



Analysis of Competency Based Human Capital Development Implementation in Supporting Sustainable Organizational Performance

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ABSTRACT

Changes in the business environment due to digitalization, technological transformation, and global competition require organizations to have competent and adaptive human resources. This study aims to analyze the implementation of competency-based Human Capital Development, the factors influencing its success, and its contribution to sustainable organizational performance. The study used a qualitative approach through case studies and literature reviews. Data were collected through interviews, observations, documentation, and previous research reviews, then analyzed descriptively. The results show that competency development implementation is carried out through competency mapping, gap analysis-based training, reskilling, upskilling, mentoring, and integration of competency evaluation with organizational performance targets. The success of implementation is influenced by top management support, an organizational learning culture, digital learning technology readiness, and continuous competency evaluation. Competency-based human capital development has been proven to increase productivity, innovation, align individual capabilities with organizational goals, and support sustainable organizational performance. Therefore, organizations need to develop a structured and integrated competency development strategy.

INTRODUCTION

In an era of globalization and increasingly dynamic business competition, organizations are required to continuously adapt and innovate to achieve sustainable performance. One of the main factors determining an organization's success is the quality of its human resources. Human capital is no longer viewed merely as a supporting factor, but rather as a strategic asset that plays a crucial role in creating long-term value for the organization (Becker, 1993). Changes in the global business environment, characterized by digitalization, technological transformation, increasingly complex market competition, and demands for organizational sustainability, place human resources (HR) as a determining factor in organizational success. In this context, organizations no longer rely solely on physical and financial assets, but also on the quality of their human capital. Barney (1991) emphasized that valuable, rare, difficult to imitate, and irreplaceable internal resources are the primary source of sustainable competitive advantage, and HR is one of the most strategic elements within this framework.

Therefore, human capital development is a primary concern for organizations in maintaining competitiveness and sustainable performance (Armstrong, 2014). Competency-based Human Capital Development (HCD) is an important approach to improving human resource capacity to align with an organization's strategic needs. Becker (1993) explains that investing in education, training, and individual skills development will increase the productivity and economic value of the workforce. In modern organizations, competency-based human resource development is directed at improving knowledge, skills, attitudes and work behavior that are relevant to organizational targets.

The implementation of competency-based HCD is becoming increasingly important as many organizations still face a gap between employees' actual competencies and the competencies needed to support innovation and business sustainability. Wibowo et al. (2024) stated that competency-based human resource development enables organizations to systematically identify competency gaps and design more targeted development interventions. Furthermore, Leontes and Hoole (2024) found that structured human capital management practices significantly impact employee performance by increasing work engagement.

However, the implementation of competency-based HCD still faces challenges such as limited competency evaluation, lack of integration between HR strategy and business strategy, and low organizational readiness to build a culture of continuous learning. Therefore, this research is crucial to analyze the implementation of competency-based Human Capital Development in supporting sustainable organizational performance.

Human capital is a strategic asset that plays a crucial role in creating an organization's competitive advantage. Becker's (1993) Human Capital Theory emphasizes that investment in employee education, training, and competency development will increase productivity and overall organizational performance. Consistently, a competency-based approach emphasizes the alignment of individual abilities with organizational needs, thereby enhancing

work effectiveness and competitiveness (Armstrong, 2020). However, various studies indicate that the implementation of competency-based human capital development in many organizations still faces obstacles, such as the lack of a systematic competency framework, suboptimal training programs, and the lack of integration of competency development with organizational strategy (Noe et al., 2017). This situation indicates a gap between theoretical concepts and practical implementation in the field. The purpose of this research consists of:

1. Analyzing the implementation of competency-based Human Capital Development in organizations.
2. Identifying factors that influence the effectiveness of competency-based HCD implementation.

Evaluating the contribution of competency-based HCD to sustainable organizational performance improvement.

LITERATURE REVIEW

Human Capital Development Concept

Human Capital Development (HCD) is a strategic process for improving the quality of human resources through investments in education, training, continuous learning, and work capacity development. Becker (1993) states that human capital is the accumulation of knowledge, skills, and experience possessed by individuals that contributes to increased productivity and economic value. From this perspective, human resources are no longer viewed merely as a factor of production, but rather as strategic assets that determine organizational success. In the context of modern organizations, HCD is transforming from a traditional approach focused on improving technical skills to a more holistic approach. Development encompasses not only technical aspects (hard skills), but also adaptive, innovative, and collaborative capabilities, which are essential in facing the dynamic business environment. Afandi et al. (2024) emphasize that current HR development trends are moving toward the integration of digital technology, adaptive learning, and the concept of lifelong learning in response to the acceleration of industrial change. Furthermore, HCD is closely related to the concept of a learning organization, where organizations actively encourage continuous learning at all levels. Organizations that develop effective learning systems will have a greater ability to adapt to change and create innovation.

