

Integrating Human Resource Development Systems in Tourism Vocational Education Institutions

HR Development
System in Tourism
Vocational Education

Dameria Girsang^{1*}, Ivan Benedict Tambunan², Lyandru Togu Mulia Tambunan³, Susanna Silvia Sembiring⁴

2965

^{1,2,3,4}Department of Tour and Travel Business Management, Akademi Pariwisata dan Perhotelan Darma Agung; Medan, Indonesia

*Corresponding Author E-Mail: mberhul@gmail.com

ABSTRACT

This research is driven by the suboptimal human resource management in tourism vocational education in meeting dynamic industry demands, especially in graduate competency alignment, educator capacity, certification implementation, and industry partnership quality. This study aims to describe the practice of human resource management in tourism vocational education, analyze competency development strategies of students and educators, identify obstacles to human resource management, and formulate a development model that is more relevant to the needs of the tourism sector. This study uses a qualitative case study design in Indonesian tourism vocational education institutions, with data collected through semi-structured interviews, limited observations, and document analysis involving institutional leaders, educators, staff, students, alumni, and industry partners, and analyzed using reflexive thematic analysis to identify key patterns of institutional experiences and practices. The results identify four key findings, including a mismatch between graduate competencies and industry needs, underdeveloped educator capacity building, limited substantive industry partnerships, and fragmented human resource management, while the quality of training and certification programs remains uneven. These findings indicate the need for a more integrative, adaptive, and collaborative human resource management system in tourism vocational education to improve relevance and competitiveness.

Keywords: Educator Development, Graduate Competencies, Human Resource Management, Industry Partnerships, Tourism Vocational Education.

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INTRODUCTION

Tourism vocational education is facing growing pressure to adapt to digitalization, personalization, and sustainability demands within the tourism industry (Vafokulova et al., 2024). Human resource development has therefore become a strategic issue influencing graduate readiness, educator competency, institutional relevance, and industry collaboration (Kayyali, 2025). Recent studies show that tourism and hospitality sectors increasingly require competencies in digital engagement, innovation, leadership, and data-driven service management (Busulwa et al., 2022; Baluyut, 2025). At the same time, sustainability is now considered a core component of tourism education rather than an additional aspect (Fuchs et al., 2025). Consequently, tourism vocational institutions are expected to move beyond procedural training and develop adaptive, reflective, digitally literate, and sustainability-oriented graduates who can respond effectively to evolving professional demands (Lungu et al., 2023; Fernández-Villarán et al., 2024).

In practice, Rocha et al. (2022) highlight persistent misalignment between institutional competencies and labor market demands. Pantaruk et al. (2025) show that soft skills and internship experiences significantly enhance hospitality students' employability, particularly in communication, teamwork, and problem-solving. Balls and Balls (2025) further confirm that contextual and practice-based learning is essential in shaping tourism competencies. Liu et al. (2024) show that mentoring significantly improves hospitality

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students' internship satisfaction, indicating that workplace learning quality strongly influences the transition from education to employment. Hamizi et al. (2025) reinforce that learning interactions during internships are a critical determinant of graduate readiness. These findings suggest that the issue is not only what is taught, but also how human resources are managed through training, internships, mentoring, and certification systems.

However, existing literature tends to examine these aspects separately. Fernández-Villarán et al. (2024) focus on curriculum and sustainability integration, Busulwa et al. (2022) emphasize digital competence, while Lungu et al. (2023) and Liu et al. (2024) highlight internships and employability. SimSek and Kalipci (2023) show that tourism education research is growing, yet curriculum remains dominant, while institutional human resource governance is still underexplored. Airey (2013) and Chen et al. (2025) similarly indicate that human resource development is often treated as fragmented initiatives rather than an integrated managerial system.

From a strategic human resource management perspective, educational outcomes depend on how institutions manage the full HR cycle, including recruitment, professional development, industry-based learning, performance evaluation, motivation, and partnership design. Habibi et al. (2025) show that management strategy, commitment, knowledge management, and motivation significantly influence teacher performance in Indonesian vocational education. Zhou et al. (2024) further state that workplace placement improves vocational teachers' competencies, but knowledge transfer depends on relevance, peer support, and institutional capacity. This indicates that educator development must be institutionally structured, not individually driven.

