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EVALUATING THE GAP BETWEEN ACTUAL AND TARGET COMPETENCIES IN HUMAN RESOURCES IN INDONESIA: ANALYSIS OF KEY COMPETENCY CORRELATIONS AND INNOVATIVE APPROACHES FOR INTEGRATED DEVELOPMENT

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ABSTRACT

This study investigates the disparity between actual achievements and target competencies of Human Resources (HR) in Indonesia, focusing on the identification and analysis of key competencies. Data were collected and analyzed using NVivo to explore correlations among various competencies, such as innovation management through power-sharing models and quasi-experimental methods. The results reveal a significant positive correlation among several competencies, indicating that improvements in one area can coincide with advancements in another. However, the findings also highlight a substantial gap between actual achievements and desired targets, underscoring the need for a more holistic and integrated approach to competency development. By utilizing NVivo, this research identifies areas requiring further attention and offers strategic insights for more effective HR development. The main conclusion of this study is the necessity to focus on strengthening underdeveloped competencies and leveraging synergies among competencies to bridge this gap. The proposed strategies aim not only to narrow the competency gap but also to enhance global competitiveness and Indonesia's readiness to face modern challenges.

KEYWORDS: competencies; gap; innovation; power; quasi-experimental; correlation; NVivo

INTRODUCTION

Previous research on human resource (HR) competency development in Indonesia has explored the concept of HR competency enhancement through a framework that includes strategic thinking, leadership, and communication [1]. These competencies can improve organizational performance by increasing employee engagement, productivity, and profitability. This research has practical implications for HR professionals and organizational leaders in Indonesia. The findings provide insights into the state of HR competency development in Indonesian organizations and its impact on organizational success. They also serve as a foundation for designing deeper HR policies and programs to enhance the skills and competencies of the Indonesian workforce [2].

Subsequent research aims to identify factors influencing the formation of human resource skills. A qualitative descriptive analysis methodology was employed to adhere to scientific investigation standards. The evolution from simple artificial intelligence versions to more sophisticated iterations is a hallmark of the era known as Industry 4.0.

This era is characterized by the increasing integration of digital technology, automation, and connectivity across various industry sectors [3].

The digital transformation era represents significant technological changes, affecting various aspects of life in society. In Indonesia, there is an urgent need for high-quality resources to meet the demands of artificial intelligence systems, which require intelligent company operations, innovative services, and products. To enhance scientific knowledge and human resource competencies, performance management analysis in artificial intelligence systems becomes crucial. This analysis includes evaluating HR competencies in the industrial system, collaboration between universities and relevant ministries, mapping education budgets, and assessing the HR needs of industries or companies in the context of artificial intelligence [4].

LITERATURE REVIEW

Curiosity and interaction are essential components of cross-cultural competence.

In the context of cultural understanding, Fujimura [5] asserts that cultural competence relies on continuous efforts to develop new understandings, skills, expertise, and curiosity. Previous studies have shown that a mindset fostering curiosity positively impacts personal growth, interpersonal relationships, and professionalism. Kashdan et al. [6] define curiosity as a motivational system linked to positive emotions associated with recognition, information seeking, and engaging in novel and challenging experiences. The essence of competency development lies in fostering curiosity and achieving cross-cultural competence by stepping out of one's comfort zone. This intentional development involves moving from familiar environments to unfamiliar ones. While some professionals may have the time and resources to explore information sources and needs, including traveling abroad, it is not always necessary to go far. Developing cross-cultural competence can also be achieved locally, such as visiting a Chinatown or an exotic restaurant, although these steps alone are insufficient without a strategic approach to cross-cultural competency development. This development, in the context of foreign cultures, aims to enhance abilities and test one's competencies, with cross-cultural competence being the key [7].

Fujimura [5] further explains that strengthening personal competency growth and optimizing development within foreign cultural contexts, cross-cultural competence (3C) offers a pathway to fulfilling personal and professional competencies. However, achieving this competence cannot be accomplished merely by reading manuals. From participant observation to reflexivity (maintaining dynamic awareness in relationships with people from different cultural contexts), 3C is developed and sustained through interaction, reflection, self-critique, and understanding the behaviors and motivations of others and oneself. This development focuses on three main elements that pave the way to 3C and its optimization for a smooth process. The key elements of 3C competence include cultural understanding, discovering new cultural values, adaptation, and optimizing cultural relationships through empathy, mindfulness, and reflexivity.

Applying Mathematical Models in Education to Address Real-World Competency Issues

1. In addressing the requirements for competency design as outlined by Wess et al. [8], students are expected to conduct research that bridges the gap between real-world phenomena and mathematical concepts, allowing for bidirectional translation. This involves working within mathematical models to define competencies, where such models are understood as the ability to identify relevant questions, structure variables, establish relationships between these variables, or formulate assumptions that align with real-world competencies within specific contexts and timeframes. These statements are then expressed mathematically, and the mathematical expression serves both as an interpretation and a validation of the competency solutions required within the model.
2. The mathematical model developed, based on the input from the given situation, should also incorporate the ability to analyze or compare the provided model by investigating various prior assumptions, verifying the fulfillment of the definitions provided, and determining the limitations of the model in representing particular real-world situations. Promoting the ability to address real-world competency challenges using mathematical modeling tools is thus the primary objective of addressing competency needs through modeling in educational institutions [9].

