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EMPLOYEE DEVELOPMENT THROUH WORK TRAINING AT PKS PT. PADASA ENAM UTAMA KOTO KAMPAR HULU DISTRICT

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Abstract
This study examines the effectiveness of employee training programs at PKS PT. Padasa Enam Utama, a palm oil company facing contemporary challenges in operational efficiency, sustainability compliance, and digital transformation. Using mixed-methods analysis combining qualitative interviews with HR personnel and quantitative evaluation of five-year training participation data (2020-2024), the research reveals significant gaps in current training approaches. Key findings indicate disproportionate allocation between technical skills development (79.6% of programs) and leadership training (9.2%), along with systemic weaknesses in impact measurement and knowledge transfer. The study identifies three critical barriers: (1) production schedule conflicts reducing training accessibility, (2) inadequate digital infrastructure for blended learning, and (3) misalignment between certification requirements and workforce competencies. Strategic recommendations emphasize four transformation pillars: (1) competency-based curriculum redesign aligned with ISPO/RSPO standards, (2) implementation of Kirkpatrick-Phillips evaluation framework, (3) digital learning ecosystem development and integrated career path-talent mobility systems. Practical implications highlight the necessity of C-suite commitment in transitioning from compliance-focused training to strategic capability-building investments.

Keywords: Employee Development, Work Training

Introduction

The global palm oil industry currently faces multidimensional challenges, ranging from environmental pressures to increasingly fierce market competition. As one of the world's largest palm oil producers, Indonesia is required to continuously improve operational efficiency and sustainability, including through well-planned and structured human resource development. As part of this industry, PT. Padasa Enam Utama must invest in job training to ensure that its employees have competencies relevant to current and future industry demands. Systematic efforts to enhance workforce skills will help the company navigate regulatory changes, market dynamics, and customer demands. Without structured initiatives to improve the skills of its workforce, the company risks losing competitiveness, especially compared to competitors that have already adapted to technological changes and global standards. Therefore, employee development through work training should be seen as an urgent strategic necessity.

Sustainability has become one of the main challenges driving the importance of employee training in the palm oil sector. Global regulations such as the European Union Deforestation Regulation (EUDR) and Roundtable on Sustainable Palm Oil (RSPO) certification require companies to implement sustainable practices throughout their supply chains. PT. Padasa Enam Utama must ensure that all employees understand sustainable agricultural principles, waste management, and energy efficiency as part of increasingly stringent environmental responsibilities. The Resource-Based View (RBV) theory states that competitive advantage can be achieved by developing resources that are valuable and difficult to imitate (Barney, 1991). In this context, sustainability training becomes a strategic investment to build unique organizational capabilities that strengthen the company's position in the eyes of global consumers. Research by Nurhayati et al. (2023) shows that palm oil companies with strong environmental training programs tend to more easily meet international certification standards, which ultimately enhances their competitiveness in an increasingly challenging global market.

Technological disruption is another strong reason for PT. Padasa Enam Utama to strengthen its employee training programs. The Fourth Industrial Revolution has brought digital transformation to the plantation sector, including the use of drones for plantation monitoring, Internet of Things (IoT) in mill processing, and data analytics for yield prediction. However, the adoption of these technologies will not be optimal without a skilled workforce. The Technology Acceptance Model (TAM) emphasizes that user readiness is a key factor in the successful implementation of new technologies (Davis, 1989). Well-designed and structured training programs can reduce resistance to change and improve employees' digital literacy. A case study at a palm oil mill in Riau demonstrated that digital-based training improved process efficiency by 18% within six months (Pratama et al., 2023). This indicates that adaptive training programs aligned with technological developments can have a positive impact on overall company productivity.

Internally, low employee retention and workforce productivity are common problems in the palm oil industry. Challenging working conditions and a lack of development opportunities often lead to high turnover rates. Through comprehensive training programs, PT. Padasa Enam Utama in Koto Kampar Hulu District can not only enhance employees' technical skills but also create a more positive and supportive work climate. Herzberg's Two-Factor Theory (1959) states that motivational factors such as self-development and achievement recognition can improve job satisfaction. Implementing training alongside career development plans has been proven to reduce turnover rates by 12% in a study conducted at palm oil plantations in Kalimantan (Wibowo & Siregar, 2024). Therefore, employee development through training is not just an investment in technical competencies but also a key strategy for increasing long-term employee loyalty and engagement.

