



Exploration of Human Capital Development Practices in Closing the Competency Gap in Human Resources in Modern Organization

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ABSTRACT

Changes in the business environment due to digitalization, automation, and technological transformation require organizations to have competent and adaptive human resources. However, many organizations still face a gap between employee capabilities and strategic needs. This study aims to explore Human Capital Development (HCD) practices in closing this gap, identify factors that influence their effectiveness, and evaluate their impact on improving employee competency. The method used is an exploratory qualitative approach with a multiple case study design through interviews, observation, and documentation, and analyzed using the Miles, Huberman, and Saldaña model. The results show that effective HCD practices include digital-based training, reskilling, upskilling, mentoring, and coaching that align with organizational needs. Their effectiveness is influenced by management support, a learning culture, and technology readiness. This study confirms that HCD plays a crucial role in improving organizational competency, adaptability, and competitive advantage.

INTRODUCTION

The increasingly dynamic business environment driven by digitalization, automation, and technological transformation has presented significant challenges for modern organizations in ensuring the competency readiness of their human resources. One of the main issues faced is the competency gap, which is the mismatch between the actual competencies possessed by employees and the competencies required by the organization to achieve its strategic goals (Zhang et al., 2024). This condition leads to decreased work effectiveness, low workforce adaptability, and hampered organizational innovation.

In this context, Human Capital Development (HCD) is a crucial strategy for enhancing human resource capacity through training, continuous learning, mentoring, reskilling, and upskilling. Becker (1993) emphasized that investment in human capital is a key factor in increasing individual productivity and organizational competitiveness. Furthermore, Afandi et al. (2024) explained that trends in modern HR competency development increasingly emphasize the integration of digital technology and adaptive learning in response to changing industry needs. However, the implementation of HCD in many organizations still faces various obstacles, such as a lack of competency needs mapping, suboptimal evaluation of training effectiveness, and poor synchronization between HR development strategies and organizational business strategies (Leontes & Hoole, 2024). Therefore, this research is crucial to explore Human Capital Development practices in closing the HR competency gap in modern organizations.

Based on this background, this study begins with the increasingly apparent competency gap phenomenon in modern organizations as a result of accelerated technological change and the dynamics of industrial needs. This gap raises fundamental questions about how organizations identify and map the gap between the actual competencies of their workforce and the competencies required. Therefore, it is important to examine in-depth the process of identifying competency gaps in modern organizations as a basis for formulating appropriate human resource development strategies. Furthermore, in an effort to close this gap, organizations are required to implement effective and sustainable Human Capital Development practices. However, this implementation does not always run optimally in various organizations. This raises questions about how Human Capital Development practices are applied in real-world contexts, particularly in increasing the relevance of workforce competencies to organizational needs.

Furthermore, the effectiveness of Human Capital Development is also influenced by various factors, both internal and external. Factors such as management support, learning infrastructure, technology utilization, and individual motivation are important determinants in the success of HR development programs. Therefore, a comprehensive analysis is needed to identify the factors that influence the effectiveness of Human Capital Development in modern organizations. Based on this description, this study focuses on three main issues: 1) What is the competency gap in modern organizations? 2) How is the implementation of Human Capital Development

practices to address this gap? 3) What factors influence the effectiveness of human capital development in improving the quality of human resources.

Based on the problem formulation outlined above, this study aims to comprehensively analyze the dynamics of human resource development in the context of modern organizations facing rapidly changing business environments. Specifically, this study aims to identify and understand the competency gap that occurs between the actual capabilities of the workforce and the competency needs demanded by the organization. Furthermore, this study also aims to explore the implementation of Human Capital Development practices implemented by organizations in an effort to overcome this competency gap. This analysis focuses on various forms of development such as training, upskilling, reskilling, and the use of technology-based learning that support the continuous improvement of human resource capacity. Furthermore, this study aims to identify and analyze factors that influence the effectiveness of Human Capital Development, both from organizational and individual aspects. Thus, this study is expected to provide a deeper understanding of the strategic role of human capital development in improving the quality of human resources and supporting the achievement of organizational goals in a sustainable manner.