3. The definition of a mathematical model, as described above, refers to what is known as global modeling competency, which can be utilized even in partial forms within specific processes, identified as an atomistic perspective. This understanding of modeling competency is recognized as the ability to construct, use, or adapt mathematical models by adequately following the necessary steps in the process to address competency-related problems and to analyze or compare the resulting models. Therefore, mathematical modeling competency is not a one-dimensional construct but can be interpreted as a combination of various sub-competencies [10].

The Power-Sharing Model for Innovation and Competency Development

In relation to the execution of ideas, Colwill [11] suggests that one approach to power-sharing is to create an environment conducive to entrepreneurial innovation. By leveraging the power held by leaders, this model allows for broader societal participation through education, while simultaneously curbing the potential for power abuse and corruption. Although the execution of power-sharing models may differ within the hierarchical structures of organizations, substantial contributions through innovation can be achieved by reducing the concentration of power within an organization, particularly by minimizing the structural distance from top leadership.

Structurally reducing power within an organization can enhance flexibility, foster competency development, and facilitate learning within those competencies [12]. In a culture where executive power is concentrated, the significant distance between decision-makers and direct implementers may hinder the initiation and sustainability of innovation. This is especially true in environments where organizational members are accustomed to relying heavily on directives and decisions from their supervisors. Moreover, a significant power distance can stifle inquiry, hinder competency development, and impede adaptation to change through innovation, as there are fewer opportunities to debate innovations and express differing viewpoints. In such environments, asking questions may be perceived as criticizing executive power, potentially leading to blame, thereby creating an atmosphere where questioning is implicitly discouraged [13].

Observation, Interview, and Document Analysis Methods for Identifying Relationships Between Events

Research conducted using the Scientific Research Method involves the active participation of the researcher in the process of hypothesis testing. According to Jain [14], the primary goal of this research is to establish the nature of relationships between various observed events, serving as a foundation for explaining the dynamics between the involved parties. In this particular investigation, information is gathered through responses to questions posed during interviews, either one-on-one or in small group settings. During these interviews, the researcher engages with participants by asking specific research questions or initiating discussion topics. Respondents are then asked to provide answers to these questions, with the possibility of additional instructions or follow-up questions.

Additionally, observation is employed by recording activities or behaviors related to the research topic, while closely monitoring the interactions of individual or group respondents. This observational method may involve controlled settings or experimental participation, allowing the researcher to directly engage or remain passive, depending on the type of observation conducted. Another approach includes naturalistic inquiry, where the researcher explores events as they naturally occur, with varying degrees of involvement based on the observational approach chosen.

Furthermore, document analysis or archival research is incorporated as part of this qualitative study. This method involves examining a wide range of information sources, including documents, media, historical records, and contemporary records. The term "document" in this context encompasses various written or visual sources, such as journals, narratives, and diaries, all of which are analyzed to provide deeper insights into the research question.

Risk Management and Stakeholder Interests in Organizational Change Management

In the context of organizational change, Somerset [15] emphasizes that managing organizational change requires careful consideration of the organization’s goals and objectives, the attitudes adopted toward change, and the positioning toward risk. It also involves maintaining the interests of the organization's stakeholders, governance systems and controls, the existing organizational culture, leadership, and the actions that are consistently nurtured as part of the organization’s identity. Decision-makers are increasingly scrutinizing these elements, particularly the inherent risks that may be misaligned during organizational change management [16].

Given the potential impact, corporate policymakers face significant challenges in determining how organizational change should be configured, driven, and led. They must also navigate the subsequent implications, which are

manifested in the strategies pursued and in maintaining relationships among stakeholders throughout the change process.

Human-Machine Collaboration for Enhancing Competency in Network-Based Technologies

According to Troisi [17], in the context of human-machine collaboration, pre-existing networks composed of various subjects across a wide range of expertise have collectively developed network-based knowledge technologies. These networks facilitate the sharing of expertise, thereby enhancing individual competencies and expanding collective knowledge through the dissemination of information among participants. The networks are further strengthened by social approaches, including the sharing of entrepreneurial culture, which supports the necessary actions to mitigate risks associated with business activities that may covertly benefit from the inherent knowledge transmission within those activities [18].

However, the risk of failure arises because the actors involved in these business activities also include participants from the public sector, who engage in specific aspects of the business related to administrative and geographical activities. These activities, though limited, can influence the interests of the business actors. Within this ecosystem, it is crucial that there is no overlap between the administrative and geographical boundaries of these approaches, such as geographic clusters characterized by economic agglomeration activities, which are closely linked to the expertise possessed by the human resources within each company.

Quasi-Experimental Design for HR Competency in the Industry 4.0 Era

The advancement of Human Resource (HR) competencies in the Industry 4.0 era is continuously evolving. According to Christie and Alkin [19], enhancing HR competencies within organizations involves experimenting with changes in HR management design as part of efforts to improve these competencies. This process includes the development of quasi-experimental designs for managing competencies, where various experimental designs are tested, ideally through random assignments. Quasi-experimental designs are adapted from randomized experiments and are readily implemented in applied social science research, though they may not always meet practical or ethical standards or involve random control assignments [20].

Generally, quasi-experimental designs encompass multiple types of interventions or treatments aimed at enhancing competencies, followed by a comparison of outcomes achieved through these experiments. Similar to treatments or randomization in new design methods, essential attributes of experiments result in specific characteristics defining the experiment. The ideas introduced in Campbell and Stanley's 1966 paper have significantly influenced the promotion of new concepts related to HR competency enhancement research and now form the foundation for nearly all applied social science research methods in this field. The responses generated from the interventions or treatments in quasi-experimental designs, which yield favorable reactions to HR competency enhancement, contribute to fostering an environment that is more receptive to alternative approaches in applied social science research.

The Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability

In the 21st century, organizations have increasingly recognized the importance of operations in predicting events that are highly likely to occur, even if these events have negative impacts. This awareness has led to the implementation of adequate risk protection measures to safeguard against negative impacts on competencies. According to Kosieradzka and Rostek [21], one of the most popular operational protection models in risk management and continuity planning is the Business Continuity Maturity Model (BCMM) introduced by Virtual Corporation in 2020. This model features a maturity scale with six levels and evaluates operational development based on 11 competency areas and sustainability criteria, specifically 7 competency areas and 4 sustainability criteria.

In addition to the BCMM, another widely used operational protection model is the Enterprise Risk Management Maturity Model (ERM), which includes 8 assessment areas analyzed with a 5-level maturity scale, as proposed by Ciorciani and Blattner in 2008. Another prominent maturity model, the Risk and Insurance Management Society Maturity Model (RIMS-RMM), uses a 5-point scale and surveys 7 competency attributes and their sustainability across 25 competency units and 68 key indicators to characterize organizational operations predictions. This model is notable for its adherence to numerous standards and norms in risk management and continuity.

For addressing competency and sustainability issues in the public sector, particularly in the context of crisis impacts, the Risk Management in Public Crisis Management (RMPCM) model is proposed. This model focuses on operational protection of competencies and sustainability through risk management in public crisis management.

The Impact of Focus on Grammar on Intercultural Communication Effectiveness

In the context of cultural reflection, Zhang [22] highlights that although instructors in competency enhancement programs recognize the importance of integrating intercultural competencies into language instruction, culture has often been overlooked in many language classrooms from the outset. One argument is that instructors tend to adhere to traditional approaches, emphasizing linguistic competencies before teaching the substantive aspects of language outlined in grammar syllabi. These approaches prioritize linguistic accuracy and communication without adequately addressing cultural awareness in language learning or intercultural communication competency development [23].

Furthermore, instructors often struggle with finding sufficient time to incorporate cultural content into classroom communication or post-classroom learning through competency enhancement programs. Many novice instructors, despite their awareness and commitment to substantial cultural communication in their teaching, frequently focus excessively on their personal development and the limited time and energy they have for language instruction. Additionally, there is a lack of both supportive resources and appropriate technical support needed for effective teaching within competency enhancement programs.

Culture, as interpreted by scholars, is seen as something that is frequently touched upon but not sufficiently leveraged in its relevance and contribution to language communication teaching, rendering it an unclear and enigmatic component. This issue of relevance and inadequate contribution is exacerbated by the lack of suitable teaching materials for teaching cultural aspects and intercultural interaction skills [24]. While vocabulary and grammatical themes can be easily explained and practiced, integrating cultural elements into language communication instruction and addressing cultural mismatches present ongoing challenges in the classroom [25].

The Role of Seniority in Promotion and Assignment Decision-Making

In this context, Shinohara and Kenichi [26] discuss that the reinforcement of seniority rights tends to satisfy labor unions, although such rights can lead to controversy regarding how workers' competencies are assessed, particularly in companies undergoing changes and seeking resolutions through further arbitration. In arbitration cases, new criteria established in rulings, such as the one from Chevrolet Gear & Axle dated December 30, 1941, clarify the standards used for evaluating competencies. The grievance that led to this ruling, issued on August 15, 1941, involved a case where worker T was selected for a complaint handling position over worker M, despite both having the same competency level for the job. T was chosen due to longer seniority, which was a key factor in the decision.

The arbitrator in this ruling argued that determining subjective factors of competency is challenging due to: (1) the difficulty of accurately assessing each worker's relative abilities; (2) the inevitable personal considerations involved in field supervisors' evaluations; (3) the clear impact of seniority on productivity; and (4) the necessity for management to assess suitability according to processes that measure compatibility, even when workers with similar competencies are involved.

RESEARCH METHOD

The first issue with collecting qualitative data is the intensive effort and time required, which can extend over months or even years. Researchers must manually transcribe and analyze data, a process that is not only time-consuming but also tedious and labor-intensive.

The second problem researchers face is in sampling. Researchers need to determine whether the cases studied are representative of a broader population. In other words, whether qualitative research findings can be generalized beyond the specific cases examined.

These challenges can be addressed with NVivo, a software developed by QSR International. NVivo assists in managing data from various sources such as books, reports, articles, websites, and field notes. The application supports qualitative research by efficiently managing data, conducting literature reviews, performing triangulation, and generating research presentations.

NVivo simplifies the processing of non-numeric data, including text and visual data, and helps organize large volumes of information. By using NVivo, researchers can achieve greater efficiency in terms of time, cost, and effort.

