



Strategic learning leadership: Unravelling the relationship between talent management and organizational leadership competencies

Tonda Priyanto, Universitas Gadjah Mada, Indonesia
Agus Heruanto Hadna, Universitas Gadjah Mada, Indonesia
Indrayanti, Universitas Gadjah Mada, Indonesia
Muhadjir Darwin, Universitas Gadjah Mada, Indonesia

*Email for Correspondence: tonda.priyanto@mail.ugm.ac.id

ABSTRACT

Keywords:

Indonesian State-Owned Enterprises

Organizational leadership competencies

Strategic learning leadership

Talent management

In today's dynamic economic environment, developing leadership competencies is vital for organizational success. Despite the growing recognition of the importance of leadership development, there is a notable research gap in understanding how specific talent management strategies impact the enhancement of leadership competencies. This study investigates how talent management (TM) and strategic learning leadership (SLL) contribute to cultivating organizational leadership competencies (OLCs) in Indonesian state-owned companies. The study utilised a quantitative study with a random convenient sampling method using Google Forms in Indonesian state-owned companies. Data were collected from across 25 state-owned companies, with a total of 605 respondents participating. Statistical analysis was conducted using Structural Equation Modeling with Partial Least Squares (SEM-PLS) to test the hypotheses. The findings indicate that SLL significantly mediates the relationship between TM and OLCs, enhancing the impact from 17.2% to 58.5%, with SLL showing a stronger influence on OLCs compared to TM. Overall, these factors account for 55.2% of the impact on OLCs. This study contributes to the existing literature by highlighting the critical role of strategic learning leadership in enhancing leadership competencies, offering valuable insights for organizations aiming to develop effective leadership through strategic approaches.

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.

INTRODUCTION

In today's rapidly evolving economic landscape, developing organizational leadership competencies is essential for maintaining a competitive edge and ensuring long-term success. This imperative is particularly critical within Indonesian State-Owned Enterprises (SOEs), where the Ministerial Decree guides leadership development—according to a 2023 survey of over 1,000 learning and development professionals, Harvard Business Publishing Corporate Learning emphasized the importance of developing leaders who are ready for any challenge (Harvard Business Publishing Corporate Learning, 2023). Consequently, organizations must nurture both competent management and skilled leadership (Northouse, 2019). A key strategy for cultivating the necessary leadership skills is implementing effective talent management practices, which are mandatory for SOEs in Indonesia.

Despite its strategic importance, talent management remains a concept with varying definitions among scholars. Collings and Mellahi (2009) and Farndale et al. (2019) define strategic talent management as the systematic identification of critical positions that contribute to an organization's sustainable competitive advantage, the development of a talent pool of high-potential and high-performing incumbents, and the creation of a differentiated human resource architecture to ensure their retention and commitment. In contrast, other researchers, such as Al Aina and Atan (2020) and Baharin et al. (2023), simplify talent management into four key components: Talent Attraction (TA), Talent Development (TD), Talent Retention (TR), and Career Management (CM). Despite these differences, the underlying consensus is that talent management is integral in cultivating the leadership competencies needed to drive organizational success.

Within an organizational context, leadership is commonly defined as the process by which an individual influences a group to achieve common objectives (Northouse, 2019; Yukl & Gardner III, 2020). Key leadership competencies include emotional intelligence, social intelligence, and adaptability to change (Yukl, 2013). These competencies are vital at all levels of an organization, requiring distinct skills for different leadership roles (Mumford et al., 2007). Therefore, effective leadership involves a complex blend of self-leadership, guiding others, and steering the organization toward its strategic objectives (Koohang et al., 2017).

Attracting and developing talent, particularly for future leadership roles, is critical for organizational success. Talent Attraction (TA) focuses on identifying individuals with the potential to become future leaders. At the same time, Talent Development (TD) enhances their abilities and competencies through structured programs, such as training, coaching, and mentoring, to adapt to technological and business changes (Garavan et al., 2012; Isfahani & Boustani, 2014). Talent Retention (TR) strategies are employed to sustain organizational growth by keeping valuable employees engaged and motivated through intrinsic and extrinsic incentives (Mujtaba & Mubarik, 2022; Wolor et al., 2020). Career Management (CM) involves planning succession and providing opportunities for talented individuals to take on more responsibilities, thus preparing them for future leadership roles (Lyria et al., 2017).

This study proposed five hypotheses to explore the phenomena regarding the impact of talent management on organizational leadership competencies as shown in figure 1. Research has shown that talent management positively impacts various leadership competencies and organizational performance (Hamzah, 2017; Sharma & Bhatnagar, 2009; Battisti et al., 2023; Byukusenge et al., 2021). However, there is a gap in understanding how talent management specifically enhances organizational leadership competencies, leading to the **first hypothesis** that talent management positively influences these competencies.

Further, talent management activities are proposed to directly impact the development of SLL, suggesting that these activities help create learning organizations that drive organizational growth and success (Thunnissen et al., 2013). This leads to the hypothesis that talent management positively impacts SLL (Hypothesis #2).

In accordance with the principles of SLL, leaders who model, promote, and facilitate learning play a crucial role in developing leadership competencies within their organizations. Leadership development, therefore, involves managerial approaches such as mentoring, coaching, and providing growth opportunities that enhance subordinates' abilities and career progression (Yukl & Gardner III, 2020). This leads to the hypothesis that SLL positively influences organizational leadership competencies (Hypothesis #3).

