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Technology-Based Career Development Model for Improving Teacher and Employee Retention

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Abstract

Purpose: This study aims to develop an integrated technology-based career development model and analyze its effectiveness in enhancing retention, motivation, and performance among teachers and employees in a private educational institution in Jakarta. The core objective is to address challenges posed by manual and non-transparent HR systems that undermine employee loyalty and productivity.

Methodology/Approach: A qualitative case study was conducted at a private educational institution in Jakarta. Data were collected through in-depth interviews with nine purposively selected participants, including the HR Manager, principals, and teachers, as well as from policy documents and performance records. Data were analyzed using thematic, SWOT, and gap analyses, with validity ensured through triangulation of sources, methods, and theories.

Results/Findings: The manual performance evaluation system lowers motivation and retention, while a proposed digital assessment model with LMS aims to address these gaps.

Conclusions: The study introduces a conceptual and practical model for career development through digital tools to enhance motivation, retention, and job satisfaction. By aligning digital HR strategies with employee needs, the model offers actionable insights for institutions undergoing digital transformation.

Limitations: As a single-case study, the findings are context-specific and lack generalizability. The model remains conceptual and requires further validation through large-scale implementation and quantitative monitoring.

Contributions: This study contributes empirically to HRM literature, particularly in education, by providing a framework for designing technology-based career development models and offering practical strategies to transition from manual to integrated digital HR systems.

Keywords: *Career Development, Digital Transformation, Employee Retention, Human Resource Management, Technology-Driven HR Systems*.

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1. Introduction

Educational institutions worldwide are currently facing significant challenges in retaining qualified educators and staff, an issue that directly affects their operational stability and quality of learning. A report by Lewis (2024) indicates that more than 30% of teachers across various countries change schools, often in an effort to find more objective evaluation systems and clearer career development opportunities. This phenomenon represents a manifestation of broader systemic problems that may

threaten the foundations of educational institutions. More specifically, a private educational institution in Jakarta has experienced critical retention problems, with employee turnover increasing significantly in 2023.

This surge is not merely a statistic but a signal of an urgent crisis triggered by long-standing underlying issues, such as a manual performance evaluation system and non-transparent career pathways. These conditions directly contribute to a decline in motivation and loyalty, pushing employees to seek opportunities elsewhere that offer better recognition and growth opportunities.In this context, the use of technology in human resource management (HRM) is viewed as a promising strategic intervention to address these challenges.

Technology has the potential to transform the work environment into a fairer, more transparent, and conducive to professional growth. By adopting digital systems, an organization can improve employee satisfaction and retention, which, in turn, contributes to improving overall educational quality. In line with this (W. N Putri, 2024) emphasizes that digitalization in HRM has direct implications for work effectiveness and productivity. These findings reinforce the urgency of technology integration in educational institutions, where career development requires not only policies but also structured digital systems to reduce employee turnover.

Although many studies have discussed the separate elements of career development, employee retention, and HR technology adoption, the literature still contains a significant research gap. Most existing studies are conceptual, focused on the corporate sector, or do not integrate these three aspects into one comprehensive and contextual model. This gap indicates that retention problems cannot be solved solely through partial solutions. The issue is not only the absence of technology but also operational and cultural failures to integrate digital tools as part of a holistic talent management strategy.

Therefore, this study aims to address this gap by developing and proposing an empirical, holistic, and contextually relevant technology-based career development model that aligns with the real needs of educational institutions. This model is designed not merely as a technical solution but as a catalyst for strategic change in how institutions manage and value their talent. The objective of this study is to address retention problems caused by manual systems, as well as to design and analyze the effectiveness of a new model that can improve motivation, performance, and retention of teachers and staff through technological intervention.

2. Literature Review and Hypothesis Development

2.1 Employee Retention

Employee retention is an organization's ability to retain qualified talent and is vital for avoiding financial and operational losses resulting from high turnover. Allen and Meyer (1990) identified three types of organizational commitment that influence retention: affective, continuance, and normative commitment. Cascio and Boudreau (2012) add factors such as career development opportunities and fair performance rewards. Work stress and satisfaction strongly affect turnover intentions. A literature review (Nfoundindings that high stress and low satisfaction increased turnover risk. This underscores the need for a technology-based career development model designed to reduce stress (for example, through automated appraisal systems and self-access training platforms) and significantly enhance job satisfaction.

2.2 Technology in Human Resource Management

The integration of technology into HRM has become a key trend in digital transformation. (Wang, 2024) states that technology improves HR efficiency through automation (HRIS), advanced data analytics, and technology-based training (LMS). The challenges include resistance to change, implementation costs and data security issues. Hutasoit et al. (2025) reported that digital competence

significantly interacts with innovative behavior and work motivation to improve employee performance. These findings highlight the importance of building digital literacy and innovation capability as essential prerequisites for implementing technology-based career development platforms, such as HRIS and LMS, thereby strengthening the theoretical foundation of the proposed model.