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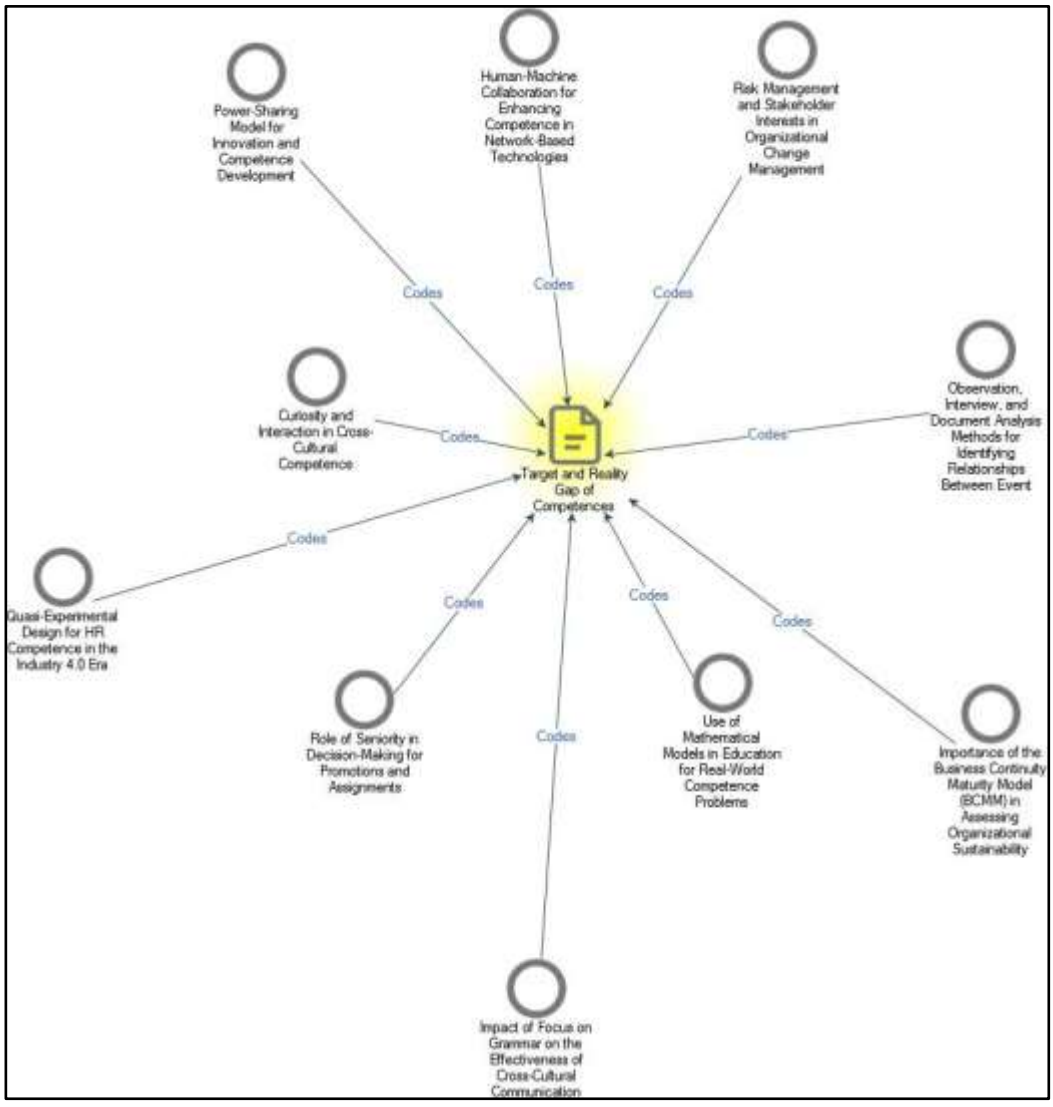
DISCUSSION

The overall processing results indicate several critical areas within the targets and achievements of Indonesian human resource competencies that require improvement to meet desired objectives. These gaps encompass aspects such as technology, research, human resource management, and cross-cultural communication.

Diagram 1 Gap Between Reality and Targets of Indonesian HR Competencies



Based on Diagram 1: Gap Between Reality and Targets of Indonesian HR Competencies, the following observations can be made:

The diagram highlights several key elements illustrating the gap between current achievements and targets for Human Resource (HR) competencies in Indonesia. Here is an analysis of several critical points related to the "Target and Reality Gap of Competences":

1. **Curiosity and Interaction in Cross-Cultural Competence:**

This emphasizes the importance of curiosity and interaction within cross-cultural competence. The identified gap suggests a lack of exposure and training in broader multicultural contexts, crucial for the current era of globalization.

2. Quasi-Experimental Design for HR Competence in the Industry 4.0 Era:

It underscores the need for more innovative research methods to develop HR competencies that align with Industry 4.0 demands. The gap here may be the limitation in applying adaptive and progressive research methods in the workplace environment [27].

3. Role of Seniority in Decision-Making for Promotions and Assignments:

This indicates that seniority still plays a role in decisions related to promotions and assignments. This gap reflects the need to prioritize competencies over seniority to support meritocracy.

4. Impact of Focus on Grammar on the Effectiveness of Cross-Cultural Communication:

It suggests that an excessive focus on grammar can affect the effectiveness of cross-cultural communication. The existing gap might be the need for a more flexible and empathetic approach to cross-cultural communication.

5. Human-Machine Collaboration for Enhancing Competence in Network-Based Technologies:

This highlights the importance of human-machine collaboration in enhancing competence with network-based technologies. The gap here might be a lack of technical skills and adaptation to new technologies among HR professionals.

6. Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability:

It emphasizes the significance of the BCMM in assessing organizational sustainability. The identified gap shows a lack of awareness or implementation of such models in organizational practices [28].