The urgency of HR system integration is increasing alongside digitalization and sustainability transitions. UNESCO-UNEVOC (2024) highlights the role of technical and vocational education and training institutions in integrating green and digital competencies in tourism and hospitality. Similarly, Andini et al. (2024) emphasize the need for adaptive HR systems that support lifelong learning and industry collaboration, while Liu and Brunhaver (2025) stress that service quality and sustainability adaptation depend on institutional human resource quality. However, four gaps remain in the literature: limited integration of HR systems in curriculum reform, insufficient focus on institutional management processes, separation between educator development and industry collaboration, and the absence of a unified HR development model linking students, educators, and industry.

Most studies still rely on quantitative approaches that measure relationships between variables such as digital competence, internship satisfaction, or employability. While these provide valuable insights, they do not sufficiently explain how HR practices are implemented, negotiated, and experienced by institutional actors. Based on this synthesis, the main problem of tourism vocational education is not only the competency gap of graduates, but also the fragmented nature of human resource development as an institutional system. This includes limited integration between student competency development, educator capacity building, industry partnerships, internship and certification practices, and curriculum alignment with digitalization and sustainable tourism demands. This study aims to analyze the major challenges in human resource development within tourism vocational education, particularly related to graduate competency gaps, educator development, industry partnerships, and the implementation of training, internships, certification, and mentoring programs. Furthermore, this study seeks to formulate a more integrative and adaptive human resource management model that aligns institutional practices with the dynamic needs of the tourism industry.

LITERATURE REVIEW

Strategic Human Resource Management in Tourism Vocational Education

In this study, Strategic Human Resource Management (SHRM) is understood not merely as administrative functions such as recruitment, training, performance appraisal, and career development, but as an organizational system that aligns institutional goals,

educator capacity, student learning, and industry needs. This perspective is crucial because tourism vocational education operates in a highly dynamic environment, requiring graduates to be prepared for rapidly changing labor market demands while maintaining strong educational quality. In vocational education, SHRM becomes relevant when institutional performance is measured not only by curriculum completeness but also by the ability to manage human resources as the main drivers of learning, innovation, and industry collaboration. These pressures reflect broader global VET transformations driven by digital transition, green skills demands, and shifting labor markets, where Storonyanska et al. (2025) affirm that VET transformation has become a strategic priority shaped by technological innovation, sustainability, and demographic change.

Within this framework, tourism vocational education can be understood as a multi-level human resource development system involving students, educators, education staff, and industry partners who collectively shape learning quality. SHRM therefore offers a more comprehensive lens than approaches that focus only on curriculum or graduate competencies in isolation. Recent hospitality education literature highlights persistent tensions between academic expectations, industry relevance, educator workload, and evolving student needs. Giousmpasoglou and Pantelidis (2025) describe hospitality education as a continuous tension between institutional pressures, industry demands, and teaching realities, and emphasize the need for a more balanced model that positions vocational relevance alongside academic legitimacy. This reinforces the importance of understanding human resource development not as an individual-level issue, but as a strategic institutional system.

Competencies, Job Readiness, and Changes in Skill Profiles

The human capital theory remains relevant in positioning vocational education as an investment in productivity and competitiveness, but in tourism, it must be expanded toward a contextual competency approach. The industry now demands not only technical skills but also transferable skills, digital literacy, reflective abilities, cross-cultural communication, and sustainability awareness. Stangl et al. (2024), through a participatory study with industry and academic experts, developed a transferable skills model in tourism and hospitality, showing that competencies must extend beyond job-specific skills toward capabilities that support mobility, career resilience, and long-term sustainability, marking a shift from a “ready to work” to a “ready to develop” paradigm.

Digitalization further highlights this gap. Stylianou and Pericleous (2025), through interviews with hospitality graduates in Cyprus, found that although graduates possess basic digital skills, they lack practical experience with industry systems such as Opera, Fidelio, Booking.com, and Expedia, indicating misalignment between education and industry practice. From an SHRM perspective, this implies the need for strategic integration of lecturer development, learning facilities, industry collaboration, and practice-based education.

