

Strategic Talent Management as a Driver of Quality, Innovation, and Competitiveness in Industrial Enterprises

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ABSTRACT

Purpose: The aim of this paper is to analyse the role of strategic talent management as a critical factor in enhancing and maintaining organisational competitiveness.

Methodology/Approach: The methodology integrated both quantitative analyses, including descriptive statistics, Pearson's Chi-square test, Spearman's correlation coefficient, and Kruskal-Wallis ANOVA, as well as qualitative thematic analyses of open-ended responses.

Findings: The results confirm statistically significant relationships between employees' perceptions of career growth opportunities, digitalisation, and artificial intelligence utilisation, and their evaluations of talent management effectiveness.

Research Limitation/Implication: Barriers such as insufficient time and motivation were identified, emphasising the need for personalised training and flexible learning modules.

Originality/Value of paper: This paper underscoring that effective talent management, supported by technological integration and inclusive organisational strategies, significantly enhances organisational adaptability and long-term competitive advantage.

Category: Research paper

Keywords: talent management; innovation; competitiveness; digitalisation; quality

Research Areas: Strategic Quality Management

1 INTRODUCTION

In today's global environment, talent management can be regarded as a key success factor for many organisations. Given the rapidly evolving technological changes, demographic shifts in the labour market, and continuously increasing competition among companies, a strategic approach to talent management plays an extraordinarily crucial role. Numerous definitions of talent management are found in contemporary academic and professional literature; hence, we present various authors' perspectives to provide a comprehensive understanding of this concept.

Cappelli (2009) defines talent management as a process that ensures an effective balance between the supply and demand for qualified employees within an organisation. His focus includes attracting, developing, and retaining individuals possessing unique skills necessary to achieve organisational objectives. Collings and Mellahi (2009), on the other hand, conceptualise talent management as a targeted approach to identifying strategically important positions and subsequently optimising resources to attract, develop, and retain individuals who can directly contribute to a sustained competitive advantage. Lewis and Heckman (2006) perceive talent management as an integrated system linking workforce planning, talent acquisition, capability development, and performance management aimed at continuous improvement and optimal utilisation of human resources to support business strategy. Michaels, Handfield-Jones, and Axelrod (2001) describe talent management as a "war for talent," where organisations strive not only to attract but also create an environment where talented employees can find opportunities for growth and personal fulfilment, thereby enhancing the organisation's competitive position. A noteworthy perspective is offered by Scullion and Collings (2011), who interpret talent management as an internationally oriented approach focused on identifying and managing talent. This enables organisations not only to recruit the best employees but also to foster their cultural and geographical mobility, thereby improving global performance.

Synthesising these definitions, talent management can be understood as a comprehensive approach focused on identifying, acquiring, developing, and retaining talent within an organisation, integrating these processes directly with organisational strategy. Thus, talent management extends beyond merely recruiting new employees, encompassing the entire employee lifecycle within an organisation (Armstrong, 2009).

A critical aspect of talent management is its alignment with an organisation's business strategy. Schiemann (2014a) asserts that talent management must support clearly defined business objectives and be integrated into strategic decision-making. This integration requires organisations not only to focus on identifying and developing talent but also to consider how such talent will ultimately contribute to the organisation's long-term sustainability and competitiveness. Armstrong (2006) underscores the importance of employee development through training, mentoring, and other educational initiatives to ensure that organisations possess the necessary competencies and skills to adapt to changing market

conditions. These development programs should be customised to individual employee needs, providing opportunities for personal growth and career advancement. Additionally, talent management is equally essential in talent retention. According to a study by Michaels, Handfield-Jones, and Axelrod (2001), the primary challenge for many organisations is not necessarily finding talented individuals but retaining them. Organisations actively fostering a culture that promotes innovation, engagement, and employee satisfaction are significantly more likely to retain their talented workforce over extended periods.

Feedback and performance evaluation are also significant tools within the talent management process. Buckingham and Goodall (2015), in their article, emphasise the necessity of regular and high-quality feedback, which is crucial for employee development and growth. With properly established evaluation mechanisms, employees can better understand their strengths and weaknesses, as well as identify areas where they require improvement, leading to more effective personal development and optimal utilisation of their potential. In addition to talent development and retention, creating an inclusive work environment that supports diversity is equally important. Diversity and inclusion contribute significantly to the creation of creative and innovative teams, resulting in better organisational outcomes. Establishing an environment where employees feel valued regardless of their backgrounds or differences enhances their engagement and ultimately contributes to the organisation's long-term success (Roberson, 2019).

Furthermore, it is essential to acknowledge the new challenges in talent management arising from digitalisation and technological advancements. According to Deloitte (Trends, D. G. H. C. 2017), organisations must adapt their talent management strategies to incorporate new technological tools such as artificial intelligence, analytics, and automation. These technologies can substantially streamline processes like recruitment, performance evaluation, and employee training, thereby increasing the efficiency and precision of talent management. Nevertheless, it remains critical for organisations not to overlook the human factor during this era of digital transformation. According to Schwab (2024), technological advancements should be complemented by developing soft skills such as communication, empathy, and teamwork abilities. These skills remain invaluable in work environments that fundamentally rely on human interactions and collaboration.

