based on the Cramer V-square statistic (0.091). As shown in Figure 2, TS is more likely to be present if formal TM exists. Hence, TS seemed to be associated with the existence of formal TM, and in the case of formal TM, TS is very likely.

TM Approach. The 63 participants who dealt with TM were asked to characterize their TM approach according to the influential works of Lewis and Heckman (2006), Collings and Mellahi (2009), and Iles et al. (2010). To this single-select multiple-choice question (Q5), 53 responses were recorded. In 20 respondents' (38%) opinions, TM was a set of typical HRM activities (e.g., recruitment, selection, development, career planning). Only five participants (9%) conceived TM as an integrated HRM activity focusing on a selected group, namely developing a talent pool and attaching paramount importance to HR planning and succession planning. At the same time, 17 respondents (32%) marked striving to develop a comprehensive talent approach by concentrating on the talent flows through the organization and targeted competence development. In contrast, 11 participants (21%) opted for taking a strategic approach, i.e., identifying key positions that are crucial to the company's comparative advantage and filling them with the members of the talent pool, who receive conscious training and development. Thus, it can be stated that regarding their approach to TM, the opinions varied. Some participants regarded TM as common HRM activities only; others viewed TM as a comprehensive talent approach with targeted competence development or as focusing on key positions in a strategic approach. At the same time, it can be observed that development turned out to be an element common to all approaches and responses.

TM Processes. In connection with the operationalization of TM, the 63 participants who dealt with TM were also asked about their TM processes based on the literature review (Q6). Fifty-six identified the processes that were components of their TM activity. The number of TM processes ranged from one to four; most frequently (27 times; 48%) two processes were listed. It was quite surprising that no other process was mentioned; only the following four processes were marked in the multiselect multiple-choice question with an "other" option: development (D: 44; 79%), retention (R: 40; 71%), selection (S: 28; 50%), and attraction (A: 27; 48% – see section RQ3 in Figure 7). To compare the presence of the four TM processes in the 56 responses, the proportions of the companies at which the examined process (A, S, D, and R) existed were studied. The inequalities (the differences) between

any two proportions were examined through hypothesis tests, respectively. In line with all pairs of the processes (A–S, A–D, A–R, S–D, S–R, and D–R), six proportion tests were conducted. In the null hypotheses, it was stated that there was no difference between the given two population proportions (e.g., $p[A]=p[S]$), while the alternative hypotheses were one-tailed (e.g., $p[A]<p[S]$), respectively.

Table 2
Results of Proportions Tests of Any Two TM Processes

| Proportion tests | p -value |
|----------------------------|------------|
| Attraction vs. selection | 0.425 |
| Attraction vs. development | 0.000 |
| Attraction vs. retention | 0.005 |
| Selection vs. development | 0.000 |
| Selection vs. retention | 0.009 |
| Development vs. retention | 0.809 |

Source: Own calculation

According to the p -values in Table 2, at a significance level of 0.05, in two cases (A vs. S and D vs. R), there was not sufficient evidence to reject the null hypotheses, so those proportions proved to be equal, respectively. While the other four null hypotheses were rejected according to the p -values, i.e., those proportions proved to be unequal. In light of these results, the overall ranking is $p(A)=p(S)<p(D)=p(R)$. Thus, the proportions of attraction and selection were proved to be equal and were lower than the equal proportions of development and retention.

As a result, it can be said that four processes characterize the operation of the respondents' TM typically. Development and retention processes proved to be dominant, but attraction and selection also appeared in many responses; thus, both the employment of existing talents and the acquisition of new talents seem to be important in Hungarian TM practices.

TM processes and the existence of formal TM. Moreover, related to the four TM processes, further association studies were conducted. Four chi-square tests of independence were used to test whether the given process (A, S, D, and R) and the presence of formal TM were associated. The Cramer V-square statistic was used to measure the strength of the associations (Table 3).