Sustainability also reshapes competency requirements. Fernández-Villarán et al. (2024) emphasize that tourism curricula should be developed collaboratively with stakeholders and grounded in critical and strategic thinking to support sustainable tourism leadership. Thus, competence is not merely technical mastery but an intellectual and ethical capacity to navigate complex contexts, reinforcing the need for integrated development of work, digital, and sustainability competencies in tourism vocational education.

Educator Development and Institutional Capacity

In vocational education, graduate quality is strongly determined by educator quality, making teacher and lecturer development a central issue rather than a supporting one. In Indonesia, Rahmawati et al. (2025), through focus group discussions with vocational teachers, found that low digital competence is driven by both external factors, such as limited infrastructure, weak institutional support, time constraints, and insufficient

training, and internal factors, such as low confidence and self-efficacy among senior teachers. These findings shift the narrative from individual shortcomings to structural and cultural limitations, which, in SHRM terms, relate to training systems, organizational support, learning culture, and incentive design.

At a broader level, Suharno et al. (2020) identify systemic weaknesses in Indonesian vocational education, including graduate unemployment, policy inconsistency, weak teacher competence, and limited institutional support, framing the issue as one of governance rather than isolated school performance. Although not specific to tourism, these findings are highly relevant due to the sector's strong dependence on effective link and match between education and industry.

Together, these studies illustrate both macro and micro dimensions of the problem. Pambudi et al. (2020) highlight systemic governance challenges in vocational education, while Rahmawati et al. (2025) show how these issues manifest in educators' lived experiences. However, both studies share a limitation in that they do not sufficiently explain how integrated HR practices covering recruitment, development, performance management, and industry collaboration are systematically designed and implemented in tourism vocational institutions. This gap strengthens the need for a comprehensive SHRM-based model in vocational education.

Experiential Learning, Internships, and Industry Partnerships

One of the most relevant theories in tourism vocational education is experiential learning, as learning in this field is highly dependent on engagement in real work contexts. However, recent literature indicates that field experiences do not automatically produce meaningful learning. Seyitoğlu (2022), through semi-structured interviews with 30 tourism students, found that the pandemic significantly shaped students' perceptions of vocational development, career planning, and industry prospects. This shows that student experiences are influenced not only by curriculum content but also by perceptions of job stability, dignity, and professional futures, meaning that institutional decisions on internships, mentorship, and industry networking also shape professional identity formation.

In line with this, Choe and Kim (2024) demonstrate that Living Lab-based learning in tourism higher education develops professional skills, collaboration and networking, learning agility, adaptability, and emotional connection with communities. Based on qualitative data from observations, field notes, questionnaires, and reflective journals, their study confirms that real-world engagement expands student competencies beyond traditional academic outcomes. Espinoza-Figueroa et al. (2021), through focus group discussions with tourism students in Ecuador, also show that research-based learning enhances student engagement, contextual understanding, and sensitivity to sustainable development. When combined, these studies indicate that effective vocational pedagogy is not only practice-oriented but also positions students as reflective actors engaging with real problems alongside external stakeholders, giving industry and community partnerships an epistemic role beyond operational functions. However, most studies on internships, work-integrated learning, and collaborative pedagogy remain centered on student experiences and learning outcomes. They provide a limited explanation of how institutions manage internal human resources to ensure consistent implementation of experiential learning, including the design of industry networks, lecturer preparation for field-based learning, and the integration of internship outcomes into competency assessment and curriculum development.

Curriculum, Pedagogic Innovation, and Industry Relevance

The latest literature also emphasizes that curriculum changes need to be read together with the capacity of institutional human resources. Assen et al. (2023) found that design thinking in hospitality education supports the development of higher-order thinking skills *in* students, and industry partners rate the learning process and innovation skills of students more positively than facilitators/educators. This finding is interesting because it

hints at the perceived distance between the industrial world and educators. On the one hand, it can be read as proof that pedagogic innovation opens up more relevant learning spaces. On the other hand, he also indicated the need to strengthen the competence of educators to be able to assess, facilitate, and interpret innovative learning with the same strong framework as industrial partners. In other words, curriculum updates without teacher HR updates risk generating implementation inequality.