Creating career opportunities represents another crucial factor in talent management. Employees are motivated to continue working for an organisation if they perceive clear possibilities for career growth and development. Companies that actively design career development plans and offer opportunities for enhancing qualifications experience higher rates of talent retention, thus enhancing their competitive position in the market (Dries, 2013a).

In conclusion, it is essential to emphasise that talent management constitutes an integral part of an organisation's successful strategy. From recruitment, development, and performance evaluation to employee retention, all these

processes must be interconnected and aligned with achieving the organisation's long-term objectives. Numerous studies have confirmed that companies focusing on strategic talent management attain better financial results and exhibit higher levels of innovation and customer satisfaction. This comprehensive approach to talent management enables organisations not only to survive but, more importantly, to thrive within today's dynamic environment.

In recent decades, talent management has emerged as a central component of strategic organisational management. The primary objective of talent management is the identification, development, retention, and optimal utilisation of talent to enhance organisational competitiveness. The term "talent" in this context extends beyond specific skills or competencies, encompassing an individual's potential to contribute meaningfully to the strategic goals of the organisation (Collings & Mellahi, 2009). Effective talent management, therefore, is not limited to operational activities but also incorporates strategic planning aimed at ensuring the right individuals are placed in the right positions at the right time. A fundamental principle of effective talent management involves aligning employees' individual goals with the strategic objectives of the organisation. An example of such alignment is the implementation of Individual Development Plans, providing employees with a clear career pathway and fostering greater employee engagement (Garavan et al., 2012).

According to research, talent identification is considered one of the most critical phases within the talent management process. Modern organisations employ sophisticated tools such as assessment centres, psychometric tests, and competency models to measure employee potential and performance (Dries, 2013b). Inclusion is also a crucial aspect of this process, as many organisations reevaluate their talent strategies to ensure fair and equal opportunities for all employees. Inclusive talent management fosters diversity and innovation within organisations, essential in today's globalised and dynamic business environment (Cappelli & Keller, 2017).

Talent development encompasses a broad spectrum of activities, including professional training, mentoring, coaching, and opportunities for rotation across different job roles. A personalised approach to individual development is becoming standard practice, as organisations recognise that universal solutions may not optimally enhance employee competencies (Garavan et al., 2012). Additionally, talent development must extend beyond technical skills to include leadership and interpersonal capabilities, critical for adaptability and long-term success at both individual and organisational levels (Groves, 2007).

Talent retention presents another significant challenge for contemporary organisations. Given high employee turnover rates, organisations must cultivate a culture that promotes employee engagement and loyalty. Proven strategies include offering competitive benefits, flexible working arrangements, and opportunities for career advancement (Hughes & Rog, 2008). Equally important is creating an

environment conducive to employees' emotional well-being and fostering their sense of meaningful work (Schiemann, 2014b).

In the era of digitalisation, talent management faces additional challenges linked to technological advancement and automation. Rapid digitalisation changes employee requirements, emphasising continuous development of digital competencies. Consequently, talent management must reflect these transformations and proactively adapt to emerging technological trends such as artificial intelligence and big data analytics, significantly enhancing human resource management efficiency (Bondarouk & Brewster, 2016). Furthermore, digital platforms offer employees access to various forms of education, including online courses, webinars, and virtual training programs. This approach enables employees to flexibly enhance their competencies according to individual needs. Organisations effectively integrating technology into their talent management strategies are better prepared for rapid labour market changes (Cappelli & Keller, 2017).

The organisation's culture and values also play a vital role in talent retention and motivation. Employees aligned with organisational values tend to exhibit greater loyalty and productivity. It is thus imperative that talent management includes building an organisational culture that fosters innovation, collaboration, and meaningful work (Hughes & Rog, 2008). One current trend in talent management is a focus on the "employee experience," encompassing overall employee engagement and satisfaction at work. Organisations strive to create environments that are not only productive but also pleasant and motivating, including providing regular feedback, supporting personal development, and creating opportunities for work-life balance. Such an environment encourages employees not only to remain within the organisation but also to deliver superior performance (Schiemann, 2014a).

Therefore, talent management represents an integral component of a successful organisation. Strategic talent management can enhance employee efficiency and strengthen the organisation's competitive advantage. In a rapidly changing work environment, where innovation and adaptability are paramount, effective talent management remains one of the most crucial determinants of long-term success (Stahl et al., 2012).

In conclusion, talent management is a dynamic and complex discipline requiring continuous adaptation to evolving labour market conditions and technological innovations. Organisations that successfully implement talent management strategies can attract and retain top talent while significantly enhancing their market competitiveness. Emphasis on individual development, technological integration, organisational culture, and diversity is fundamental to achieving success in talent management.

1.1 Current Trends in Talent Management Development

Digitalisation and emerging technologies are key factors shaping current trends in talent management. Organisations increasingly utilise digital tools to identify, acquire, and develop talent. Data processing systems, artificial intelligence (AI), and analytics enable HR professionals to better understand employee needs and career preferences, facilitating personalised and adaptive talent management programs. Digital platforms such as LinkedIn and professional networks also provide quicker access to talent, enhancing recruitment efficiency and improving the integration of talented individuals into organisations. Technological transformation thus plays a pivotal role in ensuring organisational competitiveness and growth in today's dynamic environment (Kotter, 2007).