Moreover, research has shown that leadership coaching and mentoring can significantly boost leader performance by improving emotional intelligence and leadership self-efficacy (Halliwell et al., 2022; Yukl & Gardner III, 2020). Studies have also indicated that SLL mediates the relationship between talent management and organizational outcomes, such as knowledge transfer and performance, further supporting the importance of SLL in enhancing leadership competencies (Kouichi et al., 2023; Shah et al., 2020; Tarigan et al., 2018). Consequently, the hypothesis is proposed that SLL mediates the influence of talent management on organizational leadership competencies (Hypothesis #4).

Finally, when leaders constantly desire to learn, they inspire their teams to do the same. Leaders who serve as role models facilitate individual, team, and organizational learning, enhancing leadership competencies (Rupčić, 2020; Xiao et al., 2024). This leads to the hypothesis that SLL moderates the influence of talent management on organizational leadership competencies, enhancing its impact (Hypothesis #5).

Numerous companies have implemented talent management and developed their leaders to embody SLL principles to maintain and enhance leadership capacities and competencies (PT Perkebunan Nusantara III (Persero), 2022; PT Telkom Indonesia, 2023). However, research on the combined impact of strategic leadership for learning and talent management in influencing organizational leadership competencies still needs to be completed. This empirical study focused on Indonesian SOEs and aims to fill this gap by examining the role of SLL as a mediator in the relationship between talent management and organizational leadership competencies. The insights from this study offer valuable guidance for organizations seeking to achieve sustainable success in a dynamic business environment by developing strategic learning leadership at all levels.

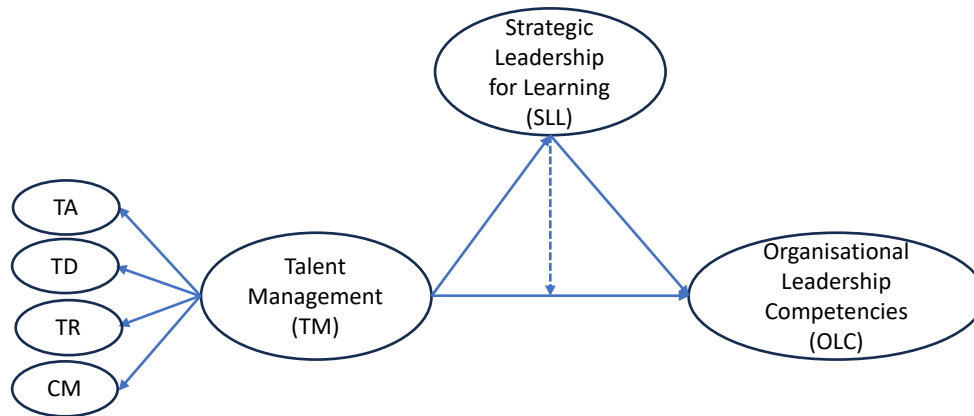


Figure 1. Researcher's Model Design

METHOD

This research adopts a quantitative methodology to facilitate generalization, minimize bias, and allow for the statistical analysis of numerical data (Creswell & Creswell, 2018). The study aims to understand the impact of talent management and strategic leadership for learning on organizational leadership competencies in Indonesian State-Owned Enterprises (SOEs).

A non-probability sampling method was employed for this study precisely because it allowed for efficient data collection within the constraints of targeting a large and dispersed population. The rationale for choosing non-probability sampling lies in the study's focus on system-based insights rather than general population inferences. Given the hierarchical structure of SOEs, where the Minister of SOE appoints executives, the survey was designed to exclude executives to avoid potential biases related to top-level decision-making authority. The survey focused on employees at various levels below the executive tier to gain a comprehensive understanding of leadership dynamics across the broader organization.

The target population comprised employees from 32 SOEs, representing an estimated population of over 20,000. The survey was distributed online through designated contacts within these SOEs. Participation was voluntary and anonymous, with written consent obtained after fully disclosing the study's purpose and scope.

Ethical considerations were strictly adhered to throughout the research process. Informed consent was obtained from all participants, ensuring they were fully aware of the study's objectives and their rights as participants. Responses were anonymized, and data was securely stored, maintaining confidentiality. The study complied with ethical standards, ensuring no harm to participants and protecting their privacy.

The study assessed three main variables: organizational leadership competencies, talent management, and strategic learning leadership (SLL). The questionnaire used for this study is provided in Appendix 1.

Table 1. List of Questionnaire

Organizational Leadership Competencies (adapted from Koohang et al., 2017)	
OLC1. Para pemimpin satu tingkat diatas anda memperlihatkan integritas, kejujuran dan beretika	OLC1. Leaders one level above you demonstrate integrity, honesty, and ethics.
OLC2 Para pemimpin satu tingkat diatas anda memahami keterbatasan dan kekuatan dirinya sendiri.	OLC2 Leaders one level above you understands their own limitations and strengths.
OLC3. Para pemimpin satu tingkat diatas anda meningkatkan kapasitasnya untuk terus belajar hal yang baru, termasuk belajar dari kesalahan diri sendiri/orang lain dan keberhasilan orang lain.	OLC3. Leaders one level above you increase their capacity for continuous learning, including learning from their own/ others's mistakes and others' successes.
OLC4. Para pemimpin satu tingkat diatas anda mengelola manajemen karir dirinya secara efektif dengan mencari umpan balik/kritik/ide, mengikuti mentoring, coaching, komunitas profesional lainnya serta menjaga hubungan baik dengan atasan.	OLC4. Leaders one level above you manage their own career management effectively by seeking feedback/criticism/ideas, participating in mentoring, coaching, other professional communities and maintaining good relationships with superiors.
OLC5. Para pemimpin satu tingkat diatas anda menginspirasi mengarahkan dan memotivasi orang lain."OLC5. Para pemimpin satu tingkat	OLC5. Leaders one level above you inspire direct and motivate others. 'OLC5. Leaders one level above you inspire direct and motivate others.