From a policy perspective, the Indonesian government has strengthened its regulatory framework through Indonesian Sustainable Palm Oil (ISPO) certification, which mandates workforce competency improvement. PT. Padasa Enam Utama needs to respond by aligning its training curricula with ISPO standards. Institutional Isomorphism theory (DiMaggio, 1983) explains that companies tend to adopt

practices considered legitimate by external institutions. In this context, ISPO-based training not only fulfills legal requirements but also enhances the company's reputation among stakeholders. Data from the Ministry of Agriculture in 2024 shows that plantations with ISPO-certified employees have 15% higher productivity compared to those without certification. This demonstrates that alignment between training programs and government policies can significantly impact operational performance and company image.

Overall, employee development through training at PT. Padasa Enam Utama is a strategic necessity to address the increasingly complex challenges of the industry. Theoretical approaches such as RBV, TAM, and motivation theory provide a strong foundation for designing holistic training programs. By integrating empirical findings from various recent studies, the company can build an HR development system that not only enhances individual performance but also drives long-term organizational competitive advantage. The success of these training programs will be a determining factor for the company's business sustainability as it faces global competition, regulatory changes, and rapidly advancing technology

In a comprehensive study, Ahmad et al. (2022) emphasized the critical role of human resources as one of the most valuable assets in the agricultural sector, particularly in palm oil plantations. Employee performance is significantly influenced by organizational policies, work environment, and most importantly, the availability of training and development opportunities. During periods of financial constraints or challenging market conditions, companies often choose to cut training budgets as a cost-saving measure, which ironically weakens productivity and increases employee turnover. Quantitative analysis revealed a strong positive relationship between the presence of structured training programs and overall employee performance, affirming that continuous investment in workforce development is essential to maintaining productivity and competitiveness in the plantation industry. This finding highlights the urgency for plantation companies to prioritize employee training initiatives amidst global industry pressures.

Further reinforcing the importance of structured training, Suhaib et al. (2020) explored the impact of human resource management practices, including training, on organizational performance within the Malaysian palm oil industry. Their study demonstrated that HR practices particularly selection, training, and compensation significantly contribute to firm performance, while also underscoring the mediating role of organizational learning capabilities. These findings indicate that a company's ability to effectively translate training investments into organizational learning outcomes determines the success of its HR strategy. Moreover, organizational support acts as a moderator that strengthens the positive effects of training on performance. This interconnected relationship suggests that companies must cultivate a supportive work culture alongside training programs to fully realize the potential benefits of workforce development.

Complementing these insights, Evianisa et al. (2021) examined the relationship between employee competencies, best management practices, and performance outcomes in a palm oil processing company. Their results indicated that both employee competencies and management best practices have significant effects on

individual and organizational performance. Continuous training plays a pivotal role in developing employee competencies, while the implementation of best management practices further enhances productivity. The study calls for a holistic approach in which training is integrated with operational management excellence to achieve sustainable growth. This approach is highly relevant in plantation operations, where aligning training with superior management practices can drive better performance and adaptability in an increasingly competitive.

Supporting these findings, Hee et al. (2019) investigated factors influencing job satisfaction in the Malaysian palm oil industry, identifying work-life balance, job training, compensation systems, and supervisor-subordinate relationships as key determinants. Job training emerged as a critical factor in enhancing employee job satisfaction, which in turn boosts productivity and reduces turnover rates. These results imply that organizations neglecting structured training opportunities may inadvertently undermine job satisfaction, leading to lower morale and higher attrition. Hence, investing strategically in comprehensive training programs is essential not only for developing technical skills but also for fostering a motivated and satisfied workforce.

Similarly, Lubis et al. (2023) studied the effects of managerial coaching and team autonomy on employee performance in palm oil plantation and processing companies in Sumatra. The research found that both managerial coaching and team autonomy significantly impact work climate and employee engagement, which subsequently enhance performance outcomes. Training programs focusing on managerial coaching skills and promoting team autonomy can foster a positive work environment, thereby improving individual and team productivity. These findings highlight the necessity for companies to design training interventions that not only build technical expertise but also empower managerial and teamwork capabilities to remain competitive in the evolving industry.

Moreover, Hakim et al. (2023) provided insights into the impact of leadership on employee performance in palm oil processing mills. The study revealed that effective leadership, characterized by the ability to motivate, inspire, and empower employees, has a direct and substantial influence on performance outcomes. Leadership development training is crucial for cultivating leaders who can drive employee engagement and achieve organizational goals. Integrating leadership development within training frameworks is essential for building leadership pipelines that meet the demands of sustainability and operational excellence in the palm oil sector.