2.3 Career Development

Career development is a planned process that helps employees achieve their maximum potential while aligning individual goals with the organization's needs. (Cascio & Boudreau, 2012) outline key components, such as training, mentoring, and transparent promotion opportunities. Effective career development increases skills, loyalty, and motivation, thereby reducing turnover and recruitment costs. A study by Andini et al. (2025) in secondary schools in Surabaya confirmed that knowledge management integrated with career development practices promotes teacher motivation and retention. This is relevant to the development of data-driven career pathways that can be automated through digital platforms, allowing teachers to have clearer and more measurable career directions.

2.4 Technology-Based Career Development Model

This model integrates HR components with technology to enable objective and transparent evaluations, as well as broad and personalized career development opportunities. Its main components include Multi-Dimensional Assessment (360-degree feedback), Data Analytics, Technology-Based Training (e-learning via LMS), and Rewards and Incentives.

2.5 Previous Studies

The researcher refers to several previous studies relevant to the topic of technology-based career development and employee retention in the education sector. This review is important for mapping existing findings, identifying similarities and differences, and determining the research gap that will be addressed in this study. The summary of previous studies below provides an overview of prior scholarly contributions and their implications for developing the model proposed in this study.

Table 1. Previous studies

No	Author(s)	Findings	Implications
1	Alsaif & Sabih Aksoy (2023)	AI in HR improves efficiency but has not yet focused on retention in the education sector.	AI-based HR models need to be directed toward retention strategies in education.
2	Andini et al., (2025)	Knowledge management supports teachers' career development.	Schools should implement performance-based knowledge-sharing.
3	Bratamanggala (2023)	Digital HR transformation requires context-specific implementation strategies.	Schools need phased digitalization plans based on actual needs.
4	Ichdan (2024)	Organizational culture and training affect motivation and performance.	Organizations should provide a positive work environment and professional support.
5	Kundu & Lata (2017)	A supportive work environment influences employee retention.	Flexible learning technology integration strengthens long-term motivation, adaptability, and loyalty.
6	Leuhery (2024)	Training technologies such as LMS, interactive videos, and gamification improve training effectiveness and employee retention.	Flexible learning technology integration strengthens long-term motivation, adaptability, and loyalty.

7	Muchsinati et al., (2024)	*e-HRM is effective in improving productivity.*	e-HRM should be adopted with adaptive policies.
8	Nasution, A. R., Suhairi, S., & Nurbaiti (2024)	Effective training and career programs increase satisfaction and positively affect retention.	Digital systems supporting career development and rewards are needed to increase motivation.
9	Nguyen et al., (2020)	Performance recognition can increase retention by up to 20%.	Effective reward systems can be important tools for retaining high-quality employees.
10	Nykvist et al., (2024)	Digital transformation affects teacher well-being and retention.	Leadership support and systems are essential for sustainable education digitalization.
11	Pervin & Zohora, (2023)	Training directly contributes to work commitment.	Training should be integrated into retention strategies.
12	Podolsky et al., (2019)	Teacher retention strategies should target well-being and development.	Education policy should regulate balanced promotion pathways and evaluation systems.
13	Sulaiman et al., (2025)	Digital and financial literacy improve HR competence.	Two-way training should focus on digital and managerial skills.
14	Wirayudha & Adnyani,(2020)	Compensation and career paths significantly influence satisfaction and retention.	Organizations should establish clear and fair career pathways.
15	Yulianah (2024)	Appropriate digital HR transformation strategies improve efficiency and employee adaptability in modern work environments.	Structured digital HRM implementation accelerates HR services, decision-making, and career development.

Although many studies have examined the separate elements of career development, employee retention, and HR technology, a significant gap remains in the literature that integrates all of these elements into a single empirically tested model, particularly within the context of private educational institutions. Identifying this gap provides a strong justification for the novelty and academic contribution of the present study, positioning it as an effort to address a critical void in the existing research.

2.6 Research Framework

The research framework presented in the following schematic provides a visual summary of the entire research logic. This framework helps readers understand the flow of the core argument, starting from the identified problems, followed by the proposed intervention and the expected cause-and-effect relationships. It serves as a logical roadmap for the entire study.