Table 3
Results of Chi-Square Tests of Independence Between TM Processes and the Existence of Formal TM

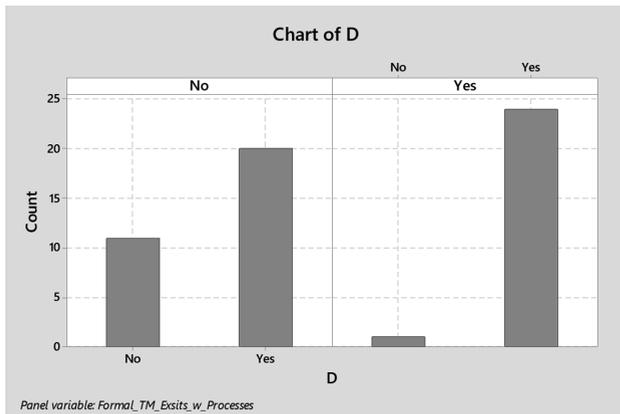
| Chi-square tests | p -value | Cramer's V-square value |
|--|------------|-------------------------|
| Attraction vs. existence of formal TM | 0.977 | 0.000 |
| Selection vs. existence of formal TM | 0.179 | 0.032 |
| Development vs. existence of formal TM | 0.004 | 0.145 |
| Retention vs. existence of formal TM | 0.610 | 0.005 |

Source: Own calculation

As shown in Table 3, in the case of the development process, at a significance level of 0.05, according to the *p*-value (0.004), there was an associative relation between D and the existence of formal TM. Based on the Cramer V-square statistic (0.145), this associative relation was weak. At the same time, there were no associations between any other TM processes and the existence of formal TM.

Figure 3

The Relation Between the Existence of Formal TM and the Development Process (D)



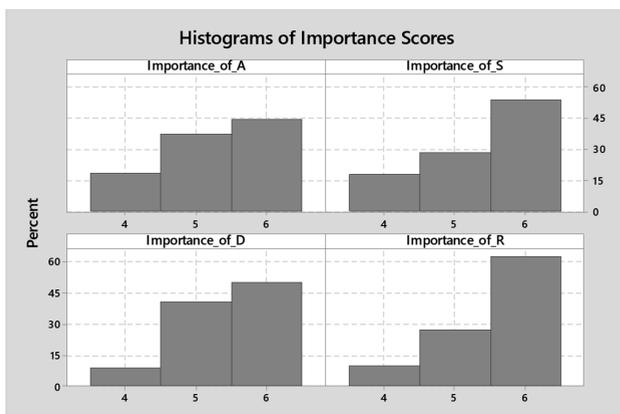
Source: Own calculation

As shown in Figure 3, the development process's presence is associated with the existence of formal TM: D is more likely if formal TM exists. Thus, of the four processes, only development seemed to be associated with the existence of formal TM; in the case of formal TM, the development process is very likely to occur.

Importance of TM Processes. The 56 participants who previously provided answers regarding TM processes were also asked about the importance of their given processes (Q7). The respondents had to characterize on a 6-point ordinal scale how important the given process was (1=not important at all to 6=very important).

Figure 4

Histograms of the Importance Scores of the Four TM Processes



Source: Own calculation

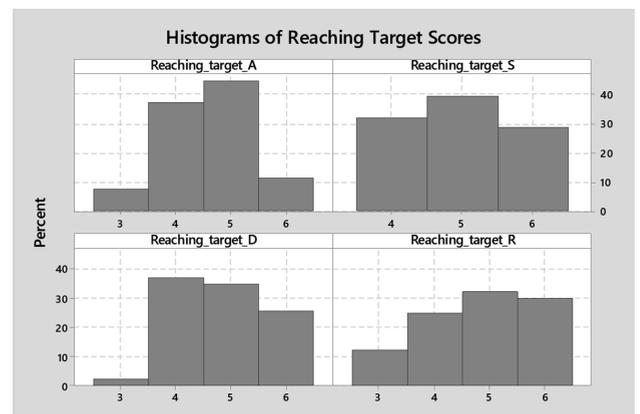
Regarding the importance of the four TM processes, somewhat similar results were obtained (Figure 4). The importance of all four processes ranged from 4=rather important to 6=very important, and the modes of importance scores of A, S, D, and R all were 6=very important.