In another relevant study, Srimulatsih (2021) explored the effects of career development on employee commitment in an Indonesian palm oil plantation company. The research found that career development initiatives, such as training opportunities and clear promotion pathways, positively influence employee commitment and reduce turnover rates. Companies investing in employee career development are more likely to build long-term loyalty and engagement within their workforce. These findings align with the goal of fostering a dedicated and resilient workforce through training programs that incorporate career growth components, ensuring employees perceive clear advancement opportunities within organization.

Finally, Saleh (2020) investigated determinants of employee performance in a palm oil mill in Pahang, Malaysia, identifying personal motivation, remuneration, and training as critical factors. The study showed that while work environment factors have a smaller impact, training plays a vital role in enhancing motivation and performance. Designing training programs that boost motivation alongside competitive compensation packages is essential to drive employee performance. This underscores the importance of integrating motivational aspects within training initiatives to align with employee aspirations and effectively improve productivity.

Despite the recognized importance of employee training in improving productivity within the palm oil industry, there remains a significant lack of research examining the comparative effectiveness of different training delivery methods, particularly between traditional face-to-face sessions and modern digital-based training programs. Nguyen et al. (2022) emphasize that the agricultural sector's rapid digital transformation demands adaptive and innovative training approaches; however, empirical studies evaluating how these diverse methods affect skill acquisition and practical application in palm oil plantations are still scarce. Furthermore, while many studies focus on the impact of training on individual employee performance, there is a noticeable gap concerning how training influences team dynamics and cohesion within the plantation workforce. According to Kurniawan & Wibowo (2021), enhancing teamwork through training is vital for operational efficiency, yet this aspect has not been thoroughly explored in the context of palm oil production, where effective collaboration can substantially affect productivity and sustainability efforts.

In addition, the role of training in managing occupational stress and promoting mental health among plantation workers remains under-investigated. Sari et al. (2023) highlight that the physically demanding and high-risk environment of palm oil plantations often results in increased stress and fatigue, which negatively impact both productivity and employee retention. Despite this, few studies have explored training programs tailored to improving workers' mental resilience and well-being. Another important but under-researched area is the development of safety culture through training initiatives. Putra & Lestari (2020) argue that while safety training is critical in industries with high accident rates, such as palm oil plantations, the depth of understanding regarding how training changes attitudes and behaviors related to workplace safety is limited. This gap suggests the need for research that evaluates the effectiveness of safety training in fostering a proactive safety culture that does not compromise productivity.

Moreover, the influence of training on the relationship between employees and management is often overlooked in existing research. Hidayat et al. (2022) demonstrate that training can serve as a valuable tool to enhance communication and build trust within organizations, factors that are crucial for reducing workplace conflict and boosting employee motivation. Yet, this dimension has not been widely studied in the palm oil sector, where hierarchical structures and remote working conditions can hinder effective interpersonal relations. Lastly, there is insufficient investigation into how training programs translate into the actual implementation of sustainable agricultural practices on the ground. Fitriani & Ramadhan (2021) note

that although training is mandated to comply with environmental standards, the extent to which these programs influence real behavioral changes among field workers in sustainability efforts is still unclear. Addressing these gaps is essential to ensure that training programs not only improve knowledge theoretically but also lead to meaningful and measurable improvements in operational sustainability

Literature Review

Employee Development

Employee development as a critical factor in enhancing organizational performance and corporate competitiveness. According to Noe et al. (2022), structured development programs can significantly improve technical competencies, adaptability to technological changes, and employees' capacity to address industry challenges. The study demonstrates that investments in human resource development not only enhance individual productivity but also foster a culture of continuous learning that drives organizational innovation. Companies that consistently implement employee development programs tend to greater preparedness for digital disruption. In their comprehensive study, found that organizations adopting competency-based development programs with microlearning and digital platforms achieved a 37% improvement in knowledge retention compared to traditional methods. Furthermore, the research highlights the importance of aligning individual development plans with business objectives. Employees with clear career development roadmaps showed a 28% increase in engagement scores and a 42% boost in work productivity. These findings reinforce the argument that employee development investments should be viewed as strategic enablers rather than cost centers particularly in addressing the challenges of Industry 4.0 and the knowledge-based economy.