Fernández-Villarán et al. (2024) shows the same thing from a sustainability point of view. A strong curriculum is born out of a collaborative process that involves international program analysis, job offers, alumni feedback, and ongoing consultation with professionals and community partners. This shows that relevant curriculum adaptation is not just an internal academic decision, but rather the result of mature knowledge governance and external relationships. From SHRM's perspective, this is only possible if the institution has mechanisms that support organizational learning: lecturers are given space to update their insights, relationships with industry are institutionally managed, and data from alumni and the job market is treated as the basis for decision-making.

RESEARCH METHODS

This study employs a qualitative case study design focusing on Human Resource Management (HRM) practices in tourism vocational education. This approach is selected because the phenomenon cannot be adequately understood through variable measurement alone, but requires an in-depth exploration of processes, experiences, relationships among actors, and institutional contexts where HR policies are implemented. The study focuses on key HRM aspects, including student competency development, educator capacity building, industry partnerships, and related practices such as training, internships, certification, and mentoring within vocational education institutions.

The research is conducted in tourism vocational education institutions in Indonesia, characterized by strong linkages with the business and industrial sectors, practice-based learning implementation, and structured competency development programs. Participants are selected purposively based on their involvement in HR development processes, including institutional leaders, lecturers or instructors, education staff, students, or final-year students with internship experience, alumni, and industry partners from tourism-related sectors. This selection ensures a comprehensive understanding of HRM practices from policy formulation to implementation and workplace experience across multiple actor levels.

Data are collected through semi-structured interviews, limited observations, and document analysis. Interviews serve as the primary data collection method to explore participants' experiences and interpretations, guided by themes such as recruitment and placement, competency development, training and certification, performance evaluation, industry partnerships, and institutional challenges. Observations are used to capture real learning environments and interactions between educators, students, and industry actors, while document analysis includes curricula, internship guidelines, partnership agreements, training materials, and institutional policies. Data analysis follows reflexive thematic analysis by Braun and Clarke (2019), which involves six iterative stages: familiarization with data, initial coding, theme development, theme review, theme definition and naming, and analytical writing. This process emphasizes an interpretive approach in which themes are constructed through continuous interaction between data, context, and the researcher's reflection. Analytical memos and coding documentation are used to support transparency in the analytical process.

Research rigor is ensured through trustworthiness criteria, including credibility through triangulation and limited member checking, transferability through thick description, dependability through an audit trail of research decisions, and confirmability through reflexive documentation of researcher perspectives. The study also follows COREQ guidelines to ensure transparency in reporting qualitative research procedures. Ethical considerations are embedded throughout the research process, including informed

consent, voluntary participation, confidentiality, and the right to withdraw at any time. Participant identities and institutional names are anonymized, and sensitive data are securely stored. These measures ensure ethical protection given the study's focus on internal institutional practices, human resource management systems, and industry collaboration dynamics. Table 1 shows the distribution of the participants for this research.

Table 1. Distribution of Research Participants

Participant Code	Role
P1, P8, P11, P19, P20	Institution/program leaders
P6, P7, P13, P17, P22	Lecturers/teachers/instructors
P10, P21	Education staff
P4, P9, P15, P23	Students
P3, P16	Alumni
P2, P5, P12, P14, P18, P24	Industry partners

RESULTS

The Mismatch of Graduate Competencies with The Dynamics of Industrial Needs

The first theme indicates that a gap is generally perceived between competencies developed in tourism vocational education institutions and evolving industry expectations. This gap is not primarily reflected in basic technical skills, but is more evident in adaptability, professional communication, mastery of operational technology, and readiness to respond to the real rhythm of work environments (Chen et al., 2025; Basrowi et al., 2025). From the perspective of institutional leaders, curriculum development and internal training are reported to be not fully aligned with rapid changes in industry needs, where curriculum revisions are often left behind by emerging requirements, particularly in digital services and guest experience-based standards (P1) (Lukitasari et al., 2025). From the perspective of industry partners, graduates are considered adequate in basic service competencies; however, inconsistencies are identified in essential soft skills required in practice, especially in speed, flexibility, cross-divisional collaboration, and the ability to respond appropriately to dynamic service situations and customer complaints (P2).