LITERATURE REVIEW

Human Capital Development

Human Capital Development (HCD) is a systematic process of enhancing individual capacity through investments in education, training, and skills development relevant to organizational needs (Becker, 1993). This concept emphasizes that human resources are not merely a factor of production, but rather a strategic asset with economic value and the potential for continued development. In the dynamic and competitive context of modern organizations, HCD is a key element in creating an adaptive, innovative, and productive workforce. Through effective HCD implementation, organizations are able not only to improve individual performance but also to strengthen overall organizational capabilities. Therefore, HCD is seen as a long-term investment that plays a vital role in maintaining competitive advantage and supporting organizational sustainability amidst rapidly changing business environments.

Human Resource Competency Gap

Competency gap is a condition. There is a difference between the actual competencies possessed by the workforce and the competency standards required by the organization, including aspects of knowledge, skills, and work attitudes. This phenomenon is generally influenced by the dynamics of changes in the business environment, technological developments, and the increasing complexity of job demands, which cause individual competencies to become irrelevant if not continuously updated. In this context, Wibowo et al. (2024) emphasized that a competency-based human resource development approach is an effective strategy in bridging this gap. This approach emphasizes the process of identifying competency standards, mapping individual competency

gaps, and designing structured development programs oriented to organizational needs.

Human Capital Development Practices

Human Capital Development (HCD) practices encompass a range of strategic activities designed to sustainably enhance individual and organizational capacity. Implementation of these practices focuses not only on improving technical skills but also on strengthening behavioral aspects, leadership, and readiness for change. In general, HCD practices encompass the following key components:

1. Training and Development

Training and development activities are at the heart of HCD, aiming to improve employee knowledge, skills, and competencies in line with job demands. These programs can be technical or non-technical and are designed based on organizational needs through a training needs analysis. Effective training can significantly improve employee productivity and performance.

2. Coaching and Mentoring

Coaching and mentoring are interpersonal development approaches focused on improving performance and developing individual potential. Coaching is generally short-term and oriented toward achieving specific performance targets, while mentoring is more long-term, focusing on shaping mindsets, values, and career development. Both practices play a crucial role in the transfer of knowledge and experience within an organization.

3. Talent Management

Talent management is the systematic process of identifying, developing, and retaining high-potential individuals within an organization. This practice encompasses talent needs planning, performance management, and structured career development. With effective talent management, organizations can ensure the availability of superior human resources to support the achievement of strategic goals.

4. Succession Planning

Succession planning is an organization's effort to prepare future leaders by identifying and developing employees with leadership potential. This practice aims to ensure organizational sustainability by minimizing the risk of vacancies in strategic positions. Well-planned succession planning will strengthen the stability and continuity of organizational leadership.

5. Digital Reskilling and Upskilling

In the era of digital transformation, reskilling and upskilling have become essential to ensure the relevance of employee competencies. Reskilling refers to the process of learning new, distinct skills, while upskilling focuses on enhancing existing skills to better align with technological developments. Both practices are crucial for improving the workforce's adaptability to digital change.

According to Leontes and Hoole (2024), effective human capital management practices significantly impact employee performance, particularly through increased work engagement. This demonstrates that employee engagement is a crucial mechanism linking HCD practices to individual

performance. Therefore, implementing comprehensive HCD practices not only enhances employee competency but also fosters emotional attachment and commitment to the organization, ultimately leading to sustained performance improvement.

METHODOLOGY

This research method uses an exploratory qualitative approach with a multiple case study design in several modern organizations. This approach was chosen to gain an in-depth understanding of Human Capital Development (HCD) practices in real-world organizational contexts, including the strategies and challenges faced. The multiple case study design allows for comparative analysis across organizations to identify patterns and differences in HCD implementation. Data collection was conducted through in-depth interviews, observation, and documentation, while data analysis used a thematic approach to generate contextual and relevant findings related to the role of HCD in closing the HR competency gap.