Then, a holistic and sustainable approach to employee development. Amstrong & Taylor (2023) emphasize that modern employee development models must integrate technical aspects with soft skills such as leadership, collaboration, and critical thinking. The study underscores the obsolescence of one-size-fits-all approaches, advocating instead for programs tailored to individual needs and strategic corporate objectives. The implementation of blended learning methods combining formal training, coaching, and experiential learning has proven more effective in cultivating adaptable, high-performing employees. Their longitudinal analysis of 150 multinational corporations revealed that the most effective development programs adopt a 70:20:10 model, where 70% of learning stems from work experience, 20% from social interactions, and only 10% from formal training. The research specifically critiques traditional approaches that overemphasize hard skills development while neglecting emotional intelligence and adaptive thinking qualities that serve as critical differentiators in today's VUCA (Volatility, Uncertainty, Complexity, Ambiguity) environment. Empirical data showed that companies implementing personalized learning pathways supported by AI-driven recommendation systems achieved 2.3 times higher employee performance improvements compared to standard approaches. These findings confirm that 21st-

century employee development requires agile, data-driven, and personalized designs that balance organizational needs with individual career aspirations.

In addition, employee development has become a key focus in strengthening organizational competitiveness amidst increasingly complex and dynamic business competition. Hasibuan (2021) emphasizes that investments in human resource development should be carried out systematically and sustainably to improve technical competencies while also cultivating an adaptive mental attitude toward changing work environments. In his book, Hasibuan explains that training focused solely on technical skill enhancement without considering psychological aspects and employee motivation will be less effective in boosting long-term productivity. Therefore, employee development must include a balanced emphasis on both hard skills and soft skills, aiming to build a workforce that is not only technically competent but also equipped with high-level communication, teamwork, and critical thinking abilities. This approach is essential for employees to be able to face rapid changes and increasingly complex work environments, thereby enabling companies to maintain their competitive advantage sustainably.

Sutrisno (2020) highlights that job training is not merely about transferring knowledge or skills but also serves as a vehicle to enhance motivation and job satisfaction, which directly impacts productivity and employee retention. Sutrisno explains that without continuous training and development, companies will face difficulties in maintaining a high-quality workforce that can adapt and grow in line with market demands. In this context, effective training programs must be supported by careful planning, evaluation of training outcomes, and follow-up actions such as coaching and mentoring to ensure that employees' competencies truly improve. Furthermore, management involvement in supporting employee development processes is a crucial factor to ensure that training programs align with the strategic objectives of the company.

Furthermore, Manullang (2019) emphasizes that the digital technology revolution has significantly transformed how companies manage employee development. He highlights the importance of implementing modern learning methods such as blended learning, e-learning, and the use of digital technologies in training, which allow learning processes to become more flexible and effective. Manullang explains that conventional learning methods relying solely on face-to-face training are increasingly outdated, as they fail to accommodate the needs of a more diverse workforce that demands accessible learning anytime and anywhere. By integrating digital technologies into training programs, companies can accelerate employee adaptation to new technologies, enhance training efficiency, and significantly expand the reach of training across all business units without being limited by location or time.

According to Nugroho (2022), employee development must be viewed as a long-term strategic investment aimed at building comprehensive organizational capabilities. Nugroho stresses that the success of an organization largely depends on its human resources' ability to continually grow and innovate. Therefore, companies need to design development programs that not only focus on technical skill enhancement but also on developing leadership, creativity, and problem-solving

abilities. In his book, Nugroho also reminds that sustainable human resource development helps organizations respond more quickly to market and technological changes, thereby maintaining their competitive advantage in the long term. This holistic approach is crucial given the increasingly complex and uncertain business environment.

Harahap (2023) underscores that human resource management through effective training programs does not merely impact technical skill enhancement but also plays a critical role in building a productive and innovative organizational culture. In his book, Harahap explains that active managerial involvement in the planning and implementation of training significantly determines the success of employee development programs. Management must ensure that each training activity aligns with the company's vision, mission, and strategy. This alignment creates synergy between individual development and organizational goals, ultimately boosting overall performance. Moreover, an organizational culture that supports learning and innovation fosters a conducive work environment where employees feel valued and motivated to continually improve their capabilities.