Keating (2023) identifies continuous learning and professional development of employees as one of the most significant trends in talent management. Organisations consistently investing in employee skill development demonstrate greater adaptability to rapidly changing markets and technologies. A focus on lifelong learning is essential to maintain organisational competitiveness. This trend includes offering training, mentoring, coaching, and opportunities for employees to acquire new skills, enabling career progression and contributing to organisational innovation. Education and development initiatives should therefore align closely with organisational strategies and objectives, ensuring their practical contribution to organisational performance.

Finally, Buckingham (2015) argues that a personalised approach to talent development is a central trend in contemporary talent management. Organisations increasingly implement individually tailored development plans that consider employees' career aspirations, strengths, and areas for improvement. Personalised approaches allow organisations to better support employees in their career growth and motivate them toward achieving high performance. This strategy enhances employee engagement and reduces turnover, as individuals perceive that the organisation invests in their development and provides growth opportunities aligned with their unique needs and capabilities.

1.2 Tools for Measuring Talent and Employee Engagement

Effective talent management relies on a wide array of tools for identifying, developing, and retaining talent within organisations. According to Greene (2020), essential tools in contemporary talent management include digital platforms for tracking employee performance and skill databases. These tools allow managers to obtain a comprehensive overview of the team's current competencies, identify skill gaps, and plan their development accordingly. Successful use of these tools depends significantly on integrating data from multiple sources, thus enhancing the accuracy of decision-making.

Kerr and Ng (2020) emphasise software solutions for career development planning as another key approach in talent management. These solutions allow employees

to map their ambitions and receive feedback on goal achievement. Digitalising career management processes fosters transparency and provides employees with a sense of control over their professional growth. Such solutions are particularly valuable in environments with high workforce turnover, where long-term developmental plans become crucial.

Rock (2008) contributes perspectives on tools designed to boost employee engagement, such as applications for measuring engagement and organisational culture. According to her, these tools facilitate regular assessment of employee satisfaction, providing managers timely insights into workplace issues. Proper use of these tools enhances interpersonal relationships and fosters a positive workplace culture.

From Ulrich's (2011) perspective, traditional talent management tools such as assessment centres and individual managerial interviews remain indispensable. Combining personal approaches with technological tools creates a comprehensive understanding of employee capabilities, helping identify potential and motivation. This blended approach allows managers to better tailor development programs to individual employees' needs.

According to Armstrong & Taylor (2023), Rothwell (2010), Fitz-Enz (2010), and Haak (2017), the most significant talent management tools include:

9-Box Grid - the 9-box grid is primarily utilised for employee evaluation based on two main criteria: their current performance and potential for further organisational growth. This tool assists managers in identifying employees who are ready for promotion or require additional development.

Competency Models - another critical tool in talent management is competency models, which are employed to define essential skills and behaviours required for successfully performing tasks in specific roles. These models provide clear guidelines for performance evaluation, recruitment, and employee development.

Assessment Centre - the assessment centre represents a comprehensive recruitment tool that incorporates various evaluation techniques, including simulations, tests, interviews, and group exercises, aimed at assessing candidate competencies and capabilities. This tool helps organisations select the most suitable candidates based on practical experiences.

360-Degree Feedback - this tool provides employee performance evaluations from multiple sources, including supervisors, peers, and subordinates. Thus, it offers a comprehensive overview of employees' strengths and weaknesses, useful for their professional development.

Succession Plans - succession plans focus on identifying and developing internal talent to prepare individuals for critical managerial or specialised roles within the organisation. This process ensures continuity and stability in case key employees leave.

Individual Development Plans - an individual development plan (IDP) is a tool that helps employees set goals related to their professional growth. This plan, developed collaboratively with their supervisor, outlines the necessary steps employees must take to achieve these objectives.

HR Analytics and Predictive Modelling - HR analytics leverages data to predict trends in human resources, such as employee turnover, performance, and skill development needs. Predictive modelling enables organisations to optimise decisions related to employee management.

AI and Big Data - the application of artificial intelligence (AI) and big data analytics in talent management enables organisations to more effectively manage recruitment, performance evaluation, and forecasting of talent development needs. These technologies offer rapid and precise tools for optimising processes.

1.3 Talent Management and Its Impact on Organisational Performance

Talent management significantly influences organisational performance. Organisations effectively managing talent typically achieve higher productivity and innovative advantages. One critical aspect of talent management involves identifying and developing high-potential employees who can significantly contribute to achieving long-term organisational goals. Appropriately implemented talent management strategies, such as personalised development programs and systematic performance evaluations, enhance organisational performance by ensuring each employee contributes effectively toward organisational objectives (Cappelli, 2009).

Talent management should also be an integral part of the overall corporate strategy. Integrating talent management strategies with long-term business objectives is crucial, as this ensures continuous organisational evolution and adaptation to changing market conditions. Talent management thus plays an essential role in shaping organisational culture, emphasising innovation, flexibility, and efficiency. Organisations focusing on developing diverse, robust teams can demonstrate greater competitiveness and adaptability, directly enhancing decision-making quality and speed across all organisational levels (Boudreau & Ramstad, 2007).

