

Talent Management and Employee Ambidexterity as Key Success in the Industrial Revolution 4.0: an Empirical Study at Universitas Terbuka

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Abstract

This study examines the impact of talent management on employee performance and employee ambidexterity at Universitas Terbuka. The research involved 164 respondents, consisting of lecturers and educational staff. The sample profile indicates that the majority of respondents are aged between 26 and 35, with 54% being female. Educational background data reveal that 69% hold a master's degree, while 5% have a doctoral degree. The study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) to assess the validity, reliability, and structural relationships among variables. Convergent validity was evaluated using outer loading values and Average Variance Extracted (AVE), confirming that the indicators of talent management, employee ambidexterity, and employee performance meet the validity requirements. Discriminant validity was tested using the Fornell-Larcker criterion, ensuring that each construct is distinct from others. Reliability tests, measured through composite reliability and Cronbach's Alpha, demonstrate that all constructs exhibit high internal consistency. The structural model analysis, including F-square, R-square, and adjusted R-square, shows that talent management significantly influences employee ambidexterity ($R^2 = 0.622$) and moderately affects employee performance ($R^2 = 0.355$). Path analysis using bootstrapping confirms the direct and indirect effects of talent management on employee ambidexterity and performance, highlighting the importance of talent management in enhancing workforce capabilities. This research provides valuable insights into human resource strategies within higher education institutions, emphasizing the role of effective talent management in improving employee adaptability and overall performance. Future studies should explore additional mediating factors to further understand the dynamics between talent management and organizational outcomes.

1. Introduction

At present, Indonesia has embarked on the era of the Industrial Revolution 4.0, characterized by the swift advancement of technology. Making an Industry 4.0 ecosystem, which includes computers, networks, and machines that are all connected and work together to improve business processes and performance, is the biggest challenge right now (Akbar, 2020). The swift advancement of technology profoundly influences the nature of employment today, rendering human resource skills and competencies essential elements to contemplate (Willy, 2019). Higher education institutions serve as a pivotal force in cultivating skilled, competent, and high-quality human resources. As centers of learning, higher education institutions must possess the ability

to address both present and forthcoming academic requirements. All higher education institutions must properly incorporate information technology (IT) into their structures. Better accessibility of IT devices calls for adding enough human resources to make sure that these ready-made tech tools are used in the best way possible (Rohmah, 2022).

Universitas Terbuka (UT) is a pioneering institution that facilitates distance higher education in Indonesia. Due to the challenges of the Fourth Industrial Revolution, Universitas Terbuka has incorporated technology into its teaching methods and internal business operations. The Portal Aplikasi Naskah Dinas UT dan Administrasi Perkantoran (PANUTAN) and the Sistem Informasi Perencanaan, Pelaksanaan, dan Pertanggungjawaban (SIPPP)

are two examples of this. The University of Texas possesses a substantial academic community necessitating contemporary, dependable, and precise administrative and academic services. UT has developed and utilizes the PANUTAN Application, which provides numerous benefits for contemporary administrative and academic services, facilitates expedited document monitoring, and enhances the efficiency of stationery usage. Furthermore, UT developed SIPPP, an integrated application that encompasses planning, implementation, and financial accountability, with the goal of establishing a new work order and culture while enhancing institutional efficiency and effectiveness (Universitas Terbuka, 2023). These two apps represent technological advances developed by UT in 2023.

UT's inventions necessitate human resources possessing technological proficiency. For this to occur, UT must sustain its management of personnel exhibiting high competence and strong performance (Irmawaty & Hamdani, 2016). Talent management is one of the strategies employed to acquire, cultivate, and retain highly skilled personnel. Stahl et al. (2012) asserted that aligning talent management with business strategy and organizational context can significantly improve organizational performance, making it a fundamental approach in human resource management. Sopiah, Kurniawan, Nora, and Narmaditya (2020) define talent management techniques as human resource development strategies that aim to enhance competitiveness through the effective and efficient utilization of talent.

UT's innovation showcases the simultaneous existence of exploitation and exploration activities. Technological applications such as PANUTAN and SIPPP leverage existing knowledge to conduct exploitation activities. The exploration activity aims to identify competitive solutions via talent management, specifically through training and the development of employee competencies.

Exploitation and exploration activities result in employee ambidexterity (Akbar & Anas, 2024). Historically, organizations frequently utilized ambidexterity. A current trend suggests that individuals can implement ambidexterity. Employee ambidexterity refers to employee behavior that integrates activities associated with both exploitation and exploration over a specific timeframe (Mom, van den Bosch, & Volberda, 2009). Researchers argue that employees must demonstrate equal proficiency in both exploratory and exploitative behaviors to qualify as ambidextrous.

Most organizations globally encounter significant challenges in talent management. Talent management is essential for a company's success, fostering a sustained competitive advantage by improving employee performance. Organizations achieve long-term advantages when employees possess unique competencies that competitors cannot replicate (Ingram and Glod, 2016). Research by Kobarg et al. (2015) indicates a positive correlation between employee ambidexterity and employee performance in the public sector. Exploration-exploitation activities significantly influence employee performance (Zhang et al., 2020). Enhancing skills through talent management and leveraging technology to foster employee ambidexterity will lead to improved performance. According to Universitas Terbuka's Performance Report 2023, ways to reach performance goals include using technology and training and developing lecturers and course tutors. This illustrates the importance of talent management and employee ambidexterity in attaining the performance goals of Universitas Terbuka.