In the era of globalization and rapid technological advancement, HR competencies are crucial for organizational success. In Indonesia, there is an urgent need to evaluate and enhance HR competencies to meet market demands and industry developments. The analyzed diagram compares current competency achievements with desired targets, identifying various gaps that need addressing.

Key Observations:

1. Cross-Cultural Competence: The diagram highlights the need for improved training and exposure to multicultural environments. Effective adaptation and collaboration at the international level are hindered by significant gaps in this area.
2. Quasi-Experimental Research Design: The need for innovative research methods is emphasized, especially in the context of Industry 4.0. Many organizations have yet to adopt adaptive research methods, which are essential for developing relevant and effective training programs.
3. Technology and Human-Machine Collaboration: The diagram reveals a need to enhance technical skills to adapt to network-based technologies. This gap reflects insufficient skills required to optimize new technologies, affecting productivity and efficiency.
4. Business Continuity Maturity Model (BCMM): The importance of BCMM in evaluating organizational sustainability is noted. Many organizations lack awareness or application of these models, which may impede their ability to thrive in a competitive environment.

Overall, this analysis indicates several critical areas where HR competencies in Indonesia need improvement to meet desired targets. Addressing these gaps will better prepare Indonesian HR professionals to face future challenges and contribute significantly to economic growth and national development [29].

In addition, the measurement of the gap between the current achievements and targets of HR competencies in Indonesia is also evaluated through the overall percentage of influencing factors, as illustrated in Table 1 "Gap Target and Achievement of HR Competencies in Indonesia." Below is an analysis of these factors:

Table 1 Gap Target and Achievement of HR Competencies in Indonesia

Factors affecting Human Resource	Percentage coverage
Curiosity and Interaction in Cross-Cultural Competence	1.47%
Curiosity and Interaction in Cross-Cultural Competence\Use of Mathematical Models in Education for Real-World Competence Problems	1.17%

Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability	0.60%
Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability\Impact of Focus on Grammar on the Effectiveness of Cross-Cultural Communication	1.45%
Power-Sharing Model for Innovation and Competence Development	1.69%
Power-Sharing Model for Innovation and Competence Development\Human-Machine Collaboration for Enhancing Competence in Network-Based Technologies	1.54%
Power-Sharing Model for Innovation and Competence Development\Observation, Interview, and Document Analysis Methods for Identifying Relationships Between Event	0.72%
Power-Sharing Model for Innovation and Competence Development\Risk Management and Stakeholder Interests in Organizational Change Management	1.84%
Quasi-Experimental Design for HR Competence in the Industry 4.0 Era	1.58%
Role of Seniority in Decision-Making for Promotions and Assignments	2.90%

The data reveals that key competencies exhibit varying scopes, reflecting differing focuses and priorities within specific contexts. The competency with the highest scope is "Seniority's Role in Promotion and Assignment Decisions," which holds a coverage percentage of 2.90%. This underscores the significant attention given to seniority in decision-making related to promotions and assignments, likely due to the experience and insights senior members contribute to the organization.

Following this is "Risk Management and Stakeholder Interests in Organizational Change Management," with a coverage of 1.84%. This indicates the crucial importance of risk management and the need to consider various stakeholder interests when navigating organizational changes. In an era characterized by rapid transformations, the ability to manage risks and understand stakeholder needs becomes increasingly vital.

The "Power-Sharing Model for Innovation and Competency Development" also commands a notable coverage of 1.69%. This highlights the significance of power-sharing models in fostering innovation and competency development. Within this framework, organizations may seek to empower a broader range of individuals within their structures to stimulate creativity and growth.

Competencies such as "Quasi-Experimental Design for HR Competency in the Industry 4.0 Era" and "Human-Machine Collaboration to Enhance Competency in Network-Based Technologies" have coverage rates of 1.58% and 1.54%, respectively. These figures indicate substantial attention to technological adaptation and innovative methodologies for developing human resources in the digital age.

Conversely, competencies like "Mathematical Models in Education" and "Methods of Observation, Interviewing, and Document Analysis" exhibit lower coverage. This may suggest that these topics are less emphasized in the current data or are applied within more specialized contexts.

Overall, this analysis provides insight into the prioritization of various competencies, with a strong emphasis on seniority, risk management, and innovation in competency development in the context of modern technology.

Table 2 further illustrates the relationships between various factors affecting human resource competencies in Indonesia, as follows:

Table 2 The relationships between various factors affecting human resource competencies in Indonesia

Code A	Code B	Pearson correlation coefficient

Power-Sharing Model for Innovation and Competence Development\Risk Management and Stakeholder Interests in Organizational Change Management	Quasi-Experimental Design for HR Competence in the Industry 4.0 Era	0.321177
Power-Sharing Model for Innovation and Competence Development\Risk Management and Stakeholder Interests in Organizational Change Management	Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability\Impact of Focus on Grammar on the Effectiveness of Cross-Cultural Communication	0.314672
Power-Sharing Model for Innovation and Competence Development\Risk Management and Stakeholder Interests in Organizational Change Management	Power-Sharing Model for Innovation and Competence Development\Human-Machine Collaboration for Enhancing Competence in Network-Based Technologies	0.310324
Power-Sharing Model for Innovation and Competence Development\Risk Management and Stakeholder Interests in Organizational Change Management	Power-Sharing Model for Innovation and Competence Development	0.301468
Quasi-Experimental Design for HR Competence in the Industry 4.0 Era	Power-Sharing Model for Innovation and Competence Development\Human-Machine Collaboration for Enhancing Competence in Network-Based Technologies	0.255977
Curiosity and Interaction in Cross-Cultural Competence\Use of Mathematical Models in Education for Real-World Competence Problems	Curiosity and Interaction in Cross-Cultural Competence	0.245518
Power-Sharing Model for Innovation and Competence Development	Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability\Impact of Focus on Grammar on the Effectiveness of Cross-Cultural Communication	0.239979
Power-Sharing Model for Innovation and Competence Development\Risk Management and Stakeholder Interests in Organizational Change Management	Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability	0.237348
Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability	Power-Sharing Model for Innovation and Competence Development\Human-Machine Collaboration for Enhancing Competence in Network-Based Technologies	0.233789
Quasi-Experimental Design for HR Competence in the Industry 4.0 Era	Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability\Impact of Focus on Grammar on the Effectiveness of Cross-Cultural Communication	0.213122