Collings et al. (2018) emphasise measurable impacts of talent management on employee productivity, noting a direct correlation between effective talent management and individual performance within organisations. Companies fostering environments supportive of personal and professional growth witness higher employee engagement, driving improved organisational productivity. Regular training and clearly defined career paths allow employees to develop competencies aligned with organisational needs, leading to enhanced efficiency and innovation at all organisational levels.

Lockwood (2006) addresses the impact of talent management on organisational innovation potential. According to her, effective talent management is crucial for

fostering creativity and innovation. Companies attracting and retaining top talent generate new ideas and innovative products and services. Innovation often results from talented individuals collaborating to achieve shared goals, underscoring the importance of nurturing diverse competencies and providing creative opportunities.

Holbeche (2012) discusses how talent management affects organisational sustainability. Organisations investing in talent development demonstrate higher resilience in turbulent economies and competitive markets. Talent management establishes stable, motivated teams capable of adapting to challenges associated with organisational growth and expansion, thereby promoting long-term performance.

Finally, Kumar (2022) notes that effective talent management significantly reduces employee turnover, directly enhancing organisational performance. Organisations fostering developmental environments increase employee satisfaction, reducing recruitment and onboarding costs, thus improving efficiency. Therefore, sustained growth and performance are closely linked to building loyal, dedicated teams committed to achieving strategic objectives.

2 METHODOLOGY

Considering the selected research topic and objectives, the following hypotheses were formulated for empirical verification:

- H1: Employees working in organisations offering career growth opportunities are more likely to perceive talent management as effective.
- H2: Employees who rate the level of digitalisation and AI implementation in their organisations positively also perceive the contribution of AI and digital tools for identifying and developing talented employees more favourably.
- H3: Employees who positively perceive the availability of career growth opportunities within their organisations tend to evaluate the quality of talent management more positively.
- H4: Organisations employing talent management and AI tools for performance management and employee development demonstrate higher employee satisfaction with talent management.

The empirical section of the research was based on a questionnaire survey conducted within enterprises operating on the Slovak market. The primary objective of the survey was to gain insight into how employees across various positions perceive talent management systems within their organisations, including career opportunities, accessibility of developmental programs, and the utilisation of digital technologies, including artificial intelligence. The collected data were processed using statistical methods, emphasising descriptive analysis

represented by percentages, mean values, and graphical representations of responses. Qualitative responses from open-ended questions underwent thematic analysis to identify recurrent themes and attitudes among employees towards talent management. The survey results were subsequently compared with theoretical frameworks, forming a foundation for conclusions and recommendations intended to enhance talent management practices not only in the banking sector but in broader organisational contexts as well. The empirical component employed a quantitative research design, conducted via a questionnaire survey administered during the first quarter of 2025. The questionnaire was distributed among employees of Slovak enterprises, designed explicitly to capture their experiences and perceptions regarding the functioning of talent management within their professional environments. Comprising 27 questions, the questionnaire included various question formats ranging from closed-ended questions with single or multiple-choice answers, Likert-scale assessments, to open-ended questions enabling respondents to express their personal opinions and suggestions. Questions addressed not only conceptual understandings of talent management but also practical implementation, identification of talent development barriers, and the degree of digitalisation in human resource management processes. Special attention was given to employees' experiences with digital tools and AI in their personal and professional development, allowing the collection of quantifiable data and subjective insights. For questionnaire data processing, descriptive statistical analysis was used to present responses through percentage distributions, averages, and graphical illustrations. Qualitative responses were analysed through thematic analysis, highlighting key attitudes, issues, and recommendations related to talent management practices from employees.

The results from the survey of 146 employees provided a comprehensive view of perceptions regarding career opportunities, motivation, talent management, and digitalisation within organisations. Perceptions of career opportunities varied: 54.1% of respondents evaluated them positively, 26% as average, while nearly one-fifth (19.9%) described these opportunities as poor or very poor.

Primary motivational factors influencing employee retention included financial compensation and benefits (78.8%), positive corporate culture and team relationships (58.2%), and career growth opportunities (56.8 %). Additionally, stability (48.6%), leadership quality (33.6%), and work-life balance (30.1%) were significant factors. Respondents defined a "talented employee" predominantly as an expert with exceptional knowledge and experience (61%), motivated and proactive (58.9%), innovative, and effective at problem-solving (both at 58.2%).

Talent management was most frequently understood as an educational and developmental program (76%), a mechanism for talent identification and development (67.1%), and a method for enhancing employee motivation (58.9%). However, practical evaluations varied: 55.4% rated talent management as good or very good, 20.5% considered it average, while 24% rated it negatively (poor or very poor). Major obstacles in talent development were reported as lack of time (48.6%), low employee motivation (30.8%), limited training opportunities

(27.4%), insufficient management support (21.9%), and unclear strategies (19.9%).

Digitalisation and AI technologies were mostly perceived positively but their implementation was limited. Over one-third of respondents (37%) were uncertain about the actual use of these tools in their organisations. While online learning platforms were extensively used (80.8%), only 21.9% had experience with digital performance evaluation, and merely 8.2% had used AI-based recommendations for career development. A substantial proportion (27.4%) was unsure about the actual impact of AI on talent management. Overall, 34.9% rated the digitalisation level in their organisations as average, 31.5% as advanced, but only 8.9% indicated regular use of AI and digital tools.