2. Literature Review

2.1 Talent Management and Employee Performance

The concept of talent management encompasses various interpretations, highlighting significant advancements in contemporary human resources. Talent management includes the procedures of

attracting, training, developing, and rewarding people that demonstrate high potential and exceptional performance. Collings and Mellahi (2009) assert that key positions are present not only in upper management but also at lower organizational levels. The ambiguity in interpretation and conceptual limits has led to extensive discourse on talent management. Some researchers conceptualize talent management through the lens of human resources (Cappelli, 2008), whereas others perceive it as a strategy for achieving organizational success (Creelman, 2004) or as a method to enable employees at all levels to realize their potential (Redford, 2005).

A strategic talent management system necessitates the identification of critical talent (Collings & Mellahi, 2009). Organizations must implement effective talent management to attain a sustained competitive advantage (Ingram and Glod, 2016). Employees possessing unique abilities that competitors cannot imitate can provide companies with a sustainable competitive advantage. Consequently, organizations focus on developing various elements, including systems, processes, and human resource management strategies, to effectively manage diverse human resources. This involves identifying opportunities and developing comprehensive, results-driven action plans (Madurani & Pasaribu, 2022).

According to talent management ideas, an organization can gain a competitive edge by maximizing the potential of its employees (Scullion et al., 2010). Organizations frequently link talent management to human resource management (HRM) strategies to enhance performance (Farndale, Scullion, & Sparrow, 2010). Talent management not only involves attracting, developing, and assessing talent but also contributes to employee satisfaction, personal development, and improved performance (Tash et al., 2016). Talent management policies can enhance employee performance and influence job engagement. Mensah et al. (2016) and Dhanalakshmi and Gurunathan (2014) proposed a relationship

between talent management and employee performance.

2.2 Employee Ambidexterity and Employee Performance

Employee ambidexterity denotes the behavioral inclination of employees to engage in both exploration and exploitation activities simultaneously (Keller & Weibler, 2015). Current literature presents two main theoretical perspectives on ambidexterity applicable at the employee level (Akbar & Anas, 2024). A contextual approach to ambidexterity has been used in some research, which says that companies should let both exploratory and exploitative actions happen at the same time (Gibson & Birkinshaw, 2004). According to this view of ambidexterity, higher levels of exploration and exploitation require a corresponding rise in ambidexterity in terms of how well an organization does its job. We anticipate ambidextrous employees to demonstrate optimal innovative work behavior because exploration and exploitation are integral to invention (Rosing, Frese, & Bausch, 2011).

According to the structural perspective on ambidexterity, exploration and exploitation should not happen at the same time because they are competing goals that need different organizational skills and want the same resources (March, 1991). This perspective at the employee level pertains to employees' specialization in either exploration or exploitation activities. Employees participating in these activities are anticipated to attain optimal performance via creative work behavior (Caniëls & Veld, 2019). By doing both exploration and exploitation tasks at the same time, this study takes a contextualized look at ambidexterity.

2.3 Talent Management, Employee Ambidexterity, and Employee Performance

Effective talent management is essential for sustaining an organization's competitive

advantage (Vecchi et al., 2021). Talent management is a continuous process that involves predicting human resource requirements and developing a strategy to address them (Cappelli, 2008). To establish a pipeline of qualified candidates, an organization must identify essential roles, understand the capabilities of its workforce, anticipate economic fluctuations, and remain aware of social and environmental changes that may affect its future (Lewis & Heckman, 2006).

Organizations that thrive in dynamic environments exhibit ambidexterity, characterized by their ability to effectively address current business needs while simultaneously adapting to future changes (Caniëls & Veld, 2019). Numerous studies indicate that employee ambidexterity contributes to the formation of ambidextrous organizations (Rogelberg, 2017), despite the concept being relatively novel in the field of HR management research. Moreover, managers pursuing ambidexterity acknowledge the importance of HR in facilitating effective exploration and exploitation activities.

When companies seek to become more ambidextrous, talent management plays a crucial role (Al Jawali, Darwish, Scullion, & Halal-Saleem, 2022). Controlling people and talent in the context of ambidexterity presents complex challenges for organizations. These involve a comprehensive transformation of mentality, an elevated view on talent, and the development and execution of innovative talent management solutions. Employees identified as pivotal within an organization can substantially influence the attainment of organizational ambidexterity (Boudreau & Ramstad, 2007). Human resources significantly contribute to organizational ambidexterity through talent identification, competency training, and skills development (Malik, Pereira, & Tarbal, 2019). Consequently, it is reasonable to conclude that these human resource practices will enhance the ability to explore and exploit. However, our understanding of the processes that underlie the relationship between talent management

and ambidexterity remains incomplete. Based on 152 research articles, Festing & Schafer (2022) stated that this combination of talent management and employee ambidexterity has not been successful. Additionally, they utilized relevant human resource knowledge as the basis for their research (Junni et al., 2015). Alternatively, they base their research on relevant knowledge from adjacent human resource fields as a basis for argumentation (Junni et al., 2015).