Power-Sharing Model for Innovation and Competence Development	Power-Sharing Model for Innovation and Competence Development\Human-Machine Collaboration for Enhancing Competence in Network-Based Technologies	0.212591
Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability	Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability\Impact of Focus on Grammar on the Effectiveness of Cross-Cultural Communication	0.210105
Power-Sharing Model for Innovation and Competence Development	Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability	0.209103
Quasi-Experimental Design for HR Competence in the Industry 4.0 Era	Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability	0.201564
Role of Seniority in Decision-Making for Promotions and Assignments	Power-Sharing Model for Innovation and Competence Development\Risk Management and Stakeholder Interests in Organizational Change Management	0.192787
Role of Seniority in Decision-Making for Promotions and Assignments	Quasi-Experimental Design for HR Competence in the Industry 4.0 Era	0.187176
Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability\Impact of Focus on Grammar on the Effectiveness of Cross-Cultural Communication	Power-Sharing Model for Innovation and Competence Development\Human-Machine Collaboration for Enhancing Competence in Network-Based Technologies	0.179457
Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability	Curiosity and Interaction in Cross-Cultural Competence	0.174335
Quasi-Experimental Design for HR Competence in the Industry 4.0 Era	Power-Sharing Model for Innovation and Competence Development	0.173407
Role of Seniority in Decision-Making for Promotions and Assignments	Power-Sharing Model for Innovation and Competence Development\Human-Machine Collaboration for Enhancing Competence in Network-Based Technologies	0.1661
Curiosity and Interaction in Cross-Cultural Competence\Use of Mathematical Models in Education for Real-World Competence Problems	Quasi-Experimental Design for HR Competence in the Industry 4.0 Era	0.155318
Power-Sharing Model for Innovation and Competence Development\Human-Machine Collaboration for Enhancing Competence in Network-Based Technologies	Curiosity and Interaction in Cross-Cultural Competence	0.153938

Role of Seniority in Decision-Making for Promotions and Assignments	Power-Sharing Model for Innovation and Competence Development	0.151078
Curiosity and Interaction in Cross-Cultural Competence\Use of Mathematical Models in Education for Real-World Competence Problems	Role of Seniority in Decision-Making for Promotions and Assignments	0.141415
Curiosity and Interaction in Cross-Cultural Competence\Use of Mathematical Models in Education for Real-World Competence Problems	Power-Sharing Model for Innovation and Competence Development\Human-Machine Collaboration for Enhancing Competence in Network-Based Technologies	0.135491
Quasi-Experimental Design for HR Competence in the Industry 4.0 Era	Curiosity and Interaction in Cross-Cultural Competence	0.13088
Curiosity and Interaction in Cross-Cultural Competence\Use of Mathematical Models in Education for Real-World Competence Problems	Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability	0.119336
Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability\Impact of Focus on Grammar on the Effectiveness of Cross-Cultural Communication	Curiosity and Interaction in Cross-Cultural Competence	0.10728
Power-Sharing Model for Innovation and Competence Development\Risk Management and Stakeholder Interests in Organizational Change Management	Power-Sharing Model for Innovation and Competence Development\Observation, Interview, and Document Analysis Methods for Identifying Relationships Between Event	0.100056
Power-Sharing Model for Innovation and Competence Development	Curiosity and Interaction in Cross-Cultural Competence	0.093814
Power-Sharing Model for Innovation and Competence Development\Observation, Interview, and Document Analysis Methods for Identifying Relationships Between Event	Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability	0.090486
Curiosity and Interaction in Cross-Cultural Competence\Use of Mathematical Models in Education for Real-World Competence Problems	Power-Sharing Model for Innovation and Competence Development	0.086158
Role of Seniority in Decision-Making for Promotions and Assignments	Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability	0.084806
Power-Sharing Model for Innovation and Competence Development	Power-Sharing Model for Innovation and Competence Development\Observation, Interview, and Document Analysis Methods for Identifying Relationships Between Event	0.081465