In conclusion, organisations exhibit a willingness to support employee development yet face significant challenges in systematising talent management and digital transformation. Respondents recommended improvements in performance evaluation, strengthening feedback mechanisms, providing training and workshops (particularly regarding digital and AI tools), establishing more objective promotion systems, and emphasising individualised approaches to employee development. These measures could substantially enhance corporate culture, talent retention, and overall organisational competitiveness.

3 RESULTS

Following the evaluation of the survey results, the four research hypotheses (H1, H2, H3, and H4) were tested to verify the relevance, validity, and reliability of the statements.

H1: Employees working in organisations providing career growth opportunities tend to evaluate talent management as effective more frequently.

Through Hypothesis H1, we examined whether employees working in organisations that offer accessible career growth opportunities more frequently evaluate talent management as effective. The variable "availability of career growth" was categorised into three levels (good, limited, poor), while the evaluation of talent management was simplified into two categories: "effective" and "other evaluations." Relationship between talent management evaluation and career growth availability is displayed in Figure 1. The relationship between these variables was tested using Pearson's Chi-square test of independence.

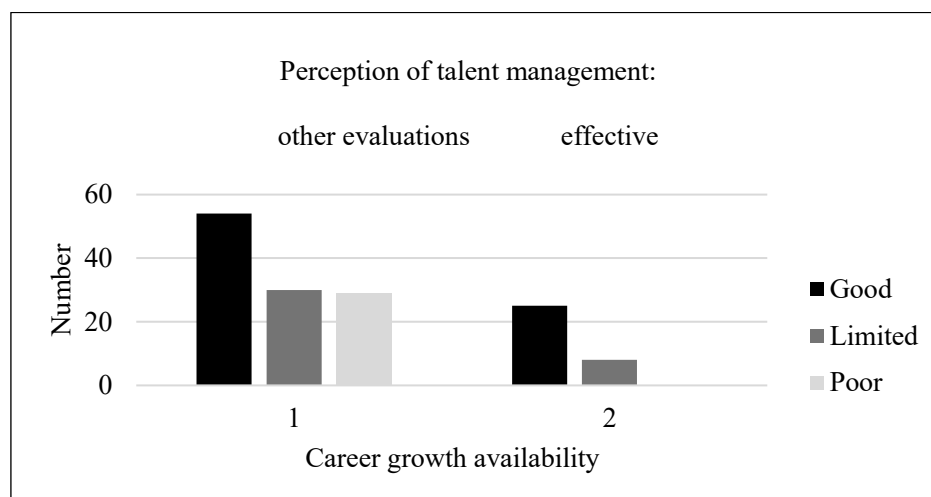


Figure 1 – Relationship between talent management evaluation and career growth availability (own research)

Distribution of talent management perception according to career growth availability is in Table 1 and expected frequencies for the relationship between career growth and talent management is in Table 2.

Table 1 – Distribution of talent management perception according to career growth availability

Availability of Career Growth Opportunities	The Perception of Talent Management (other rating than effective)	The Perception of Talent Management (effective)	Row Totals
Good	54	25	79
Limited	30	8	38
Poor	29	0	29
All Groups	113	33	146
Summary Frequency Table			
Table: Availability of Career Growth Opportunities (3) x The Perception of Talent Management (2)			

Source: own research

Table 2 – Expected frequencies for the relationship between career growth and talent management

Availability of Career Growth Opportunities	The Perception of Talent Management (other rating than effective)	The Perception of Talent Management (effective)	Row Totals
Good	61.1438	17.85616	79.0000
Limited	29.4110	8.58904	38.0000
Poor	22.4452	6.55479	29.0000
All Groups	113.0000	33.00000	146.0000
Summary Table: Expected Frequencies			
Pearson Chi-square: 12.2140; df=2; p=.002227			

Source: own research

Pearson Chi-square - test statistics; df - degrees of freedom; p - statistical significance level

The Chi-square test of independence indicated a statistically significant relationship between perceived career growth availability and the perception of talent management ($\chi^2 = 12.21$; $df = 2$; $p = 0.002 < 0.05$). The value of Cramer's $V = 0.289$ further confirmed a moderate, statistically and practically significant association between perceptions of career opportunities and perceived talent management effectiveness. Analysis of contingency tables, specifically comparing observed and expected frequencies, demonstrated that employees who rated career growth as highly accessible were significantly more likely to evaluate talent management as effective. Conversely, in groups perceiving limited or poor career growth availability, positive evaluations of talent management occurred less frequently than theoretically expected.

Hypothesis H1 was confirmed.

H2: Employees who rate the level of digitalisation and AI utilisation in their organisation positively perceive a greater contribution of AI and digital tools in identifying and developing talented employees.

The aim of Hypothesis H2 was to explore the relationship between the evaluation of digitalisation and AI utilisation in organisations and perceptions regarding the contribution of these technologies to identifying and developing talented employees. We hypothesised that employees who positively evaluate digitalisation and AI initiatives within their organisation would also perceive their benefits in talent management more favourably. Due to the ordinal nature of both variables, Spearman's correlation coefficient was employed. Spearman's correlation analysis between AI utilisation and talent management is in Table 3.