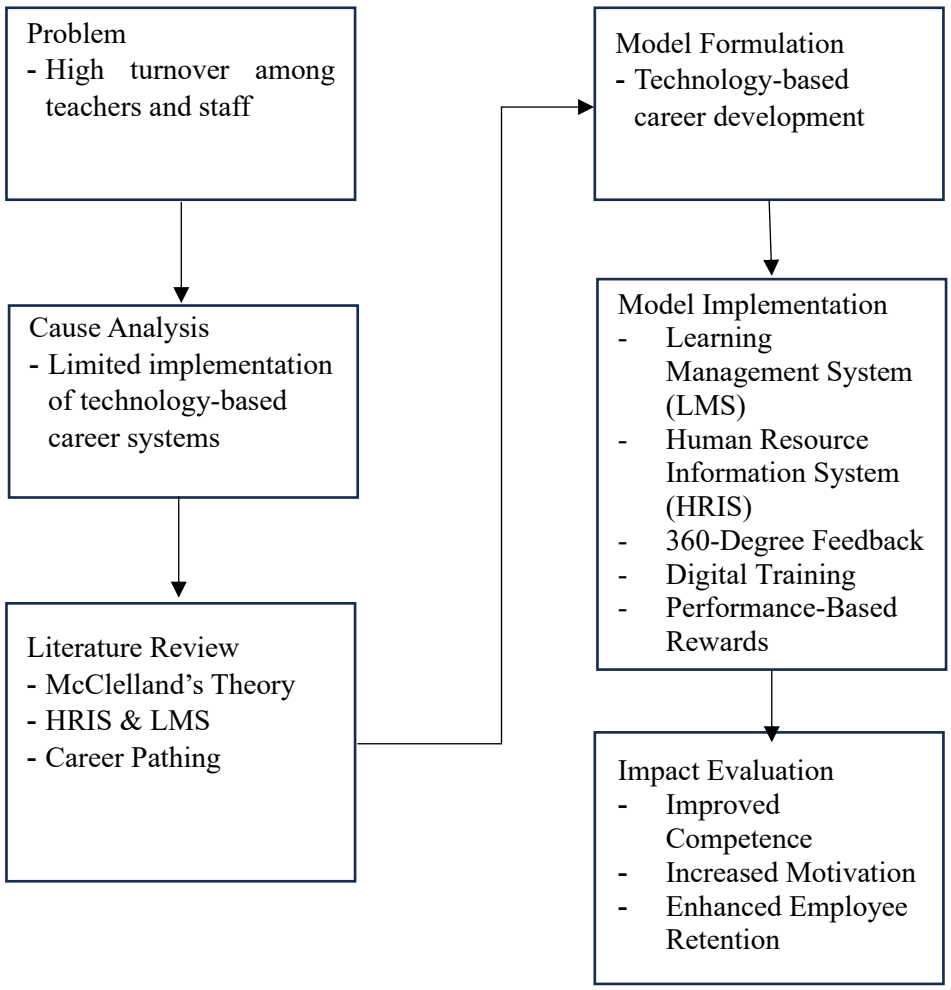

Figure 1. Research framework

2.7 Conceptual Framework of the Study

Based on the issue of high employee retention problems resulting from suboptimal career systems, this study formulates a conceptual framework that illustrates the relationships between causal factors, proposed solutions and expected outcomes. The framework emphasizes the integration of technology, such as Learning Management Systems (LMS), Human Resource Information Systems (HRIS), 360-degree performance evaluation, and data-driven reward systems, which aim to create clear career roadmaps and support the continuous development of teachers' competencies.