Strategic learning leadership: Unravelling the relationship between talent management and organizational leadership competencies

diatas anda menginspirasi mengarahkan dan memotivasi orang lain."	
OLC6. Para pemimpin satu tingkat diatas anda melakukan komunikasi yang efektif dengan semua lapisan di internal maupun di luar perusahaan."	OLC6. Leaders one level above you communicate effectively with all levels within and outside the company.
OLC7. Para pimpinan satu tingkat diatas anda mendengar dengan aktif staff-nya berbagi pengalaman, pengetahuan dan melakukan mentoring atau coaching."	OLC7. Leaders one level above you actively listen to their staff share experiences, knowledge and mentor or coach.
OLC 8 Para pemimpin satu tingkat diatas anda memberdayakan staf untuk meningkatkan kemampuan membuat keputusan	OLC8. Leaders one level above you empower staff to improve their decision-making skills.
OLC9. Para pemimpin satu tingkat diatas anda membangun mempertahankan & mengembangkan hubungan interpersonal	OLC9. Leaders one level above you build maintain & develop interpersonal relationships.
OLC10. Para pemimpin satu tingkat diatas anda bertindak dengan respek & adil kepada semua orang berlatar belakang beda baik budaya, jenis kelamin, umur, pendidikan dan sudut pandang agar dapat bekerja secara efektif.	OLC10. Leaders one level above you act with respect & fairness to all people of different cultures, genders, ages, education and viewpoints in order to work effectively.'
OLC11. Para pemimpin satu tingkat diatas anda mempunyai rasa memiliki dan menangani langsung proses perubahan digitalisasi & transformasi digital perusahaan. "	OLC11. Leaders one level above you take ownership of and directly manage the company's digitalisation & digital transformation change process.
OLC12. Para pemimpin satu tingkat diatas Anda berkemampuan mempengaruhi orang lain untuk mencapai visi, misi & tujuan yang sama	OLC12. Leaders one level above you have the ability to influence others to achieve the same vision, mission & goals.
OLC13. Para pemimpin satu tingkat diatas anda cepat bergerak (agile) dalam menghadapi perubahan dari dalam dan luar organisasi yang cepat untuk mencapai keberhasilan perusahaan.	OLC13. Leaders one level above you are agile in dealing with rapid changes inside and outside the organisation to achieve company success.
OLC14. Para pemimpin satu tingkat diatas Anda inovatif dalam pengelolaan perusahaan (pelanggan, operasi, bisnis proses, dan sumber daya manusia) serta produk perusahaan.	OLC14. Leaders one level above you are innovative in the management of the company (customers, operations, business processes, and human resources) and the company's products.

Talent Management (Adapted from Al Aina & Atan, 2020b; Jayaraman et al., 2018)

TA1. Kondisi kerja perusahaan yang baik dan penggajian yang adil telah membuat para talenta tertarik berkerja dan berkarya.	TA1. The company's good working conditions and fair pay have attracted talents to work and create.'
TA2. Perusahaan mempunyai program pelatihan, pengembangan kapasitas & kompetensi pegawai dan perkembangan karirnya.	TA2. The company has training programmes to develop the capacity & competence of employees and their career development.'
TA3. Perusahaan juga mencari talent dari sumber di luar perusahaan.	TA3. The company also seeks talents from sources outside the company.
TA4. Perusahaan menjaga keseimbangan kehidupan kerja (work life balance) & fasilitas jejaring sosial dan merupakan faktor motivasi bagi karyawan.	TA4. The company maintains work-life balance & social networking facilities and is a motivational factor for employees.
TA5. Para pemimpin memastikan iklim dan budaya organisasi yang baik untuk menarik talenta yang tepat."	TA5. Leaders ensure a good organisational climate and culture to attract the right talent.'
TD1. Perusahaan melakukan asesmen untuk menentukan kebutuhan pengembangan para pegawai.	TD1. The company conducts assessments to determine the development needs of employees.'
TD2. Perusahaan memberikan pelatihan-pelatihan peningkatan kompetensi untuk mendukung kinerja	TD2. The company provides continuous competency enhancement trainings to support company performance for employees.'