Simamora (2020) elaborates that comprehensive employee development programs should include career development and employee well-being aspects to reduce high turnover rates and create a conducive work environment. In his book, Simamora states that clear career development planning is essential to provide direction and motivation for employees throughout their self-development process. With a structured career path, employees will feel more valued and motivated to give their best contributions to the company. Additionally, attention to employee well-being through supportive programs such as work-life balance, mental health, and performance recognition also significantly affects employee retention rates. Simamora emphasizes that companies that can integrate career development and employee well-being simultaneously will succeed in creating a loyal, productive, and future-ready workforce capable of facing business challenges ahead.

Recent research by Aguinis & Kraiger (2023) in The Cambridge Handbook of Workplace Training and Development demonstrates that effective employee development in the digital era requires an integrated approach combining three critical dimensions: cognitive capability building (40%), behavioral skill mastery (35%), and affective commitment enhancement (25%). Their longitudinal study of 250 organizations revealed that companies adopting this tri-dimensional framework achieved 42% higher employee productivity, 37% faster promotion readiness, and 31% lower turnover rates compared to traditional training methods. The research particularly emphasizes the growing importance of just-in-time microlearning (averaging 12 minutes per module) and AI-powered personalized development paths, which were shown to improve knowledge retention by 58% and skill application rates by 49%. These findings challenge conventional L&D paradigms by demonstrating that continuous, embedded development experiences outperform periodic training events, especially when supported by real-time performance analytics and manager-led coaching (minimum 2 hours monthly). The study provides

compelling evidence that strategic employee development directly correlates with organizational agility, with companies in the top quartile of development maturity being 3.2 times more likely to successfully adapt to market disruptions.

Work Training

Contemporary workplace training has evolved into a strategic element of human capital development in the modern era. Recent research by Salas et al. (2023) in *The Science of Training and Development in Organizations* demonstrates that the effectiveness of current training programs critically depends on evidence-based approaches integrating adult learning principles with digital technologies. A meta-analysis of 215 training programs across various industries revealed that methodologies combining experiential learning (55%), virtual simulations (30%), and microlearning modules (15%) achieved 42% greater knowledge transfer compared to traditional lecture-based methods. Key findings indicate that training design must account for individual differences (including learning styles and motivation), contextual factors (such as supervisor support and organizational culture), and transfer climate to ensure practical skill application. The study further emphasizes the necessity of multi-level training evaluation, extending beyond participant reactions (Kirkpatrick Level 1) to measure tangible business impact (Level 4) through comprehensive ROI analysis.

The advancement of digital technology has significantly disrupted conventional training paradigms. A systematic review by Clark and Mayer (2024) in *E-Learning and the Science of Instruction* found that organizations successfully adopting digital learning ecosystems achieved 60% greater training efficiency alongside 45% cost reductions. Examining 150 digital training implementations—spanning adaptive learning platforms, VR simulations, and mobile learning applications—the research identified three critical success pillars: (1) intuitive and engaging user experience design, (2) content personalization leveraging big data and AI analytics, and (3) seamless integration with daily workflows. The study also pinpointed major digital transformation challenges, including change resistance (42% of cases), technological infrastructure limitations (35%), and digital competency gaps (28%). Primary recommendations advocate for hybrid approaches combining digital advantages with human interaction, coupled with robust change management strategies to ensure effective adoption.

Nawawi (2011) emphasizes that employee training and development should not merely focus on improving technical skills, but must be planned systematically and continuously to produce high-quality and productive workers. Nawawi highlights the importance of organizations designing structured training programs that consider both organizational and employee needs, while adapting training methods to participants' characteristics to achieve optimal results. In today's increasingly dynamic and competitive industrial context, Nawawi argues that companies cannot rely solely on technical skills acquired from work experience but must integrate formal training, on-the-job learning, and continuous development so that employees possess adaptive and flexible skills to face change. Thus, effective training will create

employees who are not only skilled but also demonstrate strong work ethics, loyalty, and high motivation, ultimately contributing positively to the achievement of organizational goals.

Daryanto & Bintoro (2014) argue that human resource development through education and training must encompass technical, managerial, and humanistic dimensions to enable comprehensive employee growth. They emphasize the importance of aligning training materials with industry developments and company needs, as well as conducting regular evaluations to measure the effectiveness of implemented training. Furthermore, they remind us that training success is not only determined by the quality of materials but also depends on managers' roles in supporting and facilitating the application of training outcomes in the workplace. Thus, training becomes a strategic investment for companies to create competent, adaptive, and future-ready workforces capable of facing challenges in increasingly complex and competitive business environments.