From the perspectives of students and alumni, the learning experience is reported to not fully reflect the complexity of real work environments. A sense of readiness is often experienced during the learning process; however, this changes after entering the industry, where greater demands are encountered related to pressure handling, guest communication, and accuracy in fast-paced service conditions (P3) (Hamizi et al., 2025). In addition, laboratory-based learning is perceived as limited in representing real workplace variability, resulting in initial confidence that is not fully sustained when facing more complex field situations during internships (P4).

A further gap is also identified in digital competence, where some graduates are reported by industry stakeholders to be unfamiliar with operational systems commonly used in workplace environments, including reservation systems, digital reporting tools, and online coordination platforms (P5) (Rahmawati et al., 2025). The results indicate that the competency gap is not perceived as an individual deficiency, but rather as a structural outcome of limited synchronization between learning processes, evolving industry demands, and the broader human resource management system within tourism vocational education institutions.

Unstructured and Sustainable Development of Educator Competencies

The second theme indicates that the development of competencies among lecturers, teachers, and instructors has not been implemented in a systematic, sustainable, and strongly industry-connected manner. Although educator competence is widely recognized as a key determinant of learning quality, capacity-building efforts remain sporadic and not fully integrated into an ongoing development system (Weller et al., 2025). Training opportunities are reported to be available; however, they are often perceived as too general and not directly applicable to classroom or laboratory needs,

particularly in areas such as reservation systems, current service trends, and emerging industry practices (P6) (Elshifa et al., 2024). Limited time and heavy workload are also consistently identified as major constraints, as educators are required to manage teaching responsibilities, administrative tasks, student supervision, and institutional activities, leaving limited space for continuous professional development (P7).

Institutional leadership acknowledges that structured mechanisms for ensuring educators' exposure to current industry practices remain limited. Opportunities for direct industry immersion are not yet consistently provided, resulting in gaps between academic teaching and real-time industry developments (P8). From the student perspective, variations in learning quality are observed across educators. Learning delivered by lecturers or teachers with active industry engagement is perceived as more relevant and closer to real workplace conditions, while such exposure is not evenly distributed among all educators (P9) (Busulwa et al., 2022).

In addition, competency development for education support staff is reported to receive less attention, despite their important role in academic administration, certification processes, internship coordination, and external relations. This indicates that professional development initiatives are still concentrated on teaching staff, while administrative personnel are not yet fully integrated into structured development programs (P10) (Andini et al., 2024). The result shows that educator and education staff development has not yet been managed as part of an integrated human resource management system, highlighting the need for a more structured, continuous, and industry-responsive approach aligned with the evolving demands of tourism vocational education.

Important but not yet Fully Substantive Industry Partnerships

The third theme highlights that partnerships with industry are widely recognized by all participant groups as an essential component of tourism vocational education, yet their implementation has not consistently reached a substantive level. Existing collaborations are often concentrated on administrative and procedural needs, such as internship placements and memorandum of understanding agreements, and have not fully developed into sustained partnerships that support mutual human resource development (Kayyali, 2025). From the perspective of institutional leaders, industrial cooperation is considered crucial for maintaining the relevance of tourism vocational education. However, the quality and continuity of these collaborations are reported to be highly dependent on personal networks and institutional capacity. Industrial partnerships are also described as not always evolving into active collaborations, as many remain limited to internship arrangements or ceremonial activities without significant follow-up engagement (P11).

This condition is reinforced by industry partners, who indicate that collaboration with educational institutions is often short-term and task-oriented. Engagement is frequently initiated only for internship needs, while broader discussions related to curriculum development, competency standards, and graduate evaluation remain limited and inconsistent (P12). Lecturers and teachers acknowledge that strong industry collaboration plays a significant role in improving the learning process. Access to industry input, field visits, guest lectures, and practical exposure is reported to facilitate the integration of theoretical and practical knowledge. However, such relationships are not consistently maintained and are often dependent on individual relationships rather than institutional systems (P13) (Chen et al., 2025).

From the perspectives of students and alumni, the quality of industry partnerships is perceived as a determining factor in learning and career outcomes. Better-structured internship experiences are associated with stronger professional development, increased confidence, and improved job opportunities, while less structured placements are perceived as providing limited guidance and direction (P14) (Prashant & Sharma, 2025). The result indicates that industry partnerships are acknowledged as a key element in tourism vocational education, yet they have not fully functioned as a structured and

sustainable institutional mechanism for supporting the competency development of students, educators, and the institution as a whole.