perusahaan secara terus menerus bagi para karyawan.	
TD3. Perusahaan membuat program pengembangan dan pelatihan untuk mengantisipasi bisnis kedepan secara berkesinambungan.	TD3. The company establishes development and training programmes to anticipate future business on an ongoing basis.
TD4. Perusahaan memberikan program & inisiatif yang menguatkan pengembangan pegawai.	TD4. The company provides programmes & initiatives that strengthen employee development.'
TD5. Perusahaan membuat program pengembangan & pelatihan talent yang disesuaikan dengan jenjang karirnya."	TD5. The company creates talent development & training programmes that are tailored to their career path.'
TD6 Perusahaan memberikan penugasan sementara atau mutasi pegawai ke tempat/bidang yang baru baginya untuk penguatan dan perluasan pengalaman pegawai tersebut.	TD6 The company provides temporary assignments or transfers employees to new places / fields for the strengthening and expansion of the employee's experience.
TR1. Perusahaan memiliki sistem remunerasi yang kompetitif dibanding organisasi/perusahaan lain pada industri yang sama merupakan faktor motivasi karyawan.	TR1. The company has a competitive remuneration system compared to other organisations/companies in the same industry is a motivating factor for employees.'
TR2. Perusahaan memberikan penghargaan non finansial	TR2. The company provides non-financial rewards.
TR3. Perusahaan memiliki jam kerja yang fleksibel untuk memotivasi karyawan.	TR3. The company has flexible working hours to motivate employees.'
TR4. Perusahaan mendorong dan mendukung tim building atau social network diantara pegawai.	TR4. The company encourages and supports team building or social networking among employees.'
TR5. Perusahaan memiliki kebijakan rekrutmen internal yang meningkatkan loyalitas dan moral karyawan.	TR5. The company has an internal recruitment policy that increases employee loyalty and morale.
CM1. Perusahaan membangun jalur karir (carrier path) pada setiap rumpun pekerjaan pada semua direktorat.	CM1. The company builds carrier paths for each job family in all directorates.'
CM2. erusahaan percaya perencanaan karir memfasilitasi ekspansi dan pertumbuhan perusahaan.	CM2. The company believes career planning facilitates company expansion and growth.'
CM3. Perusahaan merencanakan pertumbuhan dan perkembangan karir karyawan.	CM3. The company plans for employees' career growth and development
CM4. Talent yang teridentifikasi mempunyai peluang untuk naik karirnya.	CM4. Identified talents have opportunities for career advancement.'
Strategic Leadership for Learning (Marsick & Watkins, 2003b; Nguyen-Duc et al., 2023)	
SLL1. Di dalam Perusahaan, para pemimpin menjadi mentor dan coach kepada orang-orang yang mereka pimpin.	SLL1. In my organization, leaders' mentor and coach those they lead.
SLL2. Di dalam perusahaan para pemimpin perusahaan terus menerus mencari peluang untuk belajar.	SLL2. In my organization, leaders continually look for opportunities to learn.
SLL3. Di perusahaan, para pemimpin memastikan bahwa tindakan perusahaan konsisten dengan nilai-nilai perusahaan.	SLL3. In my organization, leaders ensure that the organization's actions are consistent with its values.

Organizational Leadership Competencies (OLC): This variable was measured using 14 items adapted from (Koohang et al., 2017), assessing the ability to lead oneself, lead others, and lead the organization. Respondents rated the behaviour of leaders one level above them in the hierarchy on a scale from 1 (never) to 5 (always). For example, an item such as "Leaders one level above you understand their limitations and strengths" would be rated based on the frequency with which this behaviour is observed.

Talent Management (TM): This variable encompassed four dimensions: talent acquisition, talent development, talent retention, and career management. The study utilized adapted instruments from (Al Aina & Atan, 2020a; Jayaraman et al., 2018) to assess these dimensions. Respondents provided ratings on a scale from 1 (not implemented) to 5 (fully implemented), with statements such as "The company carries out

assessments to determine employee development needs" being rated based on the extent of their implementation.

Strategic Learning leadership (SLL) variable is using a dimension of Dimension Marsick and Watkins (2003) Dimension of Learning Organization Questionnaire (DLOQ) to measure this variable. The "strategic leadership for learning" variable includes leaders mentoring and coaching, seeking continuous learning opportunities, and ensuring alignment between organizational actions and values. Respondents rated these practices on a scale from 1 (never) to 5 (always). For example, the item "In my organization, leaders mentor and coach those they lead" was rated based on the frequency of this behaviour within the organization.

Data was analyzed using Partial Least Squares Structural Equation Modeling (SEM-PLS) via SmartPLS software. PLS-SEM was selected due to its suitability for testing complex theoretical frameworks and ability to handle models with many constructs and indicators (Hair et al., 2019). The data cleaning process involved removing duplicate responses and those with identical scores across all variables to ensure the integrity of the analysis.

Factor analysis assessed the correlation between observed variables and latent factors, with a factor loading threshold of > 0.708 deemed acceptable. The reliability and validity of constructs were evaluated using Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE). Discriminant validity was ensured through the Fornell-Larcker Criterion and HTMT, with thresholds set at < 0.90 for comparable and < 0.85 for distinct constructs (Hair et al., 2019). Path analysis via bootstrapping was conducted to confirm the hypothesized relationships, with significance established at t-values > 1.96 and p-values < 0.05 .

RESULTS AND DISCUSSION

Demographic

Data collected was from 755 respondents and after eliminating data entries with identical scores in one or more variables, 605 respondents from 25 State-Owned Enterprises (SOEs) were analyzed. The sample included 44.46% of respondents in management positions and 55.54% in staff positions. The distribution of respondents about their proximity to the Board of Directors (BOD) level is as follows: 8.01% at BOD-1, 23.97% at BOD-2, 23.80% at BOD-3, 19.01% at BOD-4, 11.90% at BOD-5, 5.79% at BOD-6, and 7.44% at BOD-7.

Regarding educational attainment, 1.16% of respondents hold a doctoral degree, 20.50% have a master's degree, 56.69% have a bachelor's degree, 5.62% have a diploma, and 16.00% have completed high school. The gender distribution is 20.00% women and 80.00% men.

These demographic results provide a comprehensive overview of the respondents, ensuring that the data represents various management levels and educational backgrounds within Indonesian SOEs. This diversity is critical for the generalizability of the study's findings.

Measurement Model Evaluation

The measurement model was assessed using factor loadings, reliability, and validity metrics to measure the constructs accurately. Factor loadings were examined first, with indicators considered acceptable if their loading exceeded 0.708. However, indicators with loadings between 0.40 and 0.708 were retained if their removal would have reduced the internal consistency reliability or convergent validity (Hair Jr et al., 2021). For example, the indicator LS-3, which had an outer loading slightly below 0.708 but above 0.5, was retained for this reason.