3. Research Methods

3.1 Data Collection

Workers at Universitas Terbuka are the focus of the study's data. The researchers established the following criteria to narrow down the target research sample: (1) Male and female, (2) working as educators or lecturers at Universitas Terbuka, (3) having a minimum of 1 year of work experience, and (4) using applications developed by Universitas Terbuka. We collected a total sample of 167 respondents; the minimum sample size that must be met according to the SEM calculator developed by Soper (2021) is 119 respondents. We distributed online surveys using Google Forms to participants who met the specified requirements.

The researchers employed purposive random sampling to select the research sample according to established criteria. This methodology selects sample units according to their specific objectives. We employ purposeful random sampling to select research participants who meet specific criteria, thereby ensuring precise results (Singh & Masuku, 2014).

3.2 Measuring Instrument

All measuring instruments were in Indonesian. To ensure that the respondents filling out the questionnaire could understand the original assessment tools, the researchers translated them into suitable and correct Indonesian. The pilot test of the measuring instrument is conducted to determine the

validity and reliability of the research instrument.

The talent management variable employs a measurement tool from Akbar & Anas (2023), originally consisting of 10 items, with 7 items selected based on the pilot test results. The employee ambidexterity variable utilizes a measurement tool from Akbar & Anas (2023), which initially included 8 items, with 6 items chosen based on the pilot test. The employee performance variable uses a measurement tool adapted from Pradhan & Jena (2017), starting with 23 items, and 16 items were retained based on the pilot test results. Altogether, the measuring instrument comprises 29 items, utilizing a Likert scale with 1 for "strongly disagree" and 5 for "strongly agree."

3.3 Data Analysis

The SmartPLS 3 application and the Structural Equation Modeling (SEM) approach are used in this research data analysis (Ringle, Wende, & Becker, 2015). Using SEM to analyze data, the researchers employ an outer model, an inner model, and a path analysis. The SEM approach has the advantage of enabling researchers to analyze several very complex relationships that linear regression equations are unable to refine. Because SEM consists of both outer and inner models, its calculations are more complex and yield more significant outputs than regression equations (Harahap, 2020).

Partial Least Square (PLS) is an approach to the SEM method that does not make assumptions about the distribution of data, which is the basis for the choice to utilize SmartPLS (Vinzi, Trinchera, & Amato, 2010). This makes PLS-SEM an ideal alternative under certain conditions: (1) when the sample size is small; (2) when limited theory is available for the application; (3) when data in SmartPLS analysis does not need to follow a normal distribution due to SmartPLS's use of bootstrapping (Wong, 2011).

4. Results and Discussion

4.1 Sample Profile

The respondents are employees of Universitas Terbuka, consisting of 164 lecturers and educational staff. Of the 164 responders, 12% (19 individuals) are aged 21 to 25, while 37% (60 individuals) are aged 26 to 30. 35% (58 individuals) are aged between 31 and 35. According to the research findings, 13% (22 individuals) are aged between 36 and 40, whereas 3% (5 individuals) are beyond 40.

According to the research data, there are 75 male respondents (46%) and 89 female respondents (54%). Regarding educational attainment, 26% of the respondents have a bachelor's degree, 69% have a master's degree, and 5% have a doctoral degree. The respondents consist of 76% lecturers and 34% educational staff. Their work experience varies as follows: 85% have 1-5 years of experience, 9% have 6-10 years, 2% have 11-15 years, and 3% have over 15 years.

4.2 Convergent Validity

The validity of indicators as measures of a variable is evaluated using convergent validity, which is based on each indicator's outer loading values; values more than 0.70 are considered acceptable. The outer loading study for the measuring instrument's convergent validity found that 18 of the 29 indicators were valid, while 11 were removed since their outer loading values were less than 0.70 (refer to Table 1). In the talent management variable, 6 indicators were found to be convergently valid, each with an outer loading greater than 0,70. The employee ambidexterity variable had 2 indicators with outer loading values exceeding 0,70; indicating convergent validity. For the employee performance variable, 10 indicators were validated as convergently valid, with each showing an outer loading greater than 0,70.

The objective that measurement items for a variable should have a high degree of correlation can also be used to figure out convergent validity (Ghozali & Latan, 2015). The Average Variance Extracted (AVE) value is

used to assess its validity using a variable with reflecting indicators. Sarstedt, Ringle, & Hair (2017) stated an AVE of 0.5 or greater suggests that the variable explains more than half of the variance in its items. From the results shown in table 2, talent management has an AVE of 0.674, indicating good convergent validity. The employee ambidexterity variable has an AVE of 0.838, also showing strong convergent validity.