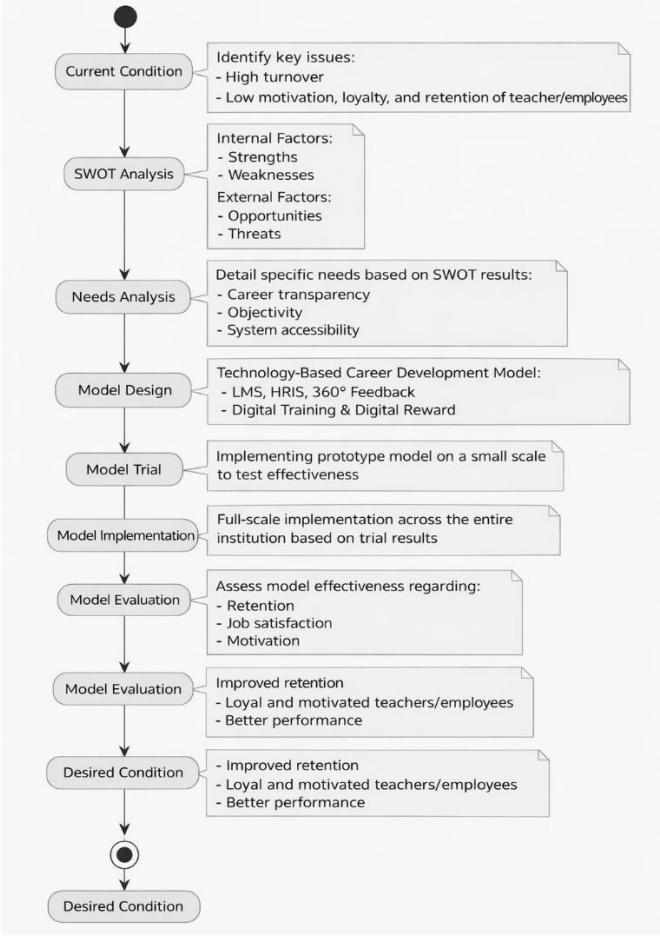

Figure 2. Conceptual framework of the technology-based career development model

3. Research Methodology

3.1 Type of Research and Data Sources

This study adopts a qualitative approach using a case study method conducted at a private school in Jakarta, Indonesia. This approach was selected based on the assumption that social reality is complex and therefore requires an in-depth understanding of teacher and staff retention phenomena and the role of technology in career development. This study utilized both primary and secondary data. Primary data were obtained through in-depth interviews with nine purposively selected informants, including the Human Resource Manager, the School Principal, senior teachers, and newly recruited teachers. The selection of these informants aimed to capture comprehensive perspectives, ranging from policy-level viewpoints to direct field experiences of the participants. Secondary data, such as school policy documents, performance reports, and employee retention data, were used to complement and validate the interview findings, thereby enhancing the objectivity and accuracy of the research results

The interviews were conducted using a semi-structured format to explore informants' perceptions in depth regarding evaluation systems, challenges in technology integration, the need for technology-based systems, the role of training, retention impact, and leadership strategies (Kvale, 1996; Creswell, 2003). Document analysis was employed to examine written materials, such as school policies and internal reports Bowen (2009). In addition, participant observation was conducted to directly observe behaviors, interactions, and situations related to retention and career development within the school environment (Spradley, 1980; Merriam and Tisdell, 2016).

3.2 Data Validity – Triangulation

To ensure data validity, this study applied triangulation, a multi-method approach that validates findings from multiple perspectives, reduces potential bias, and enriches understanding. Triangulation was selected as a data validity strategy to enhance the credibility and trustworthiness of the findings by addressing biases that may arise from the reliance on a single method, source, or theory.

- Source Triangulation: Data were collected from various stakeholders, including HR managers, the school principal, senior teachers, and newly recruited teachers, to cross-verify the findings and minimize bias from any perspective.
- Method Triangulation: A combination of in-depth interviews, observations, and documentation was used to obtain a more holistic and comprehensive understanding, overcoming the inherent limitations of any single method.
- Theory Triangulation: Data analysis was conducted using multiple theoretical frameworks, such as retention and motivation theories, to deepen the analysis and explain the phenomenon from different perspectives.

The following schematic illustrates how triangulation was implemented in this study.

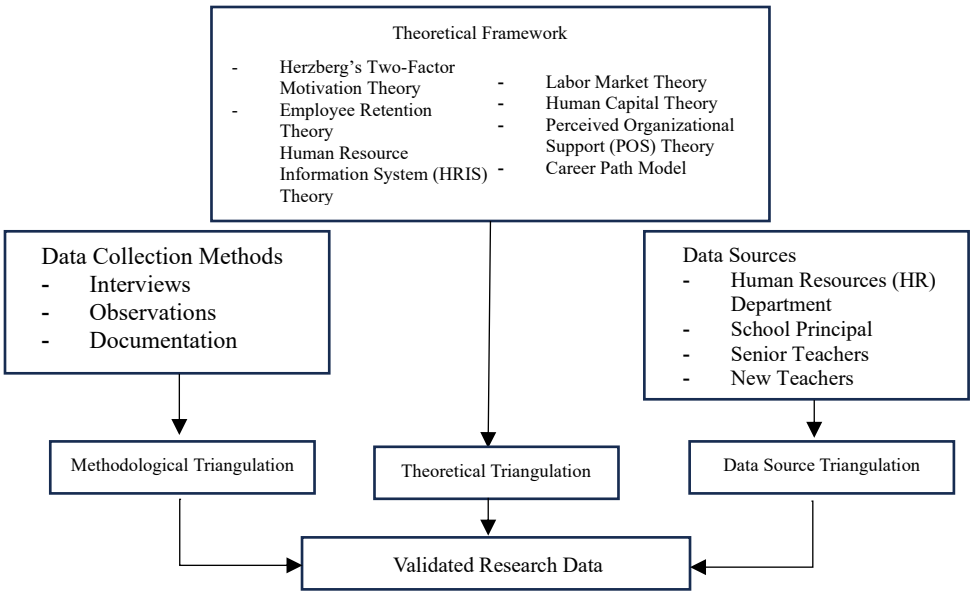

Figure 3. Data validation triangulation scheme

The application of triangulation in this study goes beyond a procedural requirement and serves as empirical validation that the identified problems namely, manual systems and a lack of objectivity are systemic across the institution rather than isolated complaints from a single group. This is evidenced by the consensus achieved across all data sources and methods, confirming that the challenges faced represent a common organizational reality. This methodological rigor provides a strong foundation for the proposed model and recommendations, as it convincingly demonstrates that the solutions are designed to address deeply rooted, institution-wide issues.