Sustainable Organizational Performance

Sustainable organizational performance refers to an organization's ability to achieve economic, social, and environmental goals in a balanced manner over the long term. This concept emphasizes not only achieving financial profit but also operational sustainability and the organization's social responsibility. Barney (1991), within the Resource-Based View framework, states that the sustainability of organizational performance is highly dependent on the ability to manage strategic resources, including human resources. Competent, adaptive, and innovative human resources are key factors in creating sustainable competitive advantage. In this context, competency-based HCD

plays a strategic role in ensuring the sustainability of organizational performance. Developing relevant competencies enables organizations to increase productivity, encourage innovation, and strengthen their ability to adapt to changes in the external environment. Furthermore, organizations that invest in human resource development tend to have higher employee retention rates and are able to create more productive and innovative work environments. This demonstrates that HCD impacts not only individuals but also overall organizational performance.

Human Capital Theory

The Human Capital Theory proposed by Becker (1993) and Schultz (1961) explains that knowledge, skills, and experience are forms of capital that can increase individual productivity. Investment in education and training is seen as a strategic effort that provides long-term benefits for both individuals and organizations. This theory emphasizes that improving the quality of human resources will have a direct impact on performance and economic growth. In an organizational context, investment in HR development through HCD will increase the productive capacity of the workforce, thereby enabling them to make a greater contribution to achieving organizational goals. Furthermore, Human Capital Theory also emphasizes that HR development is not a cost, but rather a strategic investment. Organizations that ignore human capital development risk declining performance and losing competitiveness in the long term.

Resource-Based View (RBV)

The Resource-Based View (RBV) proposed by Barney (1991) states that an organization's competitive advantage is determined by its ability to manage internal resources that are valuable, rare, inimitable, and non-substitutable (VRIN). Within this framework, human resources are a strategic asset possessing these characteristics. Human resources with high competence, unique experience, and strong adaptability are difficult for competitors to imitate. Therefore, human capital development is key to creating sustainable competitive advantage. Competency-based HCD plays a role in increasing the strategic value of human resources by ensuring that the competencies of the workforce align with the organization's needs. Thus, organizations can maximize the potential of human resources as a source of competitive advantage.

Competency-Based HR Development Theory

Competency-Based Human Resource Development Theory emphasizes that human resource development must be based on an analysis of the gap between actual competencies and the ideal competencies required by the organization. This approach ensures that training and development programs are designed to be relevant and effective. McClelland (1973) and Boyatzis (1982) emphasized that competency is a primary determinant of individual performance. Therefore, competency-based development enables organizations to improve performance in a more targeted manner. This approach also emphasizes the

importance of evaluation in the HR development process. Training programs should focus not only on knowledge transfer but also on behavioral change and performance improvement. This allows for a more comprehensive measurement of HCD effectiveness. In the context of modern organizations, this approach is crucial because it enables organizations to respond quickly and appropriately to changing competency needs. By integrating competency gap analysis into HR development strategies, organizations can enhance the relevance and effectiveness of HCD programs.

METHODOLOGY

This research method uses a qualitative descriptive exploratory approach with a case study design, because this approach allows researchers to understand in-depth the phenomenon of implementing competency-based Human Capital Development in a real organizational context (Creswell, 2014). Data were collected through in-depth interviews with HR leaders, HR development managers, and employees, and supported by observations and documentation of training and competency development programs. Data analysis was conducted using the interactive model of Miles, Huberman, and Saldaña (2014), which includes data reduction, data presentation, and systematic conclusion drawing. Data validity was maintained through triangulation of sources and methods to ensure high credibility and validity of the research results.

RESULT AND DISCUSSION

Research findings show that the implementation of competency-based Human Capital Development (HCD) in modern organizations has evolved in a more systematic direction, but still faces challenges in aligning strategy and execution.

Implementation of Competency-Based Human Capital Development

Competency-based HCD implementation generally begins with a competency mapping process to identify gaps between actual competencies and those required by the organization. This process is followed by the design of a development program that includes technical training, upskilling, reskilling, and digital-based learning. Findings indicate that organizations that have adopted a competency-based approach tend to have more focused and relevant development programs. Furthermore, the integration of technologies such as Learning Management Systems (LMS) and e-learning platforms enables a more flexible and sustainable learning process. However, not all organizations are able to implement HCD optimally. Some still use conventional training approaches that are less based on competency needs, resulting in less-than-optimal impact on performance improvement.