Based on the idea that each indicator should only have a high correlation with its own variables, discriminant validity is evaluated to see if an indicator is a useful measure of the variables it is designed to measure. According to Ghozali & Latan (2015), measurements for different variables should not exhibit high correlations. High discriminant validity signifies that a variable is different, capable of explaining

Table 1. Outer Loading Values for Convergent Validity Testing

Indicators	Talent Management	Employee Ambidexterity	Employee Ambidexterity	Description
TM1	0,763			Valid
TM2	0,828			Valid
TM3	0,856			Valid
TM4	0,880			Valid
TM5	0,842			Valid
TM6	0,747			Valid
EA1		0,911		Valid
EA2		0,920		Valid
EP2			0,705	Valid
EP8			0,775	Valid
EP9			0,784	Valid
EP10			0,771	Valid
EP11			0,763	Valid
EP12			0,703	Valid
EP13			0,815	Valid
EP14			0,835	Valid
EP15			0,832	Valid
EP16			0,851	Valid

Similarly, the employee performance variable has an AVE of 0.616, indicating it is valid in terms of convergent validity. After completing this analysis, the researchers proceeded to attempt for discriminant validity.

4.3 Discriminant Validity

Table 2. AVE Values for Convergent Validity Testing

No.	Variables	Cronbach's Alpha	Description
1	Talent Management	0,674	Valid
2	Employee Ambidexterity	0,838	Valid
3	Employee Performance	0,616	Valid

the aspect it measures, and distinct from other variables. Henseler, Ringle, & Sarstedt (2015) stated that in SmartPLS, the discriminant validity test employs the Fornell-Larcker criterion. The model is considered to have discriminant validity if the square root of the AVE for each construct is higher than the correlation between that construct and the other components in the model (Fornell and Larcker, 1981, as reported in Wong, 2013).

According to the findings of this study's discriminant validity test, every variable is legitimate and satisfies the demands for discriminant validity settled by the Fornell-Larcker criterion (see Table 3). The table indicates that each construct square root of the AVE (Fornell-Larcker Criterion) is greater than

its correlation with other variables. For instance, The AVE value of talent management is 0.726, resulting in a square root value of 0.821. This value of 0.821 is greater than its correlation with other constructs, which are 0.789 with employee ambidexterity and 0.554 with employee performance.

4.5 F-square

Researchers must use the effect size or f-square to measure the durability of the influence between variables when analyzing the structural model (inner model) (Wong, 2013). According to Sarstedt et al. (2017), Only endogenous constructs with reflective indicators can use the f-square values of 0.02

Table 3. Fornell-Larcker Criterion Values for Discriminant Validity Testing

No.		Talent Management	Employee Ambidexterity	Employee Performance	Description
1.	Talent Management	0,821	0,789	0,554	Valid
2.	Employee Ambidexterity		0,915		Valid
3.	Employee Performance		0,572	0,785	Valid

Table 4. Construct Reliability Test

No.	Variables	Composite Reliability	Cronbach's Alpha	Description
1	Talent Management	0,925	0,903	Reliabel
2	Eemployee Ambidexterity	0,912	0,806	Reliabel
3	Employee Performance	0,941	0,930	Reliabel

4.4 Construct Reliability test

After conducting the validity tests, the researchers proceeded with reliability tests. The reliability assessment involved two key measurements: composite reliability and Cronbach's Alpha. Sarstedt, Ringle, & Hair (2017) said that composite reliability values between 0.6 and 0.7 are considered indicative of good reliability, while the desirable Cronbach's Alpha value is greater than 0.7 (Ghozali & Latan, 2015).

The composite reliability values for talent management (0.925 > 0.7), employee ambidexterity (0.912 > 0.7), and employee performance (0.941 > 0.7) all surpass 0.7, as seen in Table 4. Employee performance (0.930 > 0.7), employee ambidexterity (0.806 > 0.7), and talent management (0.903 > 0.7) all have Cronbach's Alpha values that are higher than 0.7. These findings demonstrate that all variables have good reliability and are deemed reliable.

(small), 0.15 (medium), and 0.35 (large).

With a value of 1.674, which is noticeably higher than 0.35, table 5 shows that the impact of talent management on employee ambidexterity has a big effect size. Similarly, the effect of talent management on employee performance has a small effect size of 0.043, falling within the 0.02-0.15 range. The effect of employee ambidexterity on employee performance also shows a small effect size of 0.076, which is within the 0.02-0.15 range.

Table 5. F-Square Values for Structural Model Analysis

No.		TM	EA	EP
1	Talent Management		1,674	0,043
2	Employee Ambidexterity			0,076
3	Employee Performance			

4.6 R-squared and Adjusted R-square

R-square is a technique used to evaluate how well exogenous factors may explain endogenous variables. Sarstedt et al. (2017) state that a model is deemed strong if its R-square value is 0.75, moderate if it is 0.50, and weak if it is 0.25. According to Ghazali & Latan (2015) offers the following standards: a strong model is determined by an R-squared value of 0.67, a moderate model by 0.33, and a weak model by 0.19.

Table 6. R-Square and Adjusted R-Square Values for Structural Model Analysis

No.		R-square	Adjusted R-square
1	Employee Ambidexterity	0,622	0,620
2	Employee Performance	0,355	0,347

Conversely, the R-squared number that takes the standard error into consideration is called Adjusted R-square. When evaluating the degree to which the exogenous variables assess the endogenous variable, the adjusted R-square offers a more accurate representation than the R-square. Table 6 displays the R-squared and Adjusted R-squared values.