Construct reliability was confirmed using Cronbach's Alpha and Composite Reliability, with both metrics exceeding the recommended threshold of 0.708. The values ranged from 0.809 to 0.924 for Cronbach's Alpha and 0.913 to 0.946 for Composite Reliability, except for the Organizational Leadership Competencies (OLCs) construct, which showed values slightly above the typical threshold (Cronbach's Alpha = 0.956, Composite Reliability = 0.961). These slightly higher values were considered acceptable given the narrow scope and specificity of the OLCs construct.

Convergent validity was assessed using the Average Variance Extracted (AVE), with all dimensions exceeding the minimum criterion of 0.5 (Hair et al., 2019). Multicollinearity was evaluated using the Variance Inflation Factor (VIF), and all values fell below 4.5, indicating no significant multicollinearity issues.

Discriminant validity was examined using the Fornell-Larcker Criterion, cross-loadings, and the Heterotrait-Monotrait (HTMT) ratio. Initial results showed that the Fornell-Larcker and HTMT ratios did not meet the required thresholds for several dimensions of Talent Management (TA-TD, TA-CM, TR-TA, TR-TD, TR-CM, CM, TD). Consequently, indicators TA2, TA3, TD-4, TD-6, TR-3, TR-4, TR-5, and CM-2 were removed to improve validity. After these adjustments, the HTMT values fell below 0.9, confirming that the remaining indicators and constructs were valid and reliable for structural model evaluation.

These findings indicate that the constructs were measured with sufficient reliability and validity, providing a robust foundation for subsequent structural model analysis. Carefully considering which indicators

to retain or remove was crucial in ensuring that the constructs accurately reflected the underlying theoretical concepts.

Structural Model Test

Hypothesis 1: Talent management positively affects organizational leadership competencies

This study supports Hypothesis 1, demonstrating that Talent Management (TM) positively influences Organizational Leadership Competencies (OLCs). The findings validate the regulations implemented by Indonesian SOEs regarding talent management practices (BUMN). Previous studies have empirically shown that TM positively affects employee competencies (Agustiani & Sadana, 2019), digital competencies (Fazekas, 2021), and global leadership, as well as enhancing team collaboration and learning (Afshari & Hadian Nasab, 2021). However, it is noteworthy that the direct path coefficient, t-statistics, and p-values for the influence of TM on OLCs are lower than those for the influence of Strategic Learning Leadership (SLL) (Tables 2 and 5). TM directly impacts organizational leadership competencies by fostering an environment conducive to leadership development (Collings & Mellahi, 2009; Espina-Romero et al., 2023).

Table 2. Path Analysis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
SLL -> OLCs	.565	.566	.070	8.046	.000
TM -> OLCs	.172	.172	.065	2.628	.009
TM -> SLL	.732	.733	.032	23.153	.000
Moderating Effect SLL -> OLCs	-.009	-.007	.033	.280	.780

Table 3. Path Indirect Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
TM -> SLL -> OLCs	.414	.416	.057	7.240	.000

Table 4. Total Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
SLL -> OLCs	.565	.566	.070	8.046	.000
TM -> OLCs	.585	.587	.036	16.124	.000
TM -> SLL	.732	.733	.032	23.153	.000
Moderating Effect SLL -> OLCs	-.009	-.007	.033	.280	.780

Table 5. The predictive relevance of the study

	R square	R Square Adjusted
OLCs	.498	.496
SLL	.536	.536

Hypothesis 2: Talent management positively influences strategic learning leadership (SLL)

The statistical analysis demonstrates a strong link between TM and SLL, with TM accounting for 73.2% of the variation in SLL. This highlights the significant impact of effective talent management strategies on fostering a culture of continuous learning within organizations. Integrating learning components into personnel management and prioritizing development programs within TM strategies is crucial for nurturing SLL (Pitaloka, 2019). Continuous learning opportunities are essential for attracting highly skilled personnel and fostering active participation in the learning process (Al Aina & Atan, 2020a). Leadership development programs further enhance SLL by enabling leaders to act as coaches, mentors, and facilitators (Amy, 2008).

Hypothesis 3: Strategic leadership for learning (SLL) positively affects organizational leadership competencies

The findings highlight a significant correlation between SLL and OLCs, supporting the hypothesis that SLL plays a crucial role in developing leadership skills. This aligns with Marsick and Watkins (2003), who emphasized the importance of continuous learning in leadership development. The study suggests that SLL substantially impacts leadership development more than TM alone. Path analysis consistently demonstrates that SLL strongly influences leadership development independently and in conjunction with TM.

These results reinforce that SLL broadly influences various leadership competencies, extending beyond global leadership (Pitaloka, 2019) and leadership style (Di Schiena et al., 2013). SLL provides a strong foundation for cultivating OLCs by enhancing multiple dimensions, such as mentorship, coaching, continuous learning, and fostering inquiry and dialogue (Longenecker & Insch, 2018; Malik & Garg, 2017; Wefald et al., 2021). This study contributes to the growing body of research supporting the pivotal role of SLL in driving OLCs (Di Schiena et al., 2013; Longenecker & Insch, 2018; Malik & Garg, 2017; Marsick & Watkins, 2003a; Wefald et al., 2021).

Hypothesis 4: Strategic leadership for learning positively mediates talent management's influence on organizational leadership competencies

The study supports the hypothesis that TM has a direct and mediated influence on OLCs through SLL. The findings revealed that TM significantly influences OLCs both directly and when mediated by SLL, with SLL appearing to have a more significant mediating effect. This suggests that SLL acts as a partial mediator, emphasizing its role in shaping OLCs by fostering continuous individual improvement. These findings are consistent with prior research highlighting the importance of SLL in leadership development (Ellinger & Ellinger, 2021; Priyanto et al., 2021; Sultan, 2022).