Power-Sharing Model for Innovation and Competence Development\Observation, Interview, and Document Analysis Methods for Identifying Relationships Between Event	Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability\Impact of Focus on Grammar on the Effectiveness of Cross-Cultural Communication	0.074286
Role of Seniority in Decision-Making for Promotions and Assignments	Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability\Impact of Focus on Grammar on the Effectiveness of Cross-Cultural Communication	0.066837
Curiosity and Interaction in Cross-Cultural Competence\Use of Mathematical Models in Education for Real-World Competence Problems	Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability\Impact of Focus on Grammar on the Effectiveness of Cross-Cultural Communication	0.065577
Role of Seniority in Decision-Making for Promotions and Assignments	Curiosity and Interaction in Cross-Cultural Competence	0.054403
Curiosity and Interaction in Cross-Cultural Competence\Use of Mathematical Models in Education for Real-World Competence Problems	Power-Sharing Model for Innovation and Competence Development\Risk Management and Stakeholder Interests in Organizational Change Management	0.054215
Role of Seniority in Decision-Making for Promotions and Assignments	Power-Sharing Model for Innovation and Competence Development\Observation, Interview, and Document Analysis Methods for Identifying Relationships Between Event	0.051252
Quasi-Experimental Design for HR Competence in the Industry 4.0 Era	Power-Sharing Model for Innovation and Competence Development\Observation, Interview, and Document Analysis Methods for Identifying Relationships Between Event	0.049328
Power-Sharing Model for Innovation and Competence Development\Risk Management and Stakeholder Interests in Organizational Change Management	Curiosity and Interaction in Cross-Cultural Competence	0.047283
Power-Sharing Model for Innovation and Competence Development\Observation, Interview, and Document Analysis Methods for Identifying Relationships Between Event	Curiosity and Interaction in Cross-Cultural Competence	0.032241
Power-Sharing Model for Innovation and Competence Development\Observation, Interview, and Document Analysis Methods for Identifying Relationships Between Event	Power-Sharing Model for Innovation and Competence Development\Human-Machine Collaboration for Enhancing Competence in Network-Based Technologies	0.021021

Curiosity and Interaction in Cross-Cultural Competence\Use of Mathematical Models in Education for Real-World Competence Problems	Power-Sharing Model for Innovation and Competence Development\Observation, Interview, and Document Analysis Methods for Identifying Relationships Between Event	-0.013747

The data provided includes Pearson correlation coefficients among various competencies, offering insights into how each competency relates to the others. The following are key findings:

Relationships Among Competencies:

1. Power-Sharing Model for Innovation and Competence Development demonstrates several significant correlational links with other competencies. The highest correlation is observed with **Quasi-Experimental Design for HR Competence in the Industry 4.0 Era**, registering a coefficient of 0.321. This indicates that organizations utilizing a power-sharing approach for innovation are also likely to implement quasi-experimental methods in HR competence development.
2. This competency also shows a positive correlational relationship with the Importance of the Business Continuity Maturity Model (BCMM) in Assessing Organizational Sustainability, with a correlation value of 0.315. This suggests a concurrent emphasis on business continuity and the power-sharing model, indicating that organizations proficient in one aspect tend to also focus on the other.

Interpretation of the relationship

Pearson correlation coefficients reveal both the strength and direction of relationships between two variables. In this context:

1. A positive correlation implies that if an organization excels or emphasizes one competency, it is likely to also be strong or place emphasis on related competencies.
2. Although these correlations are not extremely strong (below 0.5), they indicate general patterns in organizational approaches to competence management.

From the analyzed data, it can be concluded that there are significant relationships between several key competencies within organizations. Notably, a focus on innovation through power-sharing models and the significance of business continuity appear to be interlinked. These findings may assist organizations in developing more integrated strategies for HR development and innovation by understanding how these competencies interact and support each other.

CONCLUSION

This study reveals a significant gap between the actual achievements and target competencies of Human Resources (HR) in Indonesia. Key competencies, such as innovation management through power-sharing models and quasi-experimental methods, exhibit strong positive correlations, indicating that advancements in one area often align with progress in others. However, the existing gaps highlight the urgent need for a more holistic and integrated approach to competency development. Organizations in Indonesia must focus on bridging these gaps by strengthening underdeveloped areas and leveraging the potential synergies between related competencies. With appropriate strategies, HR development can not only reduce these disparities but also enhance Indonesia's global competitiveness and readiness to face modern challenges.

REFERENCES

[1] J. Aweya, Desighning Switch/Routers, Fundamental Concept and Design Methods, First Edition ed., Boca Raton London: CRC Press Taylor & Francis Group, 2023.

[2] Kosasih, I. S. Darmo, Z. T. Rony, E. Fatmawati and H. Ali, "The Human Resources Competency Development as the Key to Organizational Success in Indonesia," *RGSA – Revista de Gestão Social e Ambiental,* vol. 18, no. 2, pp. 1-20, 2024.

[3] A. W. Samad, W. R. S. Setiyadi and Z. M. Utama, "Determination of the Human Resource Competency Development Goals of Indonesia in the Era of Industrial 4.0," *J. Electrical System,* vol. 20, no. 4s, pp. 2032-2049, 2024.

[4] P. L. Gaol, "Implementation of Performance Management in Artificial Intelligence System to Improve Indonesian Human Resources Competencies," Honolulu, 2021.

[5] C. Fujimura, "Developing 3C in the Workplace and the Role of Communication," in *Developing Cross-Cultural Compentence for Leaders*, F. Published, Ed., New York, Routledge, 2022, p. 70.

[6] T. B. Kashdan, P. Rose and F. D. Fincham, "Curiosity and Exploration: Facilitating Positive Subjective Experiences and Personal Growth Opportunities," *Journal of Personality Assessment,* vol. 82, no. 3, pp. 291-305, 2004.

[7] E. Olsen, Strategic Planning Kit For Dummies, 3rd Edition ed., New Jersey: John Wiley & Son Inc, 2023.