Based on the findings in Table 6, the influence of talent management on employee ambidexterity is moderate, with an r-square value of 0.622 and an adjusted r-square value of 0.620. Moreover, the influence of talent management on employee performance is moderate, with an r-square value of 0.355 and an adjusted r-square value of 0.347. This means that talent management influences employee performance by 34.7%, which is higher than the 33%.

4.7 Path Analysis for Hypothesis Testing

The next stage is to do a bootstrapping analysis after the outer model and the inner model have been analyzed and found to meet all requirements. Bootstrapping is a non-parametric procedure employed to evaluate the significance of hypothesis testing within partial

least squares structural equation modeling (PLS-SEM). This method facilitates researchers to test the statistical significance of both direct and indirect effects within the PLS-SEM framework. The results of the bootstrapping analysis in this study are presented in Figure 1. From the path analysis can be known that hypotheses are based on direct effect (table 7) and indirect effect (table 8).

Evaluation of an exogenous variable's immediate impact on an endogenous variable is referred to as a direct effect. According to the research paradigm, the direct effect in this study are as follows: the direct effect of talent management on employee performance; employee ambidexterity on employee performance; and employee ambidexterity on employee performance. Path coefficients are another name for these direct effects in PLS-SEM research. To evaluate the hypotheses and assess the strength of the associations, the path coefficients between variables are also measured (Sarstedt, Ringle, & Hair, 2017).

It is clear from Table 7's path coefficient values that there are noteworthy correlations between the variables' direct effects. A t-statistic of $2.104 > 1.96$ and p-value of $0.036 < 0.05$ show that talent management directly and significantly affects employee performance. Thus, **hypothesis 1 (H1) is accepted**. Similarly, talent management significantly influences employee ambidexterity, as evidenced by a t-statistic of $21.826 > 1.96$ and an p-value of $0.000 < 0.05$, thus confirming **hypothesis 2 (H2) is accepted**. Additionally, employee ambidexterity significantly affects employee performance, supported by a t-statistic of $3.282 > 1.96$ a p-value of $0.001 < 0.05$, thereby **hypothesis 3 (H3) is accepted**. These results underscore the importance of talent management and employee ambidexterity in driving employee performance within the structural model.

Indirect Effects in PLS-SEM Analysis Indirect effects refer to the influence of an exogenous variable on an endogenous variable through an intermediary endogenous variable.

For example, employee ambidexterity mediates the indirect relationship between talent management and employee performance in this study. Table 8 shows that employee

performance. The results show that talent management has all major direct impact on worker performance. Improved talent management practices are significantly

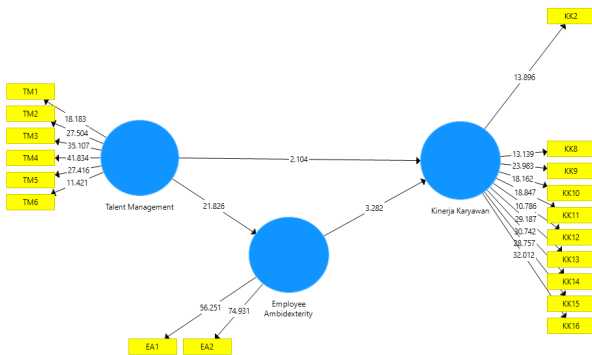
Table 8. Indirect effect between variables from path analysis

No.		Original Sample	Sample Mean	Standard Deviation	T-Statistics (>1,96)	P-Values (<0,05)	Description
1	TM -> EA -> EP	0,283	0,288	0,089	3,171	0,002	H4 accepted

ambidexterity mediates the indirect influence of talent management on employee performance, with a t-statistic value of 3.171, larger than 1.96, and a p-value of 0.002, less than 0.05. Therefore, it may be concluded that **hypothesis 4 (H4) is accepted**, demonstrating that the statistically significant indirect influence of talent management on employee performance is mediated by employee ambidexterity.

associated with better employee performance at Universitas Terbuka. Employees considered talented at Universitas Terbuka have numerous opportunities for career development. The talent management system, including development activities conducted by Universitas Terbuka, provides feedback on individual employee growth. This indicates that effective talent management at Universitas Terbuka leads to enhanced employee performance.

Figure 1. Bootstrapping Results for Hypothesis Testing



4.8 Discussion

This study looks at how employee ambidexterity mediates the direct and indirect effects of talent management on employee

The findings of this study align with previous research conducted by Sopiah, Kurniawan, Nora & Narmaditya (2020); Alzyadat, Mohamad, & Padlee (2024), which assert that effective talent management is considered a crucial factor for organizations to achieve long-term competitive advantage.