Moreover, further examination was conducted to compare the importance scores of TM processes. The medians of importance scores of the four TM processes were tested through a Mood's median test to assess whether they were equal or not. In the null hypothesis, it was stated that there was no difference between the four medians of importance scores in the population, while the alternative hypothesis was that the subpopulations' medians were different. The results showed that the medians ranged from 5.00 to 6.00: median(Importance_A)=5.00, median(Importance_S)=5.50, median(Importance_D)=6.00, median(Importance_R)=6.00. At a significance level of 0.05, however, according to the *p*-value (0.493), there was not sufficient evidence to reject the null hypothesis, i.e., the differences between the medians of importance scores were not statistically significant in the population. Hence, no notable differences were detected among the particular TM processes' importance scores; all their own processes seemed to be equally very important.

Target Reaching of TM Processes. The 56 participants who had previously provided answers regarding TM processes were also required to characterize on a 6-point ordinal scale (1=not at all to 6=absolutely yes) whether they could reach their target regarding the given process or not (Q8). As shown in Figure 5, slightly different results were observed related to the target reaching for the four TM processes. In the case of A, D, and R, target reaching ranged from 3=rather not to 6=absolutely yes, while the target reaching of S ranged from 4=somewhat yes to 6=absolutely yes. The modes of target reaching for A, S, and R were 5=yes, while in the case of D, it was worse (4=somewhat yes).

Figure 5

Histograms of the Target Reaching for the Four TM Processes



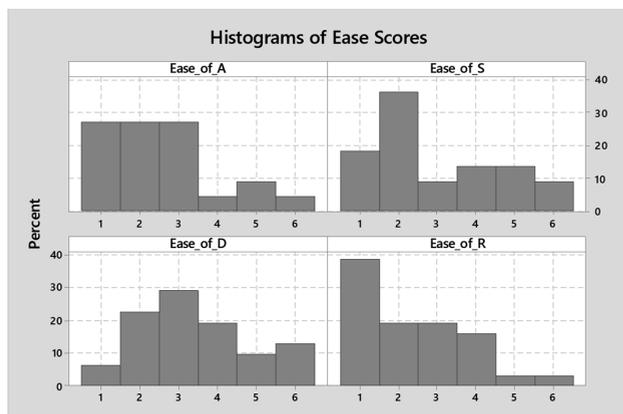
Source: Own calculation

Another analysis was also conducted to compare the target-reaching scores of the TM processes. The medians of the

target reaching for the four processes were tested through a Mood's median test to assess whether they were equal or not. In the null hypothesis, it was stated that there was no difference between the four medians of the target-reaching scores in the population, while the alternative hypothesis was that the subpopulations' medians were different. The results showed that all four processes' medians were 5.00 in the samples and that at a significance level of 0.05, according to the p -value (0.821), there was not sufficient evidence to reject the null hypothesis, i.e., the differences between the medians of the target-reaching scores were not statistically significant in the population. Based on the medians, no striking differences could be observed among the target reaching of the particular TM processes. In the case of all their processes, there seemed to be challenges in reaching the targets. It is worth noting that in the case of target reaching, slightly different and lower results were observed than before regarding the importance of the processes. Although the medians were proved to be equal, the range of the selection process was narrower (i.e., better), while the mode of development process turned out to be lower (i.e., worse) than the others (Figure 5).

Difficulty of TM Processes. In addition, the 56 participants who previously provided answers regarding TM processes had to characterize on a 6-point ordinal scale (Q9) whether the given process was causing difficulty or not (1=causes serious difficulty to 6=does not cause any difficulty at all). In connection with the difficulty of the four TM processes, quite different results were obtained. To analyze the data similarly as before, this 6-point scale of difficulty was reversed to the easiness of TM processes (1=causes serious difficulty corresponded to 1=not easy at all, and 6=does not cause any difficulty at all corresponded to 6=absolutely easy; see Figure 6). The answers seemed to be divided; all six values were marked on the 6-point scale of all four processes' easiness. The modes of ease scores ranged from 1=not easy at all to 3=rather not easy (Figure 6).

Figure 6
Histograms of the Easiness Scores of the Four TM Processes



Source: Own calculation

Furthermore, another examination was conducted to compare the ease scores of TM processes. The medians of ease

scores were analyzed through a Mood's median test to assess whether they were equal or not. In the null hypothesis, it was stated that there was no difference between the four medians of ease scores in the population, while the alternative hypothesis was that the subpopulations' medians were different. The results showed that at a significance level of 0.05, according to the p -value (0.090), there was not sufficient evidence to reject the null hypothesis, i.e., the differences between the medians of ease scores were not statistically significant in the population, although they ranged from 2.00 to 3.00: median(Ease_Score_A)=2.00, median(Ease_Score_S)=2.00, median(Ease_Score_R)=2.00, and median(Ease_Score_D)=3.00.