Fragmented Human Resource Management Practices

The fourth theme relates to the implementation of formal human resource strengthening programs in tourism vocational education institutions, including training, industry practices, certification, and mentoring. The findings indicate that although these programs are widely implemented, their quality is uneven and their integration across components remains limited. From the student perspective, internships are identified as the most significant learning experience in developing job readiness, as they provide exposure to real workplace conditions that cannot be fully replicated in classroom settings. However, the quality of internship experiences is reported to vary considerably depending on placement quality and the level of supervisory support, where some placements provide structured learning and evaluation, while others are limited to routine tasks without adequate guidance (P15) (Hamizi et al., 2025).

From the perspective of alumni, certification is recognized as valuable for demonstrating competency standards and increasing confidence, yet it is not considered sufficient to reflect actual job readiness in industry settings. Practical performance, adaptability, and problem-solving abilities are emphasized as more decisive factors in workplace assessment (P16) (Stangl et al., 2024). From the lecturer and instructor perspective, mentoring is considered a crucial component in supporting student transition into the industry, but its implementation is reported to be inconsistent and not yet fully institutionalized. In some cases, mentoring is provided actively, while in others it depends on individual initiative and informal arrangements (P17). Industry partners also highlight that some interns enter workplaces without adequate preparation from their home institutions, particularly in relation to work culture, discipline, ethics, and responsibility, which results in a need for repeated basic orientation at the workplace level (P18). From the perspective of institutional leaders, the programs are acknowledged to be formally available; however, their integration and evaluation within a unified human resource development system are reported to be incomplete (P19) (Chen et al., 2025). This theme indicates that the existence of programs does not automatically ensure their effectiveness, as variations in implementation quality, depth of guidance, and continuity remain evident.

A further pattern emerging from the data highlights that human resource management in tourism vocational education is still conducted in a fragmented manner. Development initiatives tend to be implemented as separate activities rather than as part of an integrated institutional system that connects planning, implementation, evaluation, and follow-up. Institutional leaders acknowledge that the main challenge lies not only in the availability of programs, but also in the limited integration between units and activities, resulting in an incomplete human resource development framework (P20). Education personnel similarly report that coordination between academic units, cooperation units, and administrative departments remains weak, leading to fragmented workflows and limited integration of data, evaluation, and follow-up processes (P21). From the lecturer's perspective, a more continuous system of competency development is considered necessary, one that goes beyond short-term training programs and enables ongoing learning, feedback, and direct linkage with industry needs (P22). Students and alumni also emphasize the need for clearer connections between classroom learning, internship experiences, competency evaluation, and career preparation, which are not yet consistently experienced (P23) (Seyitoğlu et al., 2022).

Industry partners further emphasize that their role is expected to extend beyond internship provision and instead be positioned as strategic partners involved in competency alignment and evaluation of learning outcomes (P24) (Kayyali, 2025). This theme indicates that the core requirement emerging from the data is the development of a more integrated, adaptive, and collaboration-oriented human resource management system. The findings collectively suggest that the main challenge is not located in a single

aspect, but in the limited integration among various human resource development components into a coherent system.

Table 2. Summary of Themes, Subthemes, and Data Indications

Main Theme	Subtheme	Key Data Indications
Incompatibility of graduate competencies	Soft skills, work adaptation, and digital literacy	Graduates are rated as adequate on a technical basis, but weak on flexibility, professional communication, and use of industrial systems
Educator competency development	Sporadic training, workload, minimal industry exposure	Educators need relevant, sustainable, and field-based upskilling
Industry partnerships	Administrative cooperation, dependency of personal networks	Relationships with industry are important, but not always substantive collaborations
Fragmented human resource management and uneven implementation of development programs	Weak integration between units and between programs; uneven implementation of training, internships, certifications, and mentoring	Human resource development programs exist but vary in quality, depth, and evaluation, and are not yet integrated into a coordinated and systematic institutional framework.