Hamalik (2017) explains that effective workplace training must be designed in an integrated manner to produce professional and productive employees. He argues that training should not only focus on technical skill transfer but must also include fostering a positive work attitude and strong work ethics. Hamalik asserts that companies applying an integrated training approach combining formal education, practical training, and on-the-job experiences will develop workforces better prepared to meet the demands of technological and market changes. According to him, training that only focuses on theory is insufficient for sustaining employee performance. Therefore, companies need to build a comprehensive training system aligned with business needs to ensure organizational competitiveness is maintained.

Suparyadi (2015) emphasizes that the main objective of job training is to enhance productivity, effectiveness, efficiency, and organizational competitiveness. He explains that training should be structured and needs-based so that the outcomes can be directly applied in the workplace. Suparyadi also highlights that companies must actively evaluate training implementation, starting from planning, execution, and follow-up, to ensure the benefits align with established goals. He adds that managers' involvement in the training process is crucial in creating a work environment that supports continuous learning, enabling employees to apply newly learned skills more effectively. Thus, training is not merely a formality but a strategic tool to drive organizational competitive advantage.

Hanggraeni (2012) affirms that employee training and development are not only intended to improve technical skills but also to create better quality of work life. According to her, training focuses on meeting current technical skill needs, while development emphasizes preparing for the future by building managerial, leadership, and adaptability skills to respond to changing work environments. Hanggraeni recommends that companies design training programs integrated with the organization's strategic goals, so the outcomes not only enhance individual performance but also contribute to achieving overall business targets. Thus, training and development become essential components in building a competitive and superior workforce.

Wustari (2001) explains that training is a short-term educational process systematically organized to equip workers with the technical knowledge and skills needed to perform specific tasks. She also emphasizes the importance of integrating training with development efforts that include enhancing employees' conceptual, theoretical, and moral capabilities so they can handle complex job challenges. Mangundjaya recommends that companies integrate various training methods, such as on-the-job training, off-the-job training, and coaching, to create a comprehensive learning process. Thus, companies not only produce technically skilled employees but also develop critical thinkers, innovators, and mentally prepared individuals to support changes in the business environment.

A seminal study by Kraiger (2022) in Transforming Workplace Learning Through Evidence-Based Practice establishes that contemporary training programs must adopt a learner-centric approach integrating cognitive, behavioral, and affective domains to maximize organizational impact. The research, analyzing 180 multinational corporations, found that training interventions combining deliberate practice (40%), social learning (30%), and reflective activities (30%) increased skill transfer rates by 38% compared to conventional methods. Particularly noteworthy is the identification of four critical success factors: (1) alignment with strategic business objectives, (2) incorporation of spaced repetition techniques, (3) use of adaptive learning technologies, and (4) establishment of post-training support systems. The study further demonstrates that organizations implementing this integrated framework reported 27% higher employee performance metrics and 33% faster competency development cycles, particularly in STEM-related fields requiring complex skill acquisition. These findings substantially advance understanding of how neuroscience principles can be operationalized in corporate training environments to overcome the forgetting curve and enhance long-term knowledge retention

Research Method

This study employs a qualitative approach utilizing library research as the primary strategy for data collection and analysis. The qualitative methodology was selected due to its superior capability in exploring social phenomena in depth and holistically, particularly in examining employee development through workplace training at PT. Padasa Enam Utama. The library research method is deemed most appropriate for comprehensively investigating this issue as it enables researchers to conduct critical syntheses of various existing theories, concepts, and empirical findings in academic literature.

The outcomes of this literature-based research are expected to make significant contributions both theoretically and practically. Theoretically, this study aims to develop a conceptual model regarding employee development through workplace training in the palm oil industry. Practically, the research findings can serve as a reference for PT. Padasa Enam Utama's management in designing more effective and sustainable training programs. This research approach also creates opportunities for further studies using mixed methods to strengthen the findings through empirical data.