The results of the study show that employee ambidexterity is significantly impacted directly by talent management. Higher employee ambidexterity is substantially correlated with better talent management practices. This result aligns with previous studies that have also identified a significant relationship between talent management

Table 7. Direct effect between variables from path analysis

No.		Original Sample	Sample Mean	Standard Deviation	T-Statistics (>1,96)	P-Values (<0,05)	Description
1	TM -> EP	0,270	0,277	0,129	2,104	0,036	H1 accepted
2	TM -> EA	0,789	0,787	0,036	21,826	0,000	H2 accepted
3	EA -> EP	0,359	0,365	0,109	3,282	0,001	H3 accepted

processes (TM) and employee ambidexterity (EA) (Hassan et al., 2022; Latukha et al., 2022). Talent management practices, including the identification of key roles, competency training, development, and reward management, can be integrated into a learning culture (Mohammed, Hafeez-Baig, Gururajan, & Hafeez Baig, 2020). By focusing on employee development, TM initiatives help create a flexible workforce capable of effectively addressing new challenges (Brix, 2019; Caniëls & Veld, 2019).

This study also demonstrates that the direct effect of employee ambidexterity on employee performance is quite significant. This implies that ambidextrous behavior among employees will enhance employee performance at Universitas Terbuka. The findings of this study align with previous research conducted by Kobarg, Wollersheim, Welpel, & Sporrle (2017).

Additionally, there are notable outcomes from the indirect impact of talent management on employee performance through employee ambidexterity. This indicates that effective talent management practices and employee ambidexterity significantly enhance employee performance. The best methods for putting management choices that improve employee performance into practice are talent management and employee ambidexterity.

5. Closing

5.1 Conclusion

The study underscores the significant impact of talent management on employee performance, both directly and indirectly through employee ambidexterity, at Universitas Terbuka. Improved talent management practices are strongly associated with enhanced employee performance, providing numerous opportunities for career development and feedback on individual growth. These findings align with previous research, affirming that effective talent management is crucial for achieving long-term competitive advantage. Additionally, the study highlights the significant direct effect of talent management on employee

ambidexterity, which in turn positively influences employee performance. Overall, the study demonstrates that strategic talent management and fostering ambidextrous behavior among employees is key to enhancing employee performance and achieving organizational success.

5.2 Suggestion

The researchers measured talent management practices based on individual employee perceptions. This method recognizes that there might be discrepancies between how employees view talent management procedures and what the company expects. Delery (1998) noted that despite the benefits of aligning both perspectives, researchers often fail to capture the potential for substitution and synergistic effects. Future research could consider evaluating talent management practices in influencing employee performance from both individual employee and organizational perspectives simultaneously.

The researchers suggest incorporating other antecedents that could influence the relationship between talent management and employee performance, such as employee engagement (Jyoti & Rani, 2014), leadership (Singh & Sabharwal, 2020), etc.

Bibliography

- Akbar, H., & Anas, M. (2024). Talent management and employee ambidexterity: the moderating role of learning organization. *The Learning Organization*, Volume 3, Issue 4 (January, 2024) PP 484-507.
- Akbar, M. I. (2020). Indonesia Butuh Manajemen Talenta. Agustus 18, 2024. <https://republika.co.id/berita/q4ga2i282/indonesia-butuh-manajemen-talenta>
- Al Jawali, H., Darwish, T. K., Scullion, H., & Haak-Saheem, W. (2022). Talent management in the public sector: Empirical evidence from the emerging economy of Dubai. *The International Journal of Human Resource*

- Management Volume 33, Issue 11, (November. 2021) PP 2256–2284, doi: 10.1080/ 09585192.2021.2001764.
- Alzyadat, A. M. A., Mohamad, Z., & Padlee, S. F. Impact of Talent Management on Human Capital Performance: Moderating Role of Organizational Commitment.
- Ashton, C., & Morton, L. (2005). Managing talent for competitive advantage: Taking a systemic approach to talent management. *Strategic HR Review* Volume 4, Issue 5, (July. 2005) PP 28-31. doi:10.1108/14754390580000819
- Boudreau, J. W., & Ramstad, P. M. (2007). *Beyond HR: The new science of human capital*. Boston: Harvard Business Press.
- Brix, J. (2019). Ambidexterity and organizational learning: Revisiting and reconnecting the literature. *The Learning Organization* Volume 26, Issue 4 (May. 2019) PP 337–351, doi: 10.1108/tlo-02-2019-0034.
- Caniëls, M. C., & Veld, M. (2019). Employee ambidexterity, high performance work systems and innovative work behaviour: How much balance do we need?. *The international journal of human resource management* Volume 30, Issue 4 (August. 2016) PP 565-585.
- Cappelli, P. (2008). Talent management for the twenty-first century. *Harvard Business Review* Volume 86, Issue 3, PP 74-81.
- Collings, D. G., & Mellahi, K. (2009). Strategic talent management: A review and research agenda. *Human Resource Management Review* Volume 19, Issue 4 (December. 2009) PP 304–313, doi: 10.1016/j.hrmr.2009.04.001.
- Creelman, D. (2004). Return on investment in talent management: Measures you can put to work right now. *Human Capital Institute* Volume 2121, Issue 01.
- Creswell, J.W. (1994). *Research Design: Qualitative & Quantitative Approaches*, SAGE Publications, London
- Dhanalakshmi, R. V., & Gurunathan, K. B. (2014). A study on talent management as a strategy to influence employee engagement and its effect on the organizational outcome. *International Journal of Business and Administration Research Review* Volume 2, Issue 4 (January-March. 2014) PP 183-186
- Farndale, E., Scullion, H., & Sparrow, P. (2010). The role of the corporate HR function in global talent management. *Journal of World Business* Volume 45, Issue 2 (april.2010) PP 161–168.
- Festing, M., & Schäfer, L. (2022). Talent and talent management in ambidextrous organizations: Framework and research agenda addressing the challenges of complexity and dynamism. *Talent management: A decade of developments*, (September. 2022) PP 147-176.
- Harahap, L. K., & Pd, M. (2020). Analisis SEM (Structural Equation Modelling) dengan SMARTPLS (partial least square). *Fakultas Sains Dan Teknologi Uin Walisongo Semarang*, 1(1), 1-11.
- Hardy, M. A. (2004). *Handbook of data analysis*, Sage Publication, London
- Hassan, Y., Pandey, J., Varkkey, B., Sethi, D., & Scullion, H. (2022). Understanding talent management for sports organizations- Evidence from an emerging country. *The International Journal of human resource management* Volume 33, Issue 11 (September.2022) PP 2192-2225.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science* Volume 43 (August. 2014) PP 115-135.
- Hwang, H., Malhotra, N. K., Kim, Y., Tomiuk, M. A., & Hong, S. (2018). A comparative study on parameter recovery of three