[8] R. Wess, H. Klock, H.-S. Siller and G. Greefrath, Measuring Profesional Competence for the Teaching of Mathematical Modelling, First Publication ed., Cham, Swithzerland: Springer Nature Switzerland, 2021.

[9] K. Tryma, "Covid-19 Infodemic and Social Responsibility of Ukrainian Hidger Education Institutions," in *Impact of Infodemic on Organizational Performance*, M. W. Bari and E. Alaverdov, Eds., USA, IGI GLobal, 2021, pp. 226-257.

[10] G. Kaluza, Calm and Confident Under Stress, The Stress Competence Book: Recognize, Understand, Manage Stress, Seventh Edition ed., Berlin: Springer-Verlag GmbH Germany, 2022.

[11] D. A. Colwill, Conflict, Power, and Organizational Change, First Publishing ed., New York: Routledge Taylor & Francis, 2022.

[12] C. Blinder, "From Fluency-Based Instruction to Accomplishment-Based Performance Improvement," in *Applied Behavior Scinece in Organization*, R. A. Houmanfar, M. Fryling and M. P. Alavosius, Eds., New Your, Routledge Taylor & Francis Group, 2022, pp. 81-96.

[13] P. Zanoni, M. D. Coster, K. V. Laer, S. Bagaers, S. Decat, F. Scholz, A. Theunissen and Zwaenepoel, "Claiming a LIvable Academic Life as Critical Diversity Scholars," in *The Routledge Companion to Organizational Diversity Research Methods*, S. N. Just, A. Risberg and F. Villeseche, Eds., New York, Routledge Taylor & Francis Group, 2021, pp. 122-135.

[14] S. Jain, Research Methodology in Arts, Science and Humaties, Oakville Canada: Society Publishing, 2019.

[15] N. P. Somerset, Competence, Conduct, and Billion Dollar Consequences, How Regulatory Strategy and Relationships can Improve Organisational Outcomes, First Published ed., New York: Routledge, 2023.

[16] W. Ten Have, C. Vernooij and J. Stuijt, "Model and methodology," in *Organizational Behaviour and Change Management*, C. Vernooij, J. Stuijt, M. Hendriks, W. ten Have and S. ten Have, Eds., New York, Routledge Taylor & Francis, 2023, pp. 11-29.

[17] R. Troisi, The Firm and Territory, An Organizational Perspective, First Publish ed., New York: Routledge Taylor & Francis, 2023.

[18] H. M. Belal, K. Shirahada, M. Kosaka and A. O. Durowoju, Knowledge in Servitization Management, A Comparative View, First Publishing ed., Cham, Switzerland: Palgrave Macmillan, 2023.

[19] C. A. Christie and M. C. Alkin, "An Evaluation Theory Three, A Framework for Guiding a Range of Evaluation Practice," in *Evaluation Roots, Theory Influencing Practice*, M. C. Alvin and C. A. Christie, Eds., New York, Guilford Publication Inc., 2023, p. 20.

[20] Z. A. Del Prette and A. Del Prette, Social Competence and Social Skills, A Theoritical and Practical Guide, First Publication ed., Cham Switzerland: Springer Natuure Switzerland, 2021.

[21] A. Kosieradzka and K. Rostek, "Models of Process Maturity in Organization," in *Process Management and Organization Process Maturity, Economic and Non-Economic Organization*, A. Kosieradzka and K. Rostek, Eds., Charm Switzerland, Springer Nature Switzerland AG, 2021, pp. 243-295.

[22] S. Zhang, "Integrating Culture in Language Curriculum from Beginning to Intermediate Level in a Blended Learning Environment," in *Enghancing Beginner-Level Foreign Language Education for Adult Learrner,*

Language Instruction, Intercultural, Competence, Technology, and Assessment, E. Nemtchinova, Ed., New York, Routledge Taylor & Francis Group, 2023, p. 76.

[23] N. B. Petersen, Knowledge Communication in Global Organisation, Making Sense of Virtual Teams, First Publishing ed., New York: Routlledge Taylor and Francis, 2023.

[24] L. A. Arasaratnam-Smith and D. K. Deardoff, Developing Intercultural Competence in Higher Education, International Students' Stories and Self Reflection, First Published ed., New York: Routledge, 2023.

[25] V. Guvta, Innovation Mechanisms in Start-ups, Practice, Strategies and Impacs, First Publishing ed., Cham Switzerland: Springer Nature Switzerland AG, 2023.

[26] Shinohara and Kenichi, Work Organizational Reforms and Employment Relations in the Automotive Industry, American Employment Relation in Transition, Fist Publishing ed., Abingdon, Oxon: Routledge Taylor & Francis Group, 2022.

[27] J. P. Maliszewska, Managing Manufacturing Knowledge in Europe in the Era of Industry 4.0, first Publishing ed., Abingdon, Oxon: Routledge, 2023.

[28] I. L. Houtman, C. Vanroelen and K. O. Kraan, "Increasing Work-Related Stress in the Netherlands and Belgium, How Do These Countries Cope?," in *Organizational Stress Around the World, Research andd Practice*, K. A. Sharma, C. L. Cooper and D. Pestonjee, Eds., New York, Routledge, 2021, pp. 167-192.

[29] J.-A. Johannessen, Artifical Intelligence, Automation andd The Future of Competence at Work, First Publish ed., Abindon, Oxon: Routledge, 2021.