4. Results and Discussion

4.1 Overview of the Research Site and Description of Informants

Educational Institution X, the case study site of this research, demonstrates a proactive attitude in addressing human resource management challenges, indicating that it is open to change and the implementation of technology-based solutions. This attitude is a critical success factor for the proposed model, as it implies a willingness to invest in and address potential resistance that may arise. Informants

were selected purposively to obtain comprehensive perspectives from various levels within the school, as summarized in table below.

Table 2. Description of informants

No	Code	Position / Role at School	Length of Service
1	N1	Human Resources	More than 5 years
2	N2	Senior Teacher (≥ 2 years)	3 – 5 years
3	N3	Senior Teacher (≥ 2 years)	3 – 5 years
4	N4	New Teacher (< 2 years)	1 - 2 years
5	N5	Senior Teacher (≥ 2 years)	More than 5 years
6	N6	Senior Teacher (≥ 2 years)	More than 5 years
7	N7	Headmaster	3 – 5 years
8	N8	Senior Teacher (≥ 2 years)	More than 5 years
9	N9	New Teacher (< 2 years)	6 months – < 1 years

4.2 Results of Data Quality Analysis (Triangulation)

To ensure data validity, this study presents the results of data triangulation, confirming that the identified issues are systemic and have been verified across all data sources and research methods. The following matrix serves as evidence of the validity of the findings, comparable to a convergent validity test in quantitative research, demonstrating that the identified problems are not merely individual perceptions but represent a shared organizational reality:

Table 3. Research data triangulation matrix

Data Aspect / Key Findings	Method Triangulation (Data / Observation)	Source Triangulation (Data / Perceptions)	Theory Triangulation (Relevant Theories)	Validation / Linkage of Findings
Manual and Less Objective Performance Evaluation	Consensus on the manual and less transparent nature of evaluation, with varying perceptions regarding objectivity.	Evaluation processes remain predominantly manual, with limited systematic digital tools. Performance reports confirm the manual nature of the process.	Herzberg's Motivation Theory: Lack of motivator factors (recognition, fairness). Retention Theory: Negative impact on affective commitment (Allen & Meyer).	Consensus on the manual nature, while differences in perception reflect the complexity of individual experiences. The need for a more transparent and objective system is evident and can be addressed through technology to enhance motivation and retention.
Limited Technology Training and Infrastructure	Training is irregular and lacks interactivity. Complaints regarding unstable WiFi	Limited structured training. WiFi and internet constraints observed in the field. Minimal evidence of a	Human Capital Theory: Insufficient investment in digital skills. Perceived Organizational	Infrastructure issues and insufficient structured training hinder technology adoption. This indicates that investment is

	and internet signals.	technology-based career management framework.	Support (POS) Theory: Perceived lack of organizational support.	required not only in technology but also in human capacity and infrastructure to enhance POS and human capital.
Expectations of Digital Systems for Transparency and Motivation	High expectations from all informants for an open, objective, and integrated system.	LMS exists but has not been optimally utilized for career development.	Social Exchange Theory: Employees remain loyal when perceived benefits (transparency, fairness) exceed costs. Career Pathway Models: The need for clear, technology-facilitated career paths.	High expectations for digital systems indicate readiness for adoption once challenges are addressed. Technology can serve as a catalyst for improving motivation and loyalty by creating a more fair and transparent work environment.

4.3 Results of Strategic Environment Analysis (SWOT)

The SWOT analysis revealed the presence of critical strategic tension within the institution. The institution possesses significant strengths and opportunities, such as the availability of basic digital platforms and management commitment to improving them. However, it simultaneously faces internal weaknesses (e.g., inadequate infrastructure and user resistance) that are exacerbated by external threats, including high implementation costs and intense competition.

Table 4. SWOT analysis of technology implementation in career development

Aspect	Research Data	Main Data Sources	Key Findings / Examples
Strengths	Availability of basic digital platforms (e.g., LMS), management awareness of the importance of technology, initial commitment to improvement.	Interviews (Principal, HR), Observation, School Documents	Potential improvement in digital skills of teachers and staff if fully supported.
Weaknesses	Supporting technological infrastructure not yet evenly distributed or optimal (e.g., WiFi), resistance from some users toward new technologies, lack of specific and continuous technology training, absence of an integrated HRIS.	Interviews (Teachers, HR), Observation	Barriers to widespread and effective technology adoption.
Opportunities	Government policy support for school digitalization, increasing availability of HR technology solutions, potential partnerships with technology providers or other institutions, high staff expectations for better systems.	Government Regulations, Technology Industry Trends, Interviews (Teachers, HR)	Potential for external collaboration and utilization of trends for acceleration.

Threats	Data security risks if systems are poorly managed, potentially high implementation and maintenance costs (limited budgets), rapid internal or external policy changes, competition from more technologically advanced institutions.	Interviews (HR), IT Experts (if consulted), General Analysis	Barriers to sustainable implementation and long-term system viability.