Table 2 shows the results of the study, a consistent picture that human resource development in tourism vocational education has been pursued through various programs and mechanisms, but has not been fully organized as a complete managerial system. From the perspective of students, the main problem can be seen in the mismatch between the learning experience and the reality of work that demands technical, social, and digital skills simultaneously. From the educator side, the need to strengthen competencies is very felt, especially to maintain the relevance of teaching materials and learning methods. Institutionally, industry partnerships, training, certification, and mentoring have become an important part of vocational education practices, but their implementation is still characterized by quality variations, weak coordination, and limited continuity. All of these findings point to one common need that repeatedly appears in the data, namely the need for more integrated, collaborative, and adaptive management of human resources and resources to changes in the tourism industry (Riyanto et al., 2025).

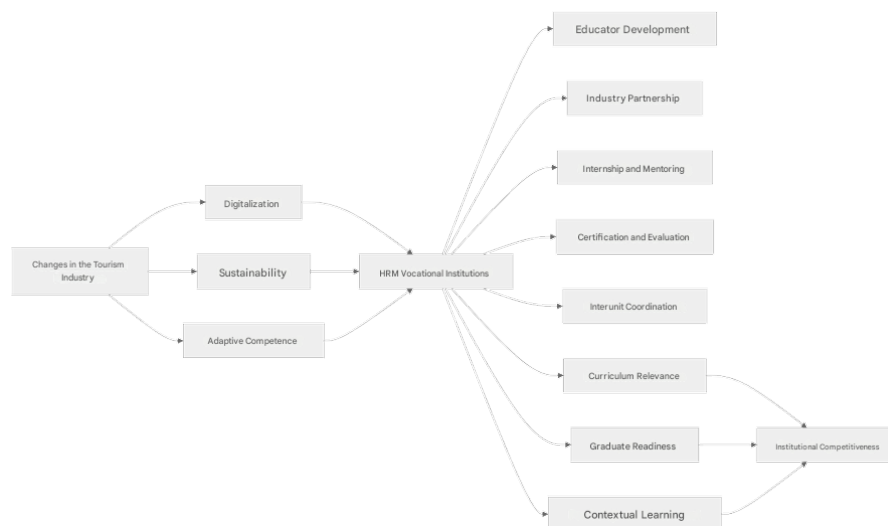


Figure 1. Conceptual Position of Findings in the Tourism Vocational Education HRM System

Figure 1 illustrates a framework in which tourism industry changes driven by digitalization, sustainability, and adaptive competence are translated by HRM in vocational institutions into strategic actions such as educator development, industry

collaboration, internships, certification, curriculum alignment, and contextual learning, ultimately enhancing graduate readiness and institutional competitiveness in responding to evolving industry demands.

DISCUSSION

The findings show that the core issue in tourism vocational education is not the absence of programs, but the lack of integration among key human resource development components: graduate competencies, educator development, industry partnerships, internships, certification, and mentoring within a unified system. In a rapidly changing tourism industry shaped by digitalization, sustainability, and adaptive skill demands, this fragmentation leads to reactive institutional responses that lag behind industry needs (Vafokulova et al., 2024). This supports vocational education literature arguing that effectiveness depends on systemic integration of learning, workforce development, and labor market alignment, rather than isolated program implementation (Liu & Brunhaver, 2025).

The issue of graduate competency mismatch reflects this systemic fragmentation. The findings show that although graduates generally possess basic operational abilities, they still experience gaps in adaptive competencies such as professional communication, digital literacy, situational flexibility, and the ability to manage service complexity. This supports the argument of Stangl et al. (2024), who emphasize that the tourism and hospitality sector increasingly requires transferable and adaptive skills beyond procedural expertise. In this sense, job readiness is no longer defined merely by task execution, but also by the ability to adapt, collaborate, and continuously learn in dynamic environments. This perspective is reinforced by Yi et al. (2025), who argue that the value of education lies in developing cross-context competencies rather than narrow technical training. Empirical findings from Prashant and Sharma (2025) and Stylianou and Pericleous (2025) further confirm that while students may master foundational skills, significant gaps remain in applying industry-specific technologies and systems. In Indonesia, this condition is consistent with the findings of Suharno et al. (2020), which highlight persistent challenges in relevance, teacher quality, and industry linkage.