Based on the results, the medians of the processes' ease were proved to be equal; however, according to the modes and histograms (Figure 6), slight differences could be noted between the ease of the particular TM processes. Attraction and retention seemed to be a little bit more difficult, while development was a little bit easier when comparing the ease of TM processes to each other.

Association Studies of Importance and Target Reaching. Additionally, related to the four TM processes, importance scores and target reaching were also compared, respectively. Four Mann-Whitney tests were conducted to examine the medians of importance and target reaching of the four processes (A, S, D, and R). In the null hypotheses, it was stated that there was no difference between the given subpopulations' medians (e.g., η [Importance_A]= η [Reaching_target_A]). In contrast, the alternative hypotheses were one-tailed (e.g., η [Importance_A]> η [Reaching_target_A]), respectively, where η denotes the median.

Table 4
Results of the Mann-Whitney Tests

| Mann-Whitney tests | p -value |
|--|------------|
| Importance of A vs. reaching the target of A | 0.004 |
| Importance of S vs. reaching the target of S | 0.041 |
| Importance of D vs. reaching the target of D | 0.001 |
| Importance of R vs. reaching the target of R | 0.001 |

Source: Own calculation

The results showed that in the case of all four processes, according to the p -values in Table 4, the null hypotheses were rejected, i.e., the importance median was greater than the goal-reaching median, respectively, at a significance level of 0.05. Thus, for all four TM processes, a difference could be observed regarding the importance of the given process and how well they could reach the target concerning that process, e.g., the importance of D was higher than the level of reaching the target of D.

Spearman's Rank Correlations Related to the Ease (Difficulty) of TM Processes. Moreover, the connection of the ease scores of TM processes to the importance scores and target-reaching scores were examined further through Spearman's rank correlation coefficients, respectively (Table 5).

Table 5
Results of the Spearman's Rank Correlations

| Spearman's rank correlations | <i>p</i> -value | Spearman's rho |
|--|-----------------|----------------|
| Importance of A vs. ease of A | 0.951 | -0.014 |
| Importance of S vs. ease of S | 0.351 | 0.209 |
| Importance of D vs. ease of D | 0.811 | 0.045 |
| Importance of R vs. ease of R | 0.889 | -0.026 |
| Reaching the target of A vs. ease of A | 0.687 | -0.091 |
| Reaching the target of S vs. ease of S | 0.080 | 0.381 |
| Reaching the target of D vs. ease of D | 0.167 | 0.254 |
| Reaching the target of R vs. ease of R | 0.645 | -0.086 |

Source: Own calculation

It was quite surprising that in the case of all four processes, at a significance level of 0.05, according to the *p*-values in Table 5, there was no significant rank correlation between the TM processes' ease and importance and between the ease and target reaching, respectively. Hence, no correlations were revealed between the ease scores and importance scores of TM processes and between the ease scores and target reaching scores, respectively.

Summary

Key Findings

The central aim of this paper was to contribute to the advancement of the existing TM knowledge by examining and analyzing the status quo of TM in Hungary, which has not happened before. The main results of this study can be summarized as follows.

RQ1: Regarding the interpretation of talents and the similarities in the conceptualizations, based on the results for Q1, it could be observed that the respondents specified talented employees fully/partially as having certain competencies, with the AA competency cluster prevailing, followed by the personal effectiveness and the cognitive clusters according to Spencer and Spencer's (1993) framework. The results suggest that non-managerial competencies are significant, while other competency clusters might be of greater importance to only certain management-related talent groups (e.g., leadership talents, potential managerial talents), not for all talents.

RQ2: In connection with talent segmentation, in the participants' opinions, according to the results for Q2–3, the need for TS seemed to be significant in Hungary, mostly concentrating on the following segments: CSEs, graduate/Gen Z talents, high potentials/potential managerial talents, managerial talents, and trainee talents. It can be observed that specific professional talent segments occurred more often than some management-related talent segments.

RQ3: Related to managing talents, it could be observed that the vast majority of the respondents seemed to deal with TM, either formally or deliberately, while only less than every seventh respondent did not deal with TM according to the results for Q4.