- approaches to structural equation modeling. *Journal of Marketing research* Volume 47, Issue 4 (October. 2010) PP 699-712.
- Iles, P., Chuai, X. and Preece, D. (2010). Talent management and HRM in multinational companies in Beijing: Definitions, differences and drivers. *Journal of World Business* Volume 45, Issue 2 (April. 2010) PP 179-189.
doi:10.1016/j.jwb.2009.09.014.
- Ingram, T., & Glod, W. (2016). Talent management in healthcare organizations-qualitative research results. *Procedia Economics and Finance* Volume 39 (2016) PP 339-346.
[https://doi.org/10.1016/S2212-5671\(16\)30333-1](https://doi.org/10.1016/S2212-5671(16)30333-1)
- Irmawaty, I., & Hamdani, M. (2016). Pengaruh Talent Management terhadap Pengembangan Karir Pegawai di Universitas Terbuka. *Jurnal Organisasi dan Manajemen (JOM)* Volume 12, Issue 2 (September. 2016) PP 97-104.
- Junni, P., Sarala, R. M., Tarba, S. Y., Liu, Y., & Cooper, C. L. (2015). Guest editors' introduction: The role of human resources and organizational factors in ambidexterity. *Human Resource Management* Volume 54, Issue S1 (December. 2015) PP s1-s28.
- Ghozali, I., & Latan, H. (2015). *Partial Least Squares: Konsep, Teknik, dan Aplikasi Menggunakan Program Smartpls 3.0.* (2nd ed.), Semarang, Universitas Diponegoro.
- Gibson, C. B., & Birkinshaw, J. (2004). The antecedents, consequences, and mediating role of organizational ambidexterity. *Academy of management Journal* Volume 47, Issue 2 (November. 2017) PP 209-226.
- Karsiwan, W., Fajartriani, T., Badar, D. S., & Takdir, M. (2021, December). Peran Kepemimpinan Dalam Meningkatkan Daya Saing Perguruan Tinggi Melalui Implementasi Balanced Scorecard. In *Journal Fascho in Education Conference- Proceedings Volume 2, Issue 1.*
- Keller, T., & Weibler, J. (2015). What it takes and costs to be an ambidextrous manager: Linking leadership and cognitive strain to balancing exploration and exploitation. *Journal of Leadership & Organizational Studies* Volume 22, Issue 1 (February. 2014) PP 54-71.
- Kobarg, S., Wollersheim, J., Welpel, I. M., & Spoerrle, M. (2017). Individual ambidexterity and performance in the public sector: A multilevel analysis. *International Public Management Journal* Volume 20, Issue 2 (February. 2016) PP 226-260.
- Latukha, M., Michailova, S., Selivanovskikh, L., & Kozachuk, T. (2022). Talent management, organizational ambidexterity, and firm performance: Evidence from Russian firms. *Thunderbird international business review* Volume 64, Issue 5 (January. 2022) PP 379-392.
- Lewis, R. E., & Heckman, R. J. (2006). Talent management: A critical review. *Human resource management review* Volume 16, Issue 2 (June. 2006) PP 139-154.
- Lin, H. E., & McDonough III, E. F. (2011). Investigating the role of leadership and organizational culture in fostering innovation ambidexterity. *IEEE Transactions on engineering management* Volume 58, Issue 3 (August. 2011) PP 497-509.
- March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization science* Volume 2, Issue 1 (February. 1991) PP 71-87.
- Madurani, D. N., & Pasaribu, M. (2022, March). The effect of talent management on employee retention mediated by organizational justice and talent perception congruence. In *7th Sriwijaya Economics, Accounting, and Business Conference (SEABC 2021)* (March. 2022) PP 228-246. Atlantis Press.