Table 3 – Spearman's correlation analysis between AI utilisation and talent management

Pair of Variables	Spearman Rank Order Correlations MD pairwise deleted Correlations are significant at $p < .050$		
	Valid N	Spearman R	p-value
Assessment of the Use of AI and Perceptions of Its Benefits in Talent Management	146	0.629354	0.000000

Source: own research

N – number; Spearman R – Spearman's correlation coefficient; p - statistical significance level

Spearman's correlation analysis revealed a moderately strong, positive, and statistically highly significant relationship ($R = 0.629$; $p = 0.000 < 0.001$) between the evaluation of AI usage levels and perceived benefits of AI and digital tools in talent management. The coefficient of determination ($R^2 = 0.395$) indicated approximately 39.5% of the variability in perceived AI benefits could be explained by differences in evaluations of AI utilisation within organisations. Relationship between the level of digitalisation and perceived AI contributions to talent management is in Figure 2.

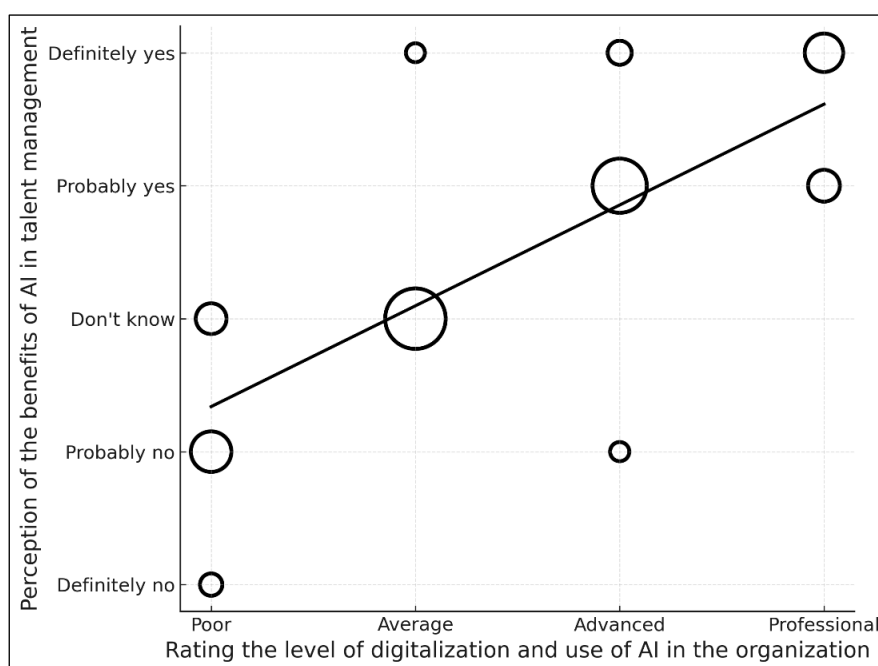


Figure 2 – Relationship between the level of digitalisation and perceived AI contributions to talent management

Source: own research

Hypothesis H2 was confirmed.

H3: Employees who positively perceive the availability of career growth opportunities within their organisation evaluate the level of talent management more positively.

Through Hypothesis H3, we analysed the relationship between the perceived availability of career growth opportunities and evaluations of talent management quality within organisations. We hypothesised that employees with more positive perceptions of career growth opportunities would also evaluate the quality of talent management more favourably. This hypothesis was tested again using Spearman's correlation coefficient. Spearman's correlation between career growth and talent management level is in Table 4.

Table 4 – Spearman's correlation between career growth and talent management level

Pair of Variables	Spearman Rank Order Correlations MD pairwise deleted Correlations are significant at $p < .050$		
	Valid N	Spearman R	p-value
Availability of Career Growth and Talent Management Levels	146	0.837841	0.00

Source: own research

N – number; Spearman R – Spearman's correlation coefficient; p - statistical significance level

Correlation analysis results indicated a strong positive, statistically significant relationship ($R = 0.8378$; $p = 0.000 < 0.001$) between perceived availability of career growth and the evaluation of talent management quality. Employees with more favourable perceptions of career opportunities in their organisation significantly rated the talent management level higher. The coefficient of determination ($R^2 = 0.702$) suggests that approximately 70.2% of the variability in talent management evaluations can be explained by perceptions of career growth availability. This value highlights the strong interconnection between these variables and underscores the importance of career development as a core component of effective organisational talent management. Relationship between availability of career growth and level of talent management is in Figure 3.