Data collection technique

1. In-depth interview
Conducted with HR managers, learning and development specialists, and employees to obtain in-depth information about Human Capital Development (HCD) practices.
2. Documentation
Review documents such as policies, training programs, and HR development data to obtain structured and formal information.
3. Observation
Directly observe competency development practices in the workplace to understand the implementation of HCD in real conditions.

Data Analysis Techniques

Using the qualitative data analysis model from Miles, Huberman, and Saldaña, which includes:

1. Data reduction
The process of simplifying, selecting, and focusing data that is relevant to the research objectives, so that the data becomes more focused and easier to analyze.
2. Data presentation
Organize data in narrative, table, or matrix form so that patterns, relationships, and findings can be understood systematically.
3. Conclusion/verification
Interpreting data to gain meaning, and conducting ongoing verification to ensure the validity and consistency of research findings.

Data Validation

Data validity in this study was maintained through source triangulation, method triangulation, and member checking. Source triangulation was conducted by comparing information from various informants, while method triangulation was conducted using various data collection techniques such as interviews, documentation, and observation. Furthermore, member checking was conducted by confirming the findings with informants to ensure the researcher's interpretations matched the actual situation.

RESULT AND DISCUSSION

The research findings indicate that modern organizations face significant challenges in managing competency gaps due to technological change and dynamic industry needs. The research findings are grouped into three main focuses: competency gap identification, implementation of Human Capital Development (HCD) practices, and factors influencing their effectiveness.

Identifying Competency Gaps in Modern Organizations

Research findings indicate that the competency gap is a real and systemic phenomenon in modern organizations. This gap arises from a mismatch between the workforce's actual competencies and the competencies required by the organization to address rapidly changing business environments. Specifically, the competency gap is most prevalent in three main areas:

- 1) digital competencies, such as mastery of information technology, data analytics, and utilization of digital-based systems;
- 2) high-level cognitive competencies, such as critical thinking, analytical skills, and data-based decision-making; and
- 3) soft skills, including communication, collaboration, and problem-solving abilities.

The findings also indicate that the majority of the workforce is still oriented towards conventional, static technical competencies, while organizational needs have shifted toward dynamic and adaptive competencies. This indicates skill obsolescence, where previously relevant skills become less relevant to current needs. Furthermore, the study found that many organizations lack a comprehensive, data-driven competency mapping system. As a result, competency gap identification is often conducted reactively, rather than strategically. This situation makes it difficult for organizations to design targeted HR development programs.

Implementation of Human Capital Development Practices

In response to this competency gap, organizations have implemented various Human Capital Development practices as a strategic effort to improve the quality of human resources. Research findings indicate that HCD practices are no longer limited to conventional training but have evolved into a more holistic and sustainable approach. Implemented programs include:

- Formal and non-formal training to improve technical competence
- Upskilling, namely increasing abilities in the same field
- Reskilling, namely the development of new skills for different roles
- Mentoring and coaching, for the transfer of knowledge and experience
- Digital-based learning, such as e-learning and learning management systems

The implementation of digital-based learning was one of the key findings of this study. Digital platforms enable the learning process to be more flexible, personalized, and accessible at any time. This increases workforce participation in the competency development process. However, this study also found that HCD implementation still faces several obstacles. One major obstacle is the mismatch between training programs and actual job needs. Many development programs are generic and not based on the specific needs of the

organization. Furthermore, evaluation of the effectiveness of training programs is still not optimal. Most organizations only evaluate participant satisfaction (reaction level), without measuring the actual impact on performance improvement (performance level).

Factors Influencing the Effectiveness of Human Capital Development

Research results show that HCD effectiveness is influenced by a combination of interacting internal and external factors. From an organizational perspective, management support is the most dominant factor. Leadership commitment to providing resources, policies, and strategic direction is crucial for the success of HCD implementation. Organizations with visionary leadership tend to be more successful in developing the competencies of their workforce.

Furthermore, digital learning infrastructure is a crucial factor in supporting the effectiveness of HCD. The availability of technologies such as e-learning platforms and learning management systems enables the competency development process to be more efficient and measurable. Organizational culture also plays a crucial role. Organizations with a culture of learning and innovation tend to be better able to encourage individuals to continuously develop their competencies. From an individual perspective, learning motivation is a key factor in determining the success of HCD. Individuals who are highly aware of the importance of self-development will be more active in participating in training programs and applying the competencies they acquire.