This analysis highlights a strategic dilemma. While the institution has considerable strengths and opportunities, internal weaknesses particularly related to infrastructure and user resistance are intensified by external threats such as operational costs and competitive pressure. Therefore, any formulated strategy must intelligently leverage strengths to capture opportunities while realistically addressing existing weaknesses and threats to the company.

4.4 Results of Gap Analysis

The gap analysis compares current career management practices with ideal conditions that can be achieved through a technology-based model. This analysis consistently reveals that the challenges faced by Educational Institution X are not solely related to technology but also to deeply rooted operational mindsets. The issue is not merely the absence of an HRIS but rather the lack of a fundamentally data-driven and strategic talent management approach. Consequently, the proposed model must be framed not only as a technological solution but also as a strategic intervention aimed at transforming the entire operational mindsetfrom fragmented and manual processes to an integrated, cohesive, and data-driven system.

Table 5. Gap analysis of career management in a private educational institution in jakarta

Aspect of Analysis	Ideal Condition	Current Practice	Key Gap	General Recommendation
Career Management System	An integrated, technology-based system with clear, transparent, and accessible career development pathways for all staff.	Processes remain predominantly manual; career paths are not clearly or transparently defined for all staff.	Lack of an integrated digital system; unclear career pathways.	Implement digital systems (HRIS, optimized LMS) for career management.
Teacher and Employee Retention	Retention programs supported by continuous career development, fair performance recognition, and a motivating work environment.	Retention programs are not explicitly linked to systematic career development; rewards are perceived as insufficient.	Missed opportunities to strengthen development programs and reward systems.	Integrate career development with retention strategies; develop fair achievement-based incentive systems.
Performance Evaluation	Objective, data-based performance evaluation processes using multiple feedback sources (e.g., 360-	Performance evaluation remains largely manual, subjective, and not fully integrated	Lack of objectivity, data integration, and technology utilization.	Digitize performance evaluation processes; adopt multi-source

	degree feedback) and integrated with LMS/HRIS for development planning.	with data or development systems.		feedback mechanisms.
Training and Development	Regular, relevant, effective, and accessible technology training and professional development for all staff.	Technology training is not conducted regularly, is unevenly distributed, and perceived as ineffective by some staff.	Limitations in training quantity, quality, and accessibility.	Design comprehensive and continuous technology training and professional development programs.

4.5 Discussion

The findings of this study indicate that retention problems faced by educational institutions are complex and multifactorial issues rooted in systemic weaknesses, rather than sporadic complaints. Data from the gap analysis revealed deeply embedded problems, particularly the continued dominance of manual operational processes. The failure of manual evaluation systems to adequately recognize the contributions of teachers and staff directly contradicts the findings of Nguyen et al. (2020), who emphasized that fair performance recognition is a key factor in improving employee retention.

This highlights the urgency of adopting more structured and data-driven systems in which technology can play a crucial role. Leuhery (2024) highlights that training technologies, such as Learning Management Systems (LMS), can enhance effectiveness, motivation, and employee loyalty. The findings of this study confirm this assertion, while also identifying implementation barriers, such as inadequate infrastructure and limited digital literacy, as real challenges. To address these issues, the integration of Human Resource Information Systems (HRIS) and LMS is essential.

Therefore, effective investment should not be limited to hardware or software but must also include the development of human capital (Becker, 1975), ensuring that staff possess the necessary skills to fully utilize new systems. This demonstrates that the proposed model should be framed not merely as a technological solution but as a strategic intervention aimed at transforming the entire operational mindsetfrom fragmented and manual processes to integrated, cohesive, and data-driven systems. Furthermore, Andini et al. (2025) emphasize that systematic knowledge management practices in schools have been proven to enhance teachers' motivation and career readiness.

In line with this, the Teacher Performance Improvement Model of MAN 2 Grobogan (2025) underscores the importance of leadership and work discipline as supporting factors for employee retention. The integration of a technology-based model in this study extends these findings by introducing digital instruments that enable objective evaluation, measurable training, and data-driven reward systems to the training process. This critical discussion establishes a strong "common thread" between the empirical data, findings, and relevant theories, adding analytical depth and strengthening the study's contribution.

4.6 Design of the Technology-Based Career Development Model Scheme

Based on the research findings and discussion, the design of the technology-based career development model can be illustrated through an input–process–output–impact framework that demonstrates the workflow and interactions among components. This scheme illustrates how inputs in the form of technology and policies are transformed through technology-supported talent management processes

to produce desired outputs, such as improved competence, motivation, and performance, which ultimately enhance teacher and staff retention as well as institutional reputation.