A similar pattern is observed in educator development, where training and capacity-building efforts remain sporadic and not fully based on structured needs analysis. This supports the view of Giousmpasoglou and Pantelidis (2025), who describe hospitality education as a field shaped by tensions between academic expectations, industry demands, and educators' working realities. Without continuous and structured development systems, institutions struggle to keep pace with rapid industry transformation. This is further supported by Widaningsih et al. (2024), who identify structural barriers such as limited access to training, heavy workloads, and weak institutional support systems. Moreover, the findings expand the conventional understanding of vocational human resources by emphasizing the critical role of administrative and support staff in managing internships, certification processes, partnerships, and academic services, consistent with the systemic perspective highlighted by Weller et al. (2025).

Industry partnerships also reflect a similar limitation, where collaboration tends to remain at a formal or administrative level rather than evolving into deep knowledge co-creation (Vicente, 2025). Although partnerships exist, they are often limited to internship placement mechanisms rather than integrated curriculum co-development. This supports critiques of superficial link-and-match implementation discussed by Meha et al. (2025). In contrast, studies such as Fernández-Villarán et al. (2024) and Rodrigues et al. (2024) demonstrate that deeper collaboration through living lab and co-creation approaches can significantly enhance student engagement, professional identity, and learning agility.

Similarly, internships, certification programs, and mentoring are widely implemented but vary significantly in quality and pedagogical integration. While these components are essential for experiential learning, the findings suggest that they often operate in isolation rather than as an integrated developmental pathway. This aligns with Espinoza-Figueroa

et al. (2021), who emphasize that experiential learning becomes meaningful only when accompanied by structured reflection and engagement. Likewise, Assen et al. (2023) show that learning outcomes improve significantly when students are involved in authentic, problem-based learning with strong stakeholder interaction.

The findings converge on the conclusion that human resource development in tourism vocational education remains fragmented and insufficiently integrated. Although various initiatives exist, their impact is limited because they operate in silos rather than as a unified system. This reinforces broader scholarly calls for systemic reform, including curriculum responsiveness, collaborative learning, and stronger link-and-match governance as discussed by Hermansyah and Faradillah (2025), Lukitasari et al. (2025), Riyanto et al. (2025), and Fatimah and Chamidi (2025). The key contribution of this study lies in emphasizing that sustainable competitiveness in vocational institutions depends not only on improving individual programs but on building an integrated human resource management system that connects all components into a coherent, adaptive, and industry-responsive institutional framework.

CONCLUSION

This study concludes that human resource management in tourism vocational education still faces a fundamental challenge in the form of weak integration among key development components, including graduate competencies, educator capacity building, internships, certification, mentoring, and industry partnerships. Although these elements have been implemented, they tend to operate partially and are not yet fully interconnected within a coherent institutional system. As a result, the effectiveness of human resource development depends not only on the availability of programs but on the institution's ability to manage them in a strategic, adaptive, and integrated manner in response to digitalization, sustainability demands, and dynamic industry changes.

This study strengthens the perspective of strategic human resource management in vocational education by positioning HR development as an integrated system that connects curriculum implementation, learning processes, and industry collaboration, rather than as isolated components. The findings imply the need for continuous industry-alumni involvement in curriculum design, structured and experience-based educator development, integration of internship and certification outcomes with academic evaluation, strengthening mentoring systems, and transforming industry partnerships into long-term strategic collaboration rather than administrative arrangements.

This study has several limitations. Its qualitative case-study design means the findings are context-specific and not intended for broad statistical generalization. Data based on participant narratives may also involve subjective bias. In addition, the study does not directly measure long-term outcomes such as graduate employability, career progression, or industry performance indicators. The scope is also limited in representing the full diversity of tourism vocational institutions across different regions. Future research is recommended to conduct comparative or multi-case studies across different types of institutions and regions to capture contextual variation in HR management practices. Mixed-method approaches are also needed to link institutional processes with measurable outcomes such as job readiness and industry satisfaction. Further studies should also integrate perspectives such as digital transformation, sustainability, and career development theory to better explain how vocational education can adapt to evolving tourism industry demands in a more comprehensive and future-oriented manner.

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