2. Factors Influencing the Success of HCD Implementation

The research results identified that the success of implementing competency-based HCD was influenced by several main factors, namely:

- **Management support:** Leadership commitment in providing policies and resources is the main determining factor.

- **Alignment with organizational strategy:** HCD programs integrated with business strategies show higher effectiveness.
- **Digital learning infrastructure:** The availability of technology supports access and flexibility of learning.
- **Organizational culture:** A culture that encourages learning and innovation increases workforce participation.
- **Individual motivation:** The level of individual awareness and willingness to learn influences the success of competency development.

In addition to supporting factors, this study also found obstacles in the form of limited access to training, lack of performance-based evaluation, and a mismatch between development programs and actual job needs.

HCD Contribution to Sustainable Organizational Performance

The research results show that competency-based HCD significantly contributes to improving sustainable organizational performance. This contribution is evident in several aspects: **Increased labor productivity** through mastery of relevant competencies; **Increased organizational innovation** as a result of adaptability and continuous learning; **Improved work quality and operational efficiency**; **Strengthening organizational competitiveness** in facing changes in the business environment. Organizations that consistently develop HR competencies demonstrate better capabilities in maintaining long-term performance sustainability.

Implementation of HCD in Competency Perspective

Research findings indicate that implementing competency-based HCD is a strategic approach to addressing the needs of modern organizations. The competency mapping process serves as a key foundation for ensuring targeted human resource development. This aligns with Competency-Based Development Theory, which emphasizes that human resource development should be based on the gap between actual competencies and job requirements. Organizations that accurately identify this gap will be more effective in designing development programs. However, findings also indicate that some organizations have not yet optimally adopted this approach. This indicates a gap between theoretical concepts and practical implementation in the field.

Determinants of Success of HCD Implementation

The success of HCD implementation is determined not only by program design but also by organizational contextual factors. Management support and alignment with organizational strategy are key factors determining implementation effectiveness. From the Resource-Based View perspective (Barney, 1991), human resources are strategic assets that must be optimally managed to create competitive advantage. Therefore, organizations need to ensure that HR development is an integral part of business strategy. Furthermore, the role of technology in supporting learning demonstrates that digital transformation impacts not only work but also the way organizations develop competencies. Individual motivation is also a critical factor in

determining implementation success, as competency development ultimately depends on the active participation of the workforce.

Contribution to Sustainable Organizational Performance

Research findings indicate that competency-based HCD directly contributes to sustainable organizational performance. Increased productivity and work quality reflect the effectiveness of competency development in improving organizational performance. This aligns with Human Capital Theory (Becker, 1993), which states that investment in human resources will increase productivity. Furthermore, from Porter's (1990) perspective, organizational competitiveness is determined by workforce productivity, which in this case is influenced by competency quality. Furthermore, an organization's ability to sustainably develop human resource competencies also strengthens its capacity for innovation and adaptation to change. Thus, HCD impacts not only short-term performance but also long-term organizational sustainability.

CONCLUSIONS AND RECOMMENDATIONS

This study concludes that competency-based Human Capital Development (HCD) is an effective strategic approach to improving human resource quality and supporting sustainable organizational performance. Implementing HCD, which begins with competency mapping, enables organizations to design more relevant and targeted development programs. The success of HCD implementation is influenced by various factors, particularly management support, alignment with organizational strategy, the availability of learning technology, organizational culture, and individual motivation. Without the support of these factors, HCD's effectiveness tends to be suboptimal. Furthermore, competency-based HCD has been shown to significantly contribute to increased productivity, innovation, and organizational competitiveness. Therefore, human capital development can be positioned as a key strategy in achieving sustainable organizational performance in an era of dynamic change.

1. **For organizations**, it is necessary to integrate competency-based HCD with business strategy so that HR development is more focused and has a direct impact on organizational performance.
2. **For management**, a strong commitment is needed in providing resources, policies, and a learning environment that supports sustainable competency development.
3. **For HR practitioners**, it is important to conduct competency mapping periodically and evaluate the effectiveness of performance-based training programs.
4. **For the workforce**, it is necessary to increase awareness of the importance of lifelong learning to maintain the relevance of competencies.

For further researchers, it is recommended to develop research with a quantitative or mixed methods approach to test the relationship between competency-based HCD and organizational performance in a more empirical and measurable manner.

FURTHER STUDY

^ This research still has limitations so further research on this topic is needed "The Role of Human Capital Development in Encouraging Increased Employability and Competitiveness of the Workforce".

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