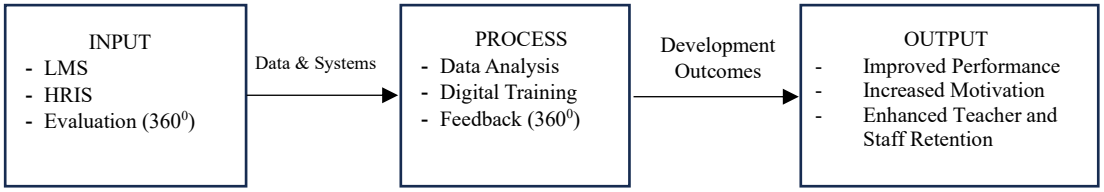

Figure 4. Input process output scheme of the technology-based career development model

5. Conclusions

5.1 Conclusions

This study successfully developed a conceptual model of technology-based career development designed to enhance motivation, retention, and job satisfaction in private educational institutions. The model fills an important gap in the literature by integrating technology-based career management systems with retention strategies an approach that has rarely been examined holistically. By operationalizing established retention theories through practical demonstration, the study offers both novelty and strong empirical justification. The findings indicate that manual and non-transparent evaluation systems reduce motivation and increase teacher turnover, whereas technology-based career development models such as HRIS, LMS, 360-degree evaluations, and digital reward systems significantly improve motivation, performance, and retention. Furthermore, triangulation analysis reveals that retention issues are systemic rather than merely the result of individual perceptions, confirming the need to integrate digital HR strategies into organizational policies to support effective and sustainable transformation.

5.2 Implications

5.2.1 Practical Implications

Guidance should be provided to private educational institutions to support the development of transparent, fair, and integrated technology-based career development systems. This study highlights the importance of HRIS, LMS, and 360-degree evaluation as practical solutions for reducing evaluation subjectivity and enhancing employee retention. In addition, the findings offer strategic insights for school management, SMEs, and HR practitioners on improving employee loyalty and job satisfaction through digital systems that facilitate clear career pathways and performance-based reward mechanisms. The study also assists institutional leaders in designing more structured technology training programs to address user resistance and strengthen digital literacy among educators and staff.

5.2.2 Academic Implications

This study enriches the human resource management literature by presenting an empirically grounded, technology-based model relevant to the education sector, which remains relatively underexplored. It contributes theoretically by operationalizing retention theory, human capital theory, and social exchange theory into a practical, technology-driven framework. Furthermore, the study serves as a reference for future research in assessing the model's effectiveness through quantitative methods and cross-context applications, such as in SMEs or non-educational institutions. It also encourages further exploration of digital transformation in HRM strategies through integrative approaches that combine policy, technology, and employee behavior.

5.3 Suggestions

Based on the limitations of this study, several recommendations are proposed for future research. Longitudinal studies are needed to measure the long-term impact of model implementation on teacher retention, motivation, and performance using robust quantitative data. Comparative studies across

different types of educational institutions should also be conducted to identify distinctive implementation patterns and institutional challenges in applying technology-based HR solutions. In addition, future research is encouraged to explore the role of artificial intelligence and machine learning in predicting turnover, personalizing career development, and automating advanced HR analytics within educational contexts. Finally, the development and testing of structured monitoring and evaluation mechanisms, including key performance indicators (KPIs), are recommended to assess the effectiveness and sustainability of the proposed system.

References

Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology*, *63*(1), 1–18. https://doi.org/10.1111/j.2044-8325.1990.tb00506.x

Alsaif, A., & Sabih Aksoy, M. (2023). AI-HRM: Artificial Intelligence in Human Resource Management: A Literature Review. *Journal of Computing and Communication*, *2*(2), 1–7. https://doi.org/10.21608/jocc.2023.307053

Andini, A., Mukayah, A., & Ismail, I. (2025). Manajemen Pengetahuan dan Kinerja Terhadap Pengembangan Karir Karyawan: Studi SMA YBPK I Surabaya. *Studi Ilmu Manajemen Dan Organisasi*, *6*(1), 111–122. https://doi.org/10.35912/simo.v6i1.3775

Becker, G. S. (1975). Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education, Second Edition. In *Human capital: A theoretical and empirical Analysis*.

Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, *9*(2). https://doi.org/10.3316/QRJ0902027

Bratamanggala, R. I. (2023). Digital Transformation in Human Resource Management: A Systematic Literature Review. *Siber International Journal of Education …*, *1*(2), 57–64. https://review.e-siber.org/SIJET/article/view/57%0Ahttps://review.e-siber.org/SIJET/article/download/57/40

Cascio, W. F., & Boudreau, J. W. (2012). Short Introduction to Strategic Human Resource Management. In *Short Introduction to Strategic Human Resource Management*. https://doi.org/10.1017/cbo9781139227087

Creswell, J. W. (2003). Research design Qualitative quantitative and mixed methods approaches. *Research Design Qualitative Quantitative and Mixed Methods Approaches*. https://doi.org/10.3109/08941939.2012.723954

Hutasoit, A. W., Satriawan, B., Khaddafi, M., & Friadi, J. (2025). *Pengaruh Inovasi , Kompetensi Digital , Lingkungan , dan Motivasi terhadap Kinerja Pegawai PU (The Influence of Innovation , Digital Competence , Environment , and Motivation on PU Employee Performance)*. *6*(1), 145–157.