In connection with Q4 and talent interpretations according to Spencer and Spencer's (1993) model, out of the six competency clusters, only the appearance of the AA competency cluster was proved to be associated with the existence of TM; AA is much more likely if formal or deliberate TM exists. Furthermore, talent segmentation turned out to be associated with the existence of formal TM; in the case of formal TM, TS is very likely.

Related to the TM approaches, responses varied, but development occurred as an element common to all approaches and responses according to the results of Q5.

In connection with the characteristics of the operationalization of TM, based on the results of Q6, four processes appeared to be components of the participants' TM activity typically: development, retention, selection, and attraction. The proportions of attraction and selection were proved to be equal and lower than the equal proportions of development and retention. Moreover, of the four processes, development was proved to be associated with the existence of formal TM. In the case of formal TM, the development process is very likely to occur.

Related to the TM processes, respondents also characterized (1) how important the given process was, (2) whether they could reach their target regarding the given process, and (3) whether the given process was causing difficulty. Regarding the importance of the four TM processes (Q7), somewhat similarly, high results were obtained in terms of ranges, modes, and medians, showing that each of their particular processes was very important to the respondents. However, related to the target reaching of the processes (Q8), slightly different and lower results were observed than before. The range of selection processes was narrower (namely better), while the mode of development process turned out to be lower (namely worse) than the others, but the medians were proved to be equal. In the case of all processes, there seemed to be challenges in reaching the targets. Moreover, according to the results of the Mann-Whitney tests, the levels (medians) of target reaching of the processes proved to be lower than their importance, respectively. At the same time, quite different and much worse results were obtained in connection with the difficulty of certain TM processes (Q9); thus, the responses ranged widely. The modes, which were much lower than before, showed that the four processes caused difficulties for the participants. According to the difficulty (ease) scores, slight differences could be noticed between the difficulty (ease) of the particular TM processes (attraction and retention seemed to be a little bit more difficult, while development was a little bit easier when comparing them to each other), though their medians were proved to be equal. To sum up, the TM processes turned out to be very important, but reaching the targets seemed to be more challenging (mostly in development), and the respondents experienced difficulties in each area (some-

what in attraction and retention). According to the results related to RQ3, the importance of the four processes can be observed; thus, all of them play a significant role in corporate TM practices.

In line with the statistical data (Q10–13), the typical responding company had an average statistical headcount between 50–249 employees, its main field of activity was the service sector, its domestic operating site was Budapest, and it did not operate as a subsidiary.

Results in Light of the Process-Based TM Model

Based on all the answers to RQ1–3, it can be observed that the results of this study are consistent with the process-based TM model by Daruka and Pádár (2019). That model originally adapted Gagné's (2010) process-based approach and the DMGT 2.0 framework to higher education; however, it might be applied in such business circumstances in line with the current findings (Figure 7). The model suggests interpreting so-called talent potentials along with Spencer and Spencer's (1993) competency clusters as a starting point. These talent potentials participate in the entire TM process – the quartet of attraction, selection, development, and retention, through which they become members of particular talent segments. Specific catalysts (e.g., organizational factors, such as leadership attitude, and macroenvironmental factors, such as demographic trends) might affect this process-based approach to TM.