Hypothesis 5: Strategic leadership for learning moderates talent management's influence on organizational leadership competencies

Hypothesis 5 is not supported by the statistical analysis, which indicates that SLL does not moderate the relationship between TM and OLCs. This may be due to cultural factors, such as power distance, which could diminish the moderating effect of SLL. In high power distance cultures like Indonesia, clear authority lines and hierarchical structures might make it harder for leaders to influence learning behaviours, reducing the effectiveness of SLL as a moderator (Arrindell, 2003). The direct impact of TM on leadership skills may not vary significantly depending on leadership behaviour in such contexts.

Conversely, in low power distance cultures, where open communication and shared decision-making are more common, SLL might play a more prominent role. However, even in these contexts, SLL's role as a mediator appears more critical than a moderator, as it involves creating a strategic learning environment that aligns TM practices with the organization's overall culture (Marsick & Watkins, 2003a). Establishing a culture of learning within organizations, with the active support of leaders, is essential for fostering continuous learning and growth at both the individual and organizational levels (Bersin et al., 2016; Rupčić, 2020).

Discussion of Biases, Limitations, and Future Research

The study acknowledges several potential biases and limitations. For example, relying on self-reported data may introduce social desirability bias, particularly in leadership competencies, where respondents may overstate their effectiveness to align with expected norms. Additionally, the sampling method, which focused on a specific set of SOEs, may not capture the full diversity of organizational cultures within Indonesia, potentially limiting the generalizability of the findings.

The findings suggest that SOE leaders should prioritize integrating strategic learning initiatives alongside talent management practices to enhance leadership competencies. However, to be effective, these initiatives must be tailored to fit within the SOEs' existing cultural and organizational frameworks. This may require a shift in leaderships between SOEs and private sector organizations to determine whether the relationships observed in this study hold in different organizational contexts. Additionally, longitudinal studies could provide insights into how these relationships evolve, particularly as SOEs undergo organizational changes and modernization efforts.

In summary, the study provides valuable insights into the roles of TM and SLL in developing organizational leadership competencies, with practical implications for leadership development programs in SOEs. The findings suggest that while TM and SLL are critical, their complex interactions warrant further exploration.

CONCLUSION

This study provides important insights into the interplay between talent management (TM), strategic leadership for learning (SLL), and organizational leadership competencies (OLCs) within Indonesian State-Owned Enterprises (SOEs). The findings reveal that SLL exerts a more substantial influence on OLCs than TM, highlighting the pivotal role that continuous learning and strategic leadership play in cultivating influential organizational leaders. Notably, SLL functions as a mediator rather than a moderator in the relationship between TM and OLCs, a particularly relevant distinction within Indonesian SOEs' cultural context.

The research underscores the significance of cultural factors, such as power distance, in shaping leadership development. In high power distance cultures, where hierarchical structures and clear authority lines dominate, leaders' ability to influence learning behaviours and foster leadership growth is often limited. Consequently, SLL is more effective as a mediator, helping integrate TM practices into the organizational culture and enhancing leadership competencies at all levels. This finding underscores the need for a comprehensive approach to leadership development that aligns organizational behaviour, learning, and leadership theories.

Practically, organizations should prioritize the development of SLL alongside robust TM programs to foster leadership competencies. This integrated approach requires creating a culture that values continuous learning, knowledge sharing, and adaptability—essential elements for maximizing the effectiveness of TM practices. Moreover, the study emphasizes the importance of addressing cultural barriers, particularly in high power distance environments, where hierarchical norms may impede leadership development efforts.

In light of these findings, organizations, especially those operating in similar cultural contexts, should consider several key recommendations: (1) cultivating a learning-oriented culture is crucial; leaders should be encouraged to act as coaches and mentors, promoting an environment where continuous learning and open communication are the norm, (2) the integration of TM and SLL strategies should be carefully managed to ensure that these approaches complement and reinforce each other, ultimately enhancing leadership competencies, and (3) organizations must be mindful of cultural barriers that may hinder leadership development and work towards empowering leaders at all levels to influence and shape learning behaviours within the organization.

The study opens several avenues for future research. Replicating this research across different industries could provide a broader understanding of how TM and SLL interact in various organizational settings, potentially revealing industry-specific factors that impact leadership development. Additionally, longitudinal studies could offer deeper insights into how the relationships between TM, SLL, and OLCs evolve, shedding light on the long-term effects of integrating these strategies. Further exploration of cultural variations, such as differences in power distance, individualism, and uncertainty avoidance, could help organizations tailor their leadership development strategies to fit their cultural contexts better. Finally, identifying the specific dimensions of TM and SLL that have the most significant impact on OLCs would allow organizations to focus their resources on the most effective areas, ensuring that leadership development efforts are targeted and impactful.

In conclusion, this study highlights the critical role of strategic leadership for learning and talent management in developing organizational leadership competencies. By integrating these strategies and considering the cultural context in which they are applied, organizations can effectively cultivate leaders capable of driving sustained success and navigating the complexities of today's business environment.