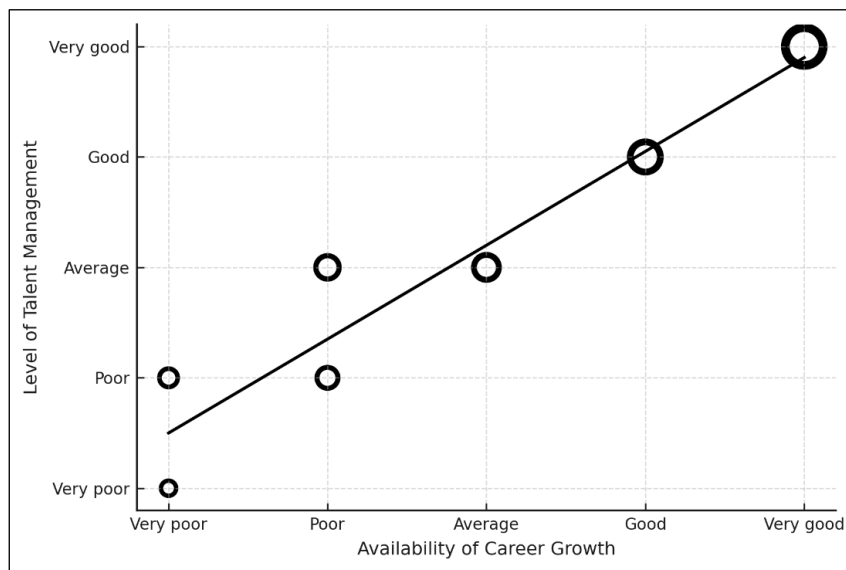


Figure 3 – Relationship between availability of career growth and level of talent management.

Source: own research

Hypothesis H3 was confirmed.

H4: Organisations utilising talent management and AI tools for performance management and employee development exhibit higher employee satisfaction with talent management.

In the final hypothesis, we examined whether differences exist in talent management evaluations among employees based on their organisation's use of digital tools and AI for performance management and employee development. Respondents were grouped into three categories: organisations utilising AI ($n = 45$), not utilising AI ($n = 21$), and unsure ($n = 80$). To test this hypothesis, the non-parametric Kruskal-Wallis test was used, suitable for comparing ordinal data across multiple independent groups. The Kruskal-Wallis test is in Table 5, and multiple comparisons following the Kruskal-Wallis test for AI utilisation and talent management are in Table 6.

Table 5 – Kruskal-Wallis test

	Kruskal-Wallis ANOVA by Ranks; Talent Management Levels Independent (grouping) variable: The Use of Digital Tools and AI Kruskal-Wallis test: H (2; N=146) =40.81690 p=.0000			
	Code	Valid N	Sum of Ranks	Mean Rank
Use	1	45	4581.000	101.8000
Don't use	2	21	750.000	35.7143
Don't know	3	80	5400.000	67.5000

Source: own research

Table 6 – Multiple comparisons following the Kruskal-Wallis test for AI utilisation and talent management

	Multiple Comparisons p values (2-tailed); Talent Management Levels Independent (grouping) variable: The Use of Digital Tools and AI Kruskal-Wallis test: H (2; N=146) =40.81690 p=.0000		
	Use R:101.80	Don't use R:35.714	Don't know R:67.500
Use		0.000000	0.000040
Don't use	0.000000		0.006522
Don't know	0.000040	0.006522	

Source: own research

H - test statistic; N- number; p - statistical significance level

The Kruskal-Wallis ANOVA indicated statistically significant differences among respondent groups based on their organisation's use of digital tools and AI for employee management ($H(2;146) = 40.817$; $p = 0.000 < 0.001$). However, the effect size ($\eta^2 = 0.02$) suggested only a weak but noteworthy impact of technology use on talent management perceptions (2% variability explained). Post-hoc analyses confirmed statistically highly significant differences among all pairs: “utilising AI” versus “not utilising AI” ($p = 0.000 < 0.001$), “utilising AI” versus “unsure” ($p = 0.00004 < 0.001$), and “not utilising AI” versus “unsure” ($p = 0.006522 < 0.001$).

Mean comparisons indicated respondents whose organisations utilised digital and AI tools in employee management reported the highest talent management ratings

($M = 4.33$ – "good" talent management). Respondents uncertain about AI use followed ($M = 3.31$ – "average"), with the lowest ratings from respondents in organisations not using these tools ($M = 2.34$ – "poor"). These findings suggest a connection between digital and AI tool use and higher talent management evaluations, while their absence or uncertainty correlates with lower perceptions of talent management quality. Impact of digital tools and AI use on level of talent management is in Figure 4.

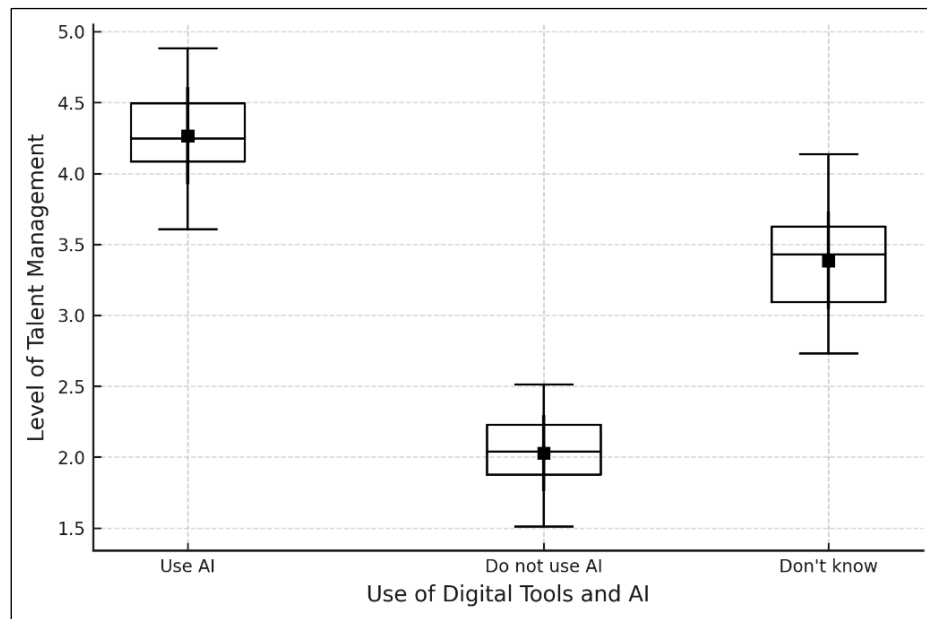


Figure 4 – Boxplot: Impact of digital tools and AI use on the level of talent management

Source: own research

Hypothesis H4 was confirmed.