Ichdan, D. A. (2024). Analysis of employee performance through productivity: The role of kaizen culture, motivation, and work discipline in the manufacturing industry. *Annals of Human Resource Management Research*, *4*(1), 13–28. https://doi.org/10.35912/ahrmr.v4i1.2158

Kundu, S. C., & Lata, K. (2017). Effects of supportive work environment on employee retention: Mediating role of organizational engagement. *International Journal of Organizational Analysis*, *25*(4). https://doi.org/10.1108/IJOA-12-2016-1100

Kvale. (1996). An Introduction to Qualitative Research Interviewing. *Qualitative Research*.

Leuhery, F. (2024). The Role of Technology in Employee Training and Development: A Systematic Review of Recent Advances and Future Directions. *Management Studies and Business Journal (PRODUCTIVITY)*, *1*(3), 369–385. https://doi.org/10.62207/jmnzaw55

Lewis, L. (2024). *Teacher Attrition and Mobility*.

Merriam, B Tisdell, E. (2016). Qualitative Research A guide to Design and Implementation. *The Jossey-Bass Higher and Adult Education Series*, *112*(483).

Muchsinati, E. S., Oktalia, A., & Priscilla, Y. G. (2024). How e-human resource management can increase employee productivity in F&B in Batam. *International Journal of Financial, Accounting, and Management*, *5*(4), 429–444. https://doi.org/10.35912/ijfam.v5i4.1606

Nasution, A. R., Suhairi, S., & Nurbaiti, N. (2024). The Influence of Training and Career Development on Employee Retention Mediated by Job Satisfaction. *Almana : Jurnal Manajemen Dan Bisnis*, *8*(2), 203–224. https://doi.org/10.36555/almana.v4i2.1417

Nguyen, H. N., Le, Q. H., Tran, Q. B., Tran, T. H. M., Nguyen, T. H. Y., & Nguyen, T. T. Q. (2020). The impact of organizational commitment on employee motivation: A study in Vietnamese enterprises. *Journal of Asian Finance, Economics and Business*, *7*(6). https://doi.org/10.13106/JAFEB.2020.VOL7.NO6.439

Nykvist, S., Langseth, I., & Nykvist, C. (2024). *Teacher wellbeing and retention: The impact of rapidly transforming learning and teaching with digital technologies*. 184–188. https://doi.org/10.36315/2024v2end039

Pervin, M. T., & Zohora, F. T. (2023). The impact of training and development facilities on job commitment among entry-level employees: Bangladeshi RMG perspectives. *Annals of Management and Organization Research*, *5*(1), 49–60. https://doi.org/10.35912/amor.v5i1.1704

Podolsky, A., Kini, T., Darling-Hammond, L., & Bishop, J. (2019). Strategies for attracting and retaining educators: What does the evidence say? *Education Policy Analysis Archives*, *27*. https://doi.org/10.14507/epaa.27.3722

Putri, N. H. (2023). Literatur Riview terhadap Turnover Intention: Pengaruh Kepuasan Kerja dan Stres Kerja. *Studi Ilmu Manajemen Dan Organisasi*, *4*(1), 51–61. https://doi.org/10.35912/simo.v4i1.1728

Putri, W. N. (2024). *the-Effect-of-the-Implementation-of-Digitalization-and-4Egbo53Qti11*. *5*(4), 565–574.

Spradley, J. (1980). Participant Observation. Nueva York: Holt, Rinehart and Winston. *Observación Participante*, *Anthropolo*.

Sulaiman, S., Lanori, T., & Susanto, P. C. (2025). *Enhancing employee competitiveness : The role mediation of human resources competencies*. *5*(1), 77–89.

Wang, A. (2024). Enhancing HR management through HRIS and data analytics. *Applied and Computational Engineering*, *64*(1), 223–229. https://doi.org/10.54254/2755-2721/64/20241394

Wirayudha, C. A., & Adnyani, I. G. A. D. (2020). Kompensasi dan Pengembangan Karir Berpengaruh Terhadap Kepuasan Kerja Dan Retensi Karyawan Bpr Lestari. *E-Jurnal Manajemen Universitas Udayana*, *9*(5). https://doi.org/10.24843/ejmunud.2020.v09.i05.p02

Yulianah, Y. (2024). Digital Transformation In Human Resource Management: Strategy And Implementation. *Jurnal Ekonomi*, *13*(2), 1502–1512. https://doi.org/10.54209/ekonomi.v13i02