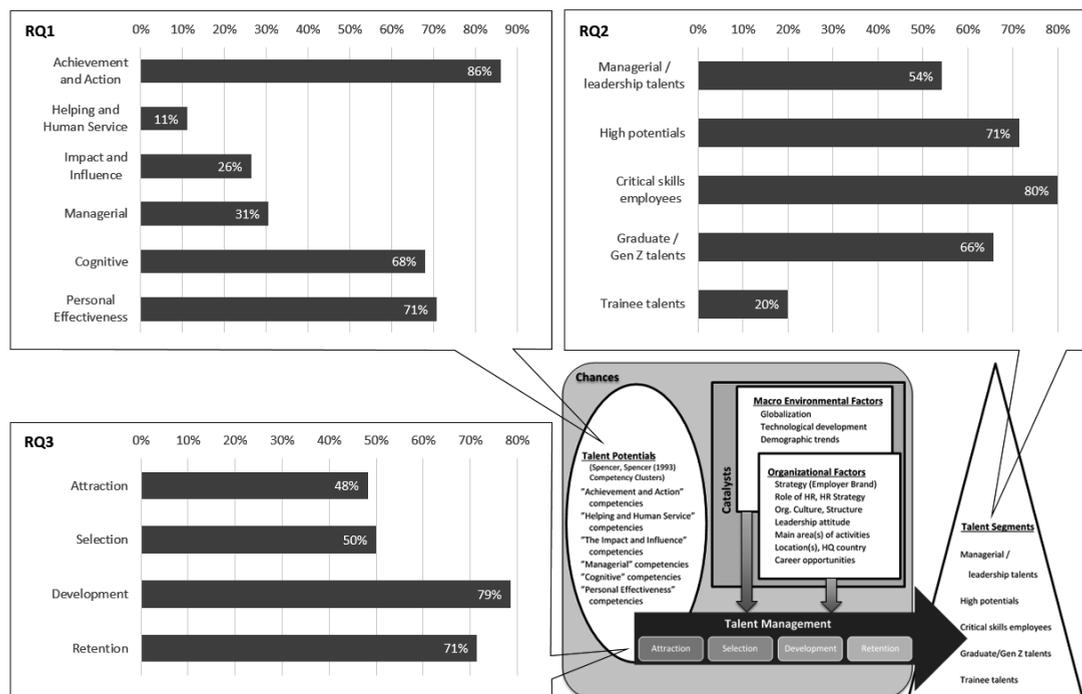
pretations, the opinions about talent segmentation, and the major features of TM and its processes in Hungary. Based on the results of this comprehensive TM research, a process-based TM model can be suggested to implement in a business context. This process-based model might help TM to operate more effectively and efficiently by differentiating talent potentials and talent segments, or it could aid in starting TM at companies.

Practical Implications

TM has received more attention recently in Hungary; however, there are several approaches and practices to follow. This paper aimed to examine and identify typical Hungarian TM practices. The results highlight the importance of competencies in talent interpretations, the need for talent segmentation, and the key TM processes – a quartet of attraction, selection, development, and retention. The proposed process-based TM model could assist in managing talented employees formally. Following this proposed model and the ever-expanding competency-based approach (Pató Gáborné Szűcs et al., 2021; Tóthné Téglás, 2020), HRM specialists might comply and/or specify relevant job descriptions and specifications more easily. Since these are interrelated with recruitment and selection, performance appraisal, and career planning, these processes can be improved as well. Moreover, they could also help organize proper development programs, which can be an essential part of TM.

Figure 7

Summary of Respective Results Related to the Process-Based TM Model by Daruka and Pádár (2019)



Source: Daruka & Pádár (2019, p. 126) extended by the author with her own results

Note: As the number of responses to each question varied, the proportion of responses has been indicated, respectively.

This article aimed to study the characteristics and analogies of Hungarian TM practices. The main contribution of this paper that it reveals the similarities of talent inter-

In practical terms, in the case of formal or deliberate TM, the AA competencies' roles are significant. Thus, the findings of this work, through revealing the peculiarities of

the current TM practices in Hungary and proposing a process-based TM model, can help to advance the field with respect to how present and future TM programs might operate and/or be improved in order to support managing talents as effectively and as efficiently as possible.

Limitations and Further Research Plans

Regarding the limitations of this article, it should be acknowledged that the sample size is a limitation; other companies might be involved as respondents in the future. Thus, the number of answers to each question might also be increased, which would allow further tests and in-depth analyses to be conducted, which were not able to be performed due to the low number of sample items for each variable. The homogeneity/heterogeneity of the sample poses a limitation, too; through a larger sample, subsets might be examined according to other variables, for example, taking into account the heterogeneity of the sample, examining what differences might be detected between homogeneous subgroups (c.f., Tóthné Téglás, 2020). As a quantitative tool, the online questionnaire could also be mentioned as a limitation; however, to further develop the study, some qualitative methods might be used as well; for example, additional in-depth interviews might reveal further important details about the TM practices in Hungary. It would also be worthwhile to carry out additional investigations from the perspective of various stakeholders, owners, managers, and most of all, and the talented employees involved inter alia. Testing the implementation of the proposed process-based TM model in the Hungarian business context also awaits future research.

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