3.1 Recommendations for Enhancing Competitiveness

Based on the findings of our research, we propose the following recommendations for organisations to enhance their competitiveness:

Career Growth

We recommend that enterprises clearly communicate to employees the specific steps required for promotion, essential educational programs, and available support resources. For example, introducing regular career discussions every six months or providing access to digital career planning tools could significantly enhance employee engagement.

Talent Programs

Programs focused on talent identification and development, such as internal competitions, mentoring, and coaching, should be expanded beyond retail

branches. These could include opportunities like presenting projects to leadership, thus motivating employees to participate actively and simultaneously develop strategic and digital competencies.

More Effective Recruitment of New Employees

We propose integrating digital tools from the first day of employment. New employees should have access to an educational platform (e.g., Seduo), a dedicated mentor, and a clear onboarding plan. Additionally, incorporating AI-driven simulations of client interactions (e.g., mystery calls) can significantly help newcomers quickly acquire essential skills. Assigning coaches specialised in specific areas such as soft skills, consumer loans, mortgages, investments, and digital competencies could also be beneficial. Regular weekly coaching sessions (approximately one hour per week) could culminate in individual assessments that inform subsequent developmental steps.

Enhanced Practical Utilisation of AI

We recommend introducing technology into the workplace alongside training sessions designed to familiarise employees with these tools and demonstrate how AI can facilitate their tasks, such as through AI assistants for data evaluation or training recommendations. Additionally, implementing simple yet effective feedback and performance planning tools is advised. Short e-learning modules available through Seduo (e.g., CRM basics, digital onboarding applications, employee chatbots, AI-assisted application processing), practical exercises (such as developing simple workflows in internal digital portals, analysing past case data via AI dashboards), and interactive AI tutors (chatbots for reinforcing product knowledge and administering knowledge quizzes) could all significantly contribute to employee development.

Supporting Employee Initiative Through Projects

We recommend creating opportunities where employees can propose improvements and actively participate in projects, thereby building loyalty and a sense of purpose. A practical implementation could be an internal "Talent Hack," where employees present their ideas, and winning proposals receive full organisational support for execution.

Overcoming Barriers to Talent Development

Considering respondents identified lack of time and insufficient motivation as primary barriers, flexible training planning, such as micro-learning modules (brief modules accessible anytime), and motivational elements like gamification and rewards for engaging in educational activities could provide effective solutions.

Improved Awareness and Access to Digital Tools

We recommend that organisations proactively offer personalised learning pathways to their employees, suggesting courses based on performance and

interests, thus enabling monitoring of employee progress through digital dashboards.

4 DISCUSSION

Analyses and research hypotheses highlight that the availability of career growth opportunities positively correlates with perceptions of effective talent management. Organisations providing clear career and development programs not only strengthen employee loyalty but also enhance their competitiveness in the labour market. Strategic alignment of employees' individual development objectives with organisational long-term vision thus remains a critical success factor.

Integrating digital tools and artificial intelligence into talent management processes significantly boosts organisational efficiency. Research findings indicate employees working in highly digitalised environments positively evaluate talent management. Such technologies streamline potential identification, recruitment, and performance evaluation, directly supporting organisational competitiveness by optimising human resources.

Creating an inclusive work environment promoting diversity and enabling varied talents to thrive is equally vital. Inclusive strategies enhance employee engagement and drive innovation, directly impacting organisational competitiveness. Opportunities for project participation, open communication, and personalised development plans are practical tools that help foster positive workplace environments.

An essential finding is that organisations intentionally employing digital solutions for performance evaluation and development report higher satisfaction with their talent management systems. The combination of personalised approaches, technological integration, and support for employee initiatives generates a synergistic effect that enhances employee motivation and long-term organisational competitiveness.

5 CONCLUSION

Talent management is increasingly recognised as a critical determinant of long-term organisational competitiveness. In an environment marked by technological advances, globalisation, and dynamic market changes, the capability to identify, develop, and retain talent is essential. Organisations proactively engaging in talent management significantly enhance their ability to retain skilled employees and respond effectively to internal and external challenges. This adaptive capacity constitutes a crucial competitive advantage.

In conclusion, talent management has transitioned from merely an HR function to a strategic pillar of organisational growth. Companies effectively implementing

talent management strategies - with a focus on development, inclusion, technology, and feedback - create conditions for sustainable success. Consequently, their competitive advantage is not incidental but systematically built upon robust human capital management practices.

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CONFLICTS OF INTEREST

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