- Malik, A., Pereira, V., & Tarba, S. (2019). The role of HRM practices in product development: Contextual ambidexterity in a US MNC's subsidiary in India. *The International Journal of Human Resource Management* Volume 30, Issue 4 (May. 2017) PP 536-564.
- Mensah, J. K., Bawole, J. N., & Wedchayanon, N. (2016). Unlocking the "black box" in the talent management employee performance relationship: evidence from Ghana. *Management Research Review* Volume 39, Issue 12 (December. 2016) PP 1546-1566.
- Mohammed, A. A., Baig, A. H., & Gururajan, R. (2020). An examination of talent management processes in Australian higher education. *International Journal of Productivity and Performance Management* Volume 69, Issue 6 (June. 2016) PP 1271-1299.
- Pradhan, R. K., & Jena, L. K. (2017). Employee performance at workplace: Conceptual model and empirical validation. *Business perspectives and research* Volume 5, Issue 1 (December. 2016) PP 69-85.
- Redford, K. (2005). Shedding light on talent tactics. *Personnel Today* Volume 26, PP 20-22.
- Ringle, C. M., Wende, S., and Becker, J.-M. (2015). "SmartPLS 3." Boenningstedt: SmartPLS GmbH.
<http://www.smartpls.com>
- Rogelberg, S. G. (Ed.). (2007). *Encyclopedia of industrial and organizational psychology* Volume 1 (June. 2024) Sage. doi: 10.4135/9781483386874.n4.
- Rohmah, Khajjar. (2022). Tantangan Perguruan Tinggi Hadapi Era Revolusi Industri dan Transformasi Digital. Agustus 18, 2024. Diakses dari <https://diskominfo.kaltimprov.go.id/pendidikan/tantangan-perguruan-tinggi-hadapi-era-revolusi-industri-dan-transformasi-digital>
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial least squares structural equation modeling. *Handbook of market research*, 26(1), 1-40. DOI: 10.1007/978-3-319-05542-8_15-1.
- Scullion, H., Collings, D. G., & Caligiuri, P. (2010). Global talent management. *Journal of World Business* Volume 45, Issue 2, PP 105-108.
- Singh, A. S., & Masuku, M. B. (2014). Sampling techniques & determination of sample size in applied statistics research: An overview. *International Journal of economics, commerce and management* Volume 2, Issue 11 (November. 2014) PP 1-22.
- Sistem Informasi Pegawai UT. (n.d). Daftar Pegawai Berdasarkan Unit. Universitas Terbuka. Agustus 21, 2024. Diakses dari http://simpeg.ut.ac.id/kepegawaian/laporan/daftar_unit.
- Soper, D.S. (2021). A-priori Sample Size Calculator for Structural Equation Models [Software]. Available from <https://www.danielsoper.com/statcalc>
- Sopiah, S., Kurniawan, D. T., Nora, E., & Narmaditya, B. S. (2020). Does talent management affect employee performance?: The moderating role of work engagement. *The Journal of Asian Finance, Economics and Business* Volume 7, Issue 7 (July. 2020) PP 335-341.
- Stahl, G., Björkman, I., Farndale, E., Morris, S. S., Paauwe, J., Stiles, P., ... & Wright, P. (2012). Six principles of effective global talent management. *Sloan Management Review* Volume 53, Issue 2, PP 25-42.
- Tash, M. S., Ali, E. N., & Ahmadzadeh, M. (2016). The effects of talent management on employees performance in oil jam petrochemical complex (Oil JPC): The mediating role of job satisfaction. *International Journal of Economics and Finance* Volume 8, Issue 6 (May. 2016) PP 1-5.

Universitas Terbuka. (2023). Laporan Kinerja Universitas Terbuka Tahun 2023. Universitas Terbuka. Agustus 20, 2024. <https://www.ut.ac.id/wp-content/uploads/2024/03/Laporan-Kinerja-Universitas-Terbuka-Tahun-2023.pdf>.

Universitas Terbuka. (2020). UT Terdepan dalam Inovasi Pendidikan Jarak Jauh. Agustus 21, 2024. Diakses dari <https://www.ut.ac.id/berita/2020/07/ut-terdepan-dalam-inovasi-pendidikan-jarak-jauh/>.

Vecchi, A., Della Piana, B., Feola, R., & Crudele, C. (2021). Talent management processes and outcomes in a virtual organization. *Business Process Management Journal* Volume 27, Issue 7 (October. 2021) PP 1937-1965.

Willy. (2019). Pendidikan Tinggi di Era Digital dan Revolusi Industri 4.0. Agustus 07, 2019. <https://sis.binus.ac.id/2019/08/07/pendidikan-tinggi-di-era-digital-dan-revolusi-industri-4-0/>

Wong, K. K. K. (2011). Book review: Handbook of partial least squares: Concepts, methods and applications. *International Journal of Business Science and Applied Management* Volume 6, Issue 2, PP 52-54.

Wong, K. K. K. (2013). Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing bulletin* Volume 24, Issue 1 (January. 2013) PP 1-32.

Zhang, J. A., Chen, G., O'Kane, C., Xiang, S., & Wang, J. (2022). How employee exploration and exploitation affect task performance: The influence of organizational competitive orientation. *The International Journal of Human Resource Management* Volume 33, Issue 5 (April. 2020) PP 930-964.