However, this study also identified several barriers, such as limited access to training, low motivation among some employees, and a lack of integration between HCD strategies and the organization's business strategy.

Competency Gap as an Impact of Digital Transformation

Research findings indicate that the competency gap is a consequence of the massive digital transformation. Rapid technological change causes competency needs to evolve faster than the workforce's ability to adapt. From the perspective of Human Capital Theory (Becker, 1993), this condition indicates that investment in human resource development has not been optimal. The competency gap reflects an imbalance between organizational needs and workforce capacity. Furthermore, this phenomenon also indicates that the HR development approach used is still reactive, rather than proactive. Organizations tend to respond to changes after the gaps occur, rather than anticipating them from the outset.

Transforming Human Capital Development Towards an Adaptive Approach

The research results show that HCD practices have undergone a transformation from a traditional approach to a more adaptive and technology-based approach. This approach aligns with Competency-Based Development Theory, which emphasizes the importance of developing competencies relevant to job needs. Programs such as upskilling and reskilling are key strategies for bridging competency gaps. However, the effectiveness of HCD implementation depends heavily on the level of alignment between development programs and

organizational needs. This misalignment indicates that many organizations have not optimally integrated HCD strategies with their business strategies.

The Strategic Role of Organizations in Improving HCD Effectiveness

Research findings confirm that the success of HCD is greatly influenced by the organization's role in creating a conducive learning ecosystem. From the Resource-Based View perspective (Barney, 1991), human resources are strategic assets that can create competitive advantage. Therefore, organizations need to manage HR development systematically and sustainably. Management support, organizational culture, and learning infrastructure are key factors determining the effectiveness of HCD. Organizations that are able to integrate these three factors will have a greater ability to develop workforce competencies.

Implications for Organizational Competitive Advantage

The research results show that human capital development not only impacts individual competency improvement but also contributes to organizational competitive advantage. A workforce with relevant and adaptive competencies will be able to increase productivity, work quality, and organizational innovation. This aligns with Porter's (1990) view that competitiveness is determined by productivity. Furthermore, the ability to adapt to technological change is a key factor in maintaining competitive advantage in the era of disruption. Organizations that fail to develop HR competencies risk declining performance and losing competitiveness.

CONCLUSIONS AND RECOMMENDATIONS

Based on the research results and discussion outlined above, it can be concluded that the competency gap in modern organizations is an inevitable consequence of technological acceleration and changing global market dynamics. However, strategically integrated Human Capital Development practices have proven to be the most effective tool for closing this gap.

This research shows that successful Human Capital Development focuses not only on technical training (hard skills), but also on developing employees' dynamic capabilities and psychological capital. When Human Capital Development practices align with the company's strategic vision, organizations are able to transform individual potential into a collective competitive advantage that is difficult for competitors to replicate. Thus, investment in human capital is no longer an operational expense, but rather a fundamental defense and growth strategy for organizational sustainability.

For Practitioners and Organizational Management

1. **Strategic Integration:** Organizations are advised to align their HR development curriculum with the company's technology and business roadmap to ensure each development program has a direct impact on performance.
2. **Continuous Learning Culture:** Management needs to build an ecosystem that supports continuous learning, where employees are encouraged to

upskill independently through digital platforms provided by the company.

Leadership Support: Leaders at every level must play an active role as mentors and coaches to ensure knowledge transfer occurs organically within the team.

FURTHER STUDY

Future research is recommended to expand the scope to various industrial sectors and organizational scales, including MSMEs and startups, to increase the generalizability of findings related to the effectiveness of Human Capital Development (HCD). Furthermore, the use of a quantitative or mixed methods approach is recommended to more precisely measure the impact of HCD investments on Return on Investment (ROI) and employee productivity. Furthermore, the addition of moderating variables such as organizational culture and transformational leadership style is also important to identify the most influential factors in accelerating the closing of competency gaps.

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