REFERENCES

- Afshari, L., & Hadian Nasab, A. (2021). Enhancing organizational learning capability through managing talent: mediation effect of intellectual capital. *Human Resource Development International*, 24(1), 48–64. <https://doi.org/10.1080/13678868.2020.1727239>
- Agustiani, F. N., & Sadana. (2019). Pengaruh manajemen talenta dan kompetensi terhadap kinerja karyawan PT. Bank Rakyat Indonesia (Persero) Tbk. . *Jurnal Riset Perbankan Manajemen Dan Akuntansi*, 3(2), 100–131.
- Al Aina, R., & Atan, T. (2020a). The impact of implementing talent management practices on sustainable organizational performance. *Sustainability*, 12(20), 8372. <https://doi.org/10.3390/su12208372>
- Al Aina, R., & Atan, T. (2020b). The impact of implementing Talent Management Practices on sustainable organizational performance. *Sustainability*, 12. <https://doi.org/10.3390/su12208372>
- Amy, A. H. (2008). Leaders as facilitators of individual and organizational learning. *Leadership & Organization Development Journal*, 29(3), 212–234. <https://doi.org/10.1108/01437730810861281>
- Arrindell, W. A. (2003). Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations. *Behaviour Research and Therapy*, 41(7), 861–862. [https://doi.org/10.1016/S0005-7967\(02\)00184-5](https://doi.org/10.1016/S0005-7967(02)00184-5)

- Baharin, N. L., Kelana, B. W. Y., Sanny, L., Teo, P.-C., Ho, T. C. F., & Ramliy, M. K. (2023). The mediating effect of emotional intelligence on the relationship between talent management practices and leadership skills in Malaysian GLCs. *Sustainability*, 15(13), 10727. <https://doi.org/10.3390/su151310727>
- Battisti, E., Graziano, E. A., Pereira, V., Vrontis, D., & Giovanis, A. (2023). Talent management and firm performance in emerging markets: A systematic literature review and framework. *Management Decision*, 61(9), 2757–2783. <https://doi.org/10.1108/MD-10-2021-1327>
- Bersin, J., Geller, J., Wakefield, N., & Walsh, B. (2016). *Global Human Capital Trends 2016 The New Organization: Different by Design*. <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/HumanCapital/gx-dup-global-human-capital-trends-2016.pdf>
- Collings, D. G., & Mellahi, K. (2009). Strategic talent management: A review and research agenda. *Human Resource Management Review*, 19(4), 304–313. <https://doi.org/10.1016/j.hrmr.2009.04.001>
- Creswell, J. W., & Creswell, D. C. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (5th ed.). Sage Publication, Inc.
- Di Schiena, R., Letens, G., Van Aken, E., & Farris, J. (2013). Relationship between leadership and characteristics of learning organizations in deployed military units: An exploratory study. *Administrative Sciences*, 3(3), 143–165. <https://doi.org/10.3390/admsci3030143>
- Ellinger, A. D., & Ellinger, A. E. (2021). Providing strategic leadership for learning: Optimizing managerial coaching to build learning organizations. *The Learning Organization*, 28(4), 337–351. <https://doi.org/10.1108/TLO-05-2020-0070>
- Espina-Romero, L., Noroño Sánchez, J. G., Rojas-Cangahuala, G., Palacios Garay, J., Parra, D. R., & Rio Corredoira, J. (2023). Digital leadership in an ever-changing world: A bibliometrics analysis of trends and challenges. *Sustainability*, 15(17), 13129. <https://doi.org/10.3390/su151713129>
- Farndale, E., Morley, M. J., & Valverde, M. (2019). Talent management: Quo vadis? *BRQ Business Research Quarterly*, 22(3), 155–159. <https://doi.org/10.1016/j.brq.2019.06.001>
- Fazekas, N. (2021). Learning Organizations and Organizational Digital Competencies in the Field of Public Education. *New Horizons in Business and Management Studies*, 25–36. https://doi.org/10.14267/978-963-503-867-1_03
- Garavan, T. N., Carbery, R., & Rock, A. (2012). Mapping talent development: definition, scope and architecture. *European Journal of Training and Development*, 36(1), 5–24. <https://doi.org/10.1108/03090591211192601>
- Hair, J. F., Page, M., & Brunsveld, N. (2019). *Essentials of Business Research Methods*. Routledge. <https://doi.org/10.4324/9780429203374>
- Halliwell, P., Mitchell, R., & Boyle, B. (2022). Interrelations between enhanced emotional intelligence, leadership self-efficacy and task-oriented leadership behaviour—a leadership coaching study. *Leadership & Organization Development Journal*, 43(1), 39–56. <https://doi.org/10.1108/LODJ-01-2021-0036>
- Harvard Business Publishing Corporate Learning. (2023). *2023 Global Leadership Development Study: Ready for Anything*.
- Isfahani, A. C., & Boustani, H. (2014). Effects of talent management on employees retention: The mediate effect of organizational trust. *International Journal of Academic Research in Economics and Management Sciences*, 3(5). <https://doi.org/10.6007/IJAREMS/v3-i5/1196>
- Jayaraman, S., Talib, P., & Khan, A. F. (2018). Integrated Talent Management Scale: Construction and Initial Validation. *SAGE Open*, 8(3). <https://doi.org/10.1177/2158244018780965>
- Koohang, A., Paliszkievicz, J., & Goluchowski, J. (2017). The impact of leadership on trust, knowledge management, and organizational performance. *Industrial Management & Data Systems*, 117(3), 521–537. <https://doi.org/10.1108/IMDS-02-2016-0072>
- Kouichi, M., Masako, I., & Taro, S. (2023). Talent management and organizational learning within the knowledge transfer process of human space technology development. *2023 Portland International Conference on Management of Engineering and Technology (PICMET)*, 1–5. <https://doi.org/10.23919/PICMET59654.2023.10216842>
- Longenecker, C., & Insch, G. S. (2018). Senior leaders' strategic role in leadership development. *Strategic HR Review*, 17(3), 143–149. <https://doi.org/10.1108/SHR-02-2018-0014>
- Lyria, R. K., Namusonge, G. S., & Karanja, K. (2017). The effect of career management on organizational performance of firms listed in the Nairobi Securities Exchange. *Journal of Human Resource and Leadership*, 1(3), 31–42.
- Malik, P., & Garg, P. (2017). The relationship between learning culture, inquiry and dialogue, knowledge sharing structure and affective commitment to change. *Journal of Organizational Change Management*, 30(4), 610–631. <https://doi.org/10.1108/JOCM-09-2016-0176>

- Marsick, V. J., & Watkins, K. E. (2003a). Demonstrating the value of an organization's learning culture: The dimensions of the learning organization questionnaire. *Advances in Developing Human Resources*, 5(2), 132–151. <https://doi.org/10.1177/1523422303005002002>
- Marsick, V. J., & Watkins, K. E. (2003b). Demonstrating the value of an organization's learning culture: the dimensions of the learning organization questionnaire. *Advances in Developing Human ...*. <https://journals.sagepub.com/doi/abs/10.1177/1523422303005002002>
- Mohd Hamzah, M. I., & Shamsudin, S. (2017). Talent management and teacher leadership talent development in high performing school in Malaysia. *International Journal of Educational Best Practices*, 1(1), 19. <https://doi.org/10.31258/ijebp.v1n1.p19-35>
- Mujtaba, M., & Mubarik, M. S. (2022). Talent management and organizational sustainability: Role of sustainable behaviour. *International Journal of Organizational Analysis*, 30(2), 389–407. <https://doi.org/10.1108/IJOA-06-2020-2253>
- Mumford, T. V., Campion, M. A., & Morgeson, F. P. (2007). The leadership skills strataplex: Leadership skill requirements across organizational levels. *The Leadership Quarterly*, 18(2), 154–166. <https://doi.org/10.1016/j.leaqua.2007.01.005>
- Nguyen-Duc, T., Phuong, T. T., Le, T. T. B., & Nguyen, L. T. T. (2023). Validation of dimensions of the learning organization questionnaire (DLOQ) in a Vietnamese context. *Learning Organization*, 30(5), 511–531. <https://doi.org/10.1108/TLO-04-2022-0041>
- Northouse, P. (2019). *Leadership: Theory and Practice* (8th ed.). Thousand Oaks.
- Priyanto, T., Indrawati, I., & Susetyo, A. S. A. (2021). Role of CEO in talent management to develop new leaders in the IR 4.0. In *Synergizing Management, Technology and Innovation in Generating Sustainable and Competitive Business Growth* (1st ed., p. 6). Routledge.
- PT Perkebunan Nusantara III (Persero). (2022). *Continue to Grow Towards A Sustainable Business*.
- PT Telkom Indonesia. (2023). *Transformation Towards Excellence*.
- Rupčić, N. (2020). Context related learning opportunities for individual and organizational improvement in learning organizations. *The Learning Organization*, 27(2), 173–180. <https://doi.org/10.1108/TLO-02-2020-250>
- Shah, S. I., Shahjehan, A., Afsar, B., Afridi, S. A., & Saeed, B. Bin. (2020). The dynamics of leader technical competence, subordinate learning, and innovative work behaviors in high-tech, knowledge-based industry. *Economic Research-Ekonomska Istraživanja*, 33(1), 623–638. <https://doi.org/10.1080/1331677X.2019.1699140>
- Sharma, R., & Bhatnagar, J. (2009). Talent management – competency development: Key to global leadership. *Industrial and Commercial Training*, 41(3), 118–132. <https://doi.org/10.1108/00197850910950907>
- Sultan, M. (2022). Kolaborasi stakeholder's dalam penyelenggaraan corporate university pada Badan Pengembangan Sumber Daya Manusia Provinsi Sulawesi Selatan. *Jurnal Widyaaiswara Indonesia*, 3(2), 81–94. <https://doi.org/10.56259/jwi.v3i2.135>
- Tarigan, J., Ferdian, G. N., Hatane, S. E., & Dharmayanti, D. (2018). Talent management and financial performance: Does organization learning mediate that relationship? *Asia Pacific Management and Business Application*, 007(01), 1–16. <https://doi.org/10.21776/ub.apmba.2018.007.01.1>
- Thunnissen, M., Boselie, P., & Fruytier, B. (2013). Talent management and the relevance of context: Towards a pluralistic approach. *Human Resource Management Review*, 23(4), 326–336. <https://doi.org/10.1016/j.hrmr.2013.05.004>
- Wefald, A. J., Hornung, M., & Burkhart, T. (2021). Coaching and mentoring in a capstone leadership development program. *Journal of Leadership Education*, 20(3), 1–12.
- Wolor, C. W., Khairunnisa, H., & Purwana, D. (2020). Implementation talent management to improve organization's performance in Indonesia to fight industrial revolution 4.0. *International Journal of Scientific & Technology Research*, 9(1), 1243–1247.
- Xiao, J., Yan, Y., Li, B., & Liu, S. (2024). Leading by example: understanding the trickle-down effect of voluntary green behavior in the workplace. *Journal of Managerial Psychology*, 39(5), 613–627. <https://doi.org/10.1108/JMP-04-2022-0192>
- Yukl, G. (2013). *Leading in Organizations*. (8th ed.). Pearson Education.
- Yukl, G., & Gardner III, W. (2020). *Leadership in Organizations* (9th ed.). Pearson Education Limited.