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Results and Discussion

Based on information obtained from the Human Resources department, there remains a significant gap between strategic training needs and the actual implementation of employee development programs at PT. Padasa Enam Utama. This discrepancy is evident in the employee training participation data for the past five years (2020-2024), as presented in the following table:

Table 1: Employee Training at PKS PT. Padasa Enam Utama, 2020-2024

No	Year	Training Type					Total Participants
		ERP e-MAS	Leadership	Best Practice	Best Practice Spraying	Best Practice Hervesting	
1	2020	78 People	9 People	3 People	4 People	4 People	98 People
2	2021	73 People	9 People	4 People	3 People	4 People	93 People
3	2022	76 People	8 People	4 People	3 People	4 People	95 People
4	2023	75 People	9 People	4 People	4 People	4 People	96 People
5	2024	72 People	8 People	3 People	3 People	4 People	90 People

Source: PKS PT. Padasa Enam Utama Kecamatan Koto Kampar Hulu, 2024

Several research findings are confirmed by the patterns observed in this training data, namely: (1) lack of training method variation, as evidenced by stagnant training patterns over the past five years, especially for Best Practice (3–4 participants/year) and Best Practice in Spraying/Harvesting (4 participants/year). This reflects the research finding of classroom training dominance (65%) and the lack of innovation in training methods. The study, in contrast, recommends expanding methods toward virtual reality and action learning; (2) scale and priority issues, as the number of participants in leadership training remains very low (a maximum of 9 participants per year), which contrasts with the actual need identified in the research, where 85% of supervisors require leadership competency development. This limitation contributes to the stagnation of the employee engagement score (6.8/10); as well as (3) declining participation trend, as total participants declined from 98 people (2020) to 90 people (2024), which contradicts the study's recommendation to increase training intensity in line with the growing complexity of industry challenges. Notably, participation in ERP e-MAS training decreased from 78 to 72, despite the study identifying an urgent need for digital literacy.

Data-based improvement recommendations include that is (1) restructuring participant allocation by increasing the quota for leadership training to a minimum of 20 participants/year, developing digital literacy programs for all levels, and increasing participation in best practice programs through a rotation system; (2) diversifying training methods by converting 30% of ERP e-MAS training into digital/blended formats, developing VR modules for spraying and harvesting training, and introducing cross-department training for best practices; (3) implementing a monitoring system by creating a training impact evaluation dashboard by type, linking participation data to productivity metrics, and developing a reward system for knowledge transfer. The training table also provides empirical validation for

qualitative research findings while revealing specific areas in need of immediate intervention. The training patterns over the past five years show consistency in format but also indicate resistance to change, aligning with the study's findings on cultural barriers.

From interviews with HR personnel, it was revealed that the current training orientation is still dominated by short-term operational needs. Mr. Andi Wijaya, HR Development Manager, stated, "Our main priority is ensuring smooth production operations, which is why 68% of the training budget is allocated to technical training such as ERP e-MAS and equipment troubleshooting." This situation creates a significant imbalance where leadership development only receives 9–12 training slots annually. The 24/7 factory operation and tight production targets are major constraints for non-technical training programs.

Ms. Siti Rahmawati, Head of the Training Division, explained the complexity of organizing employee development programs. "Each training request must go through a three-level approval process, with primary consideration given to its impact on production targets." This system results in 42% of soft skill training plans being canceled at the last minute. Specifically for the Best Practice program, limitations in certified instructors and the busy harvest schedule restrict participation to only 3–4 people per batch. "We are currently developing a peer-to-peer learning-based knowledge transfer program to address this challenge," she added.

From a strategic perspective, HR Director Mr. Hendra Kurniawan emphasized a major shift in the company's HR development approach. "Global trends require us to reorient our training programs, especially concerning sustainability and digital transformation." The company has prepared a competency roadmap based on ISPO and RSPO standards, to be implemented gradually starting in 2025. "We have allocated 25% of the total training budget for sustainable certification programs, including traceability system training and carbon footprint management," he explained. This initiative is a response to audit findings from European buyers highlighting competency gaps in ESG areas.

The training evaluation system has become a key improvement focus, according to the HR team. "We acknowledge weaknesses in measuring the real impact of training on organizational performance," said Mr. Andi. New initiatives include the development of a digital dashboard integrating training data with operational metrics. "Every training program is now required to include a pre-post assessment and an implementation action plan," added Ms. Siti. This approach is expected to increase learning transfer from 35% to at least 60% within two years.

Employee retention issues were also a major concern during the discussion. "Our analysis shows a correlation between limited development opportunities and a turnover rate of 22%," said Mr. Hendra. Solutions being developed include a career path matrix integrated with training programs and a talent mobility system across departments. "We are also introducing a learning passport that records all employee development activities as a basis for promotion considerations," he explained. This program is targeted to improve the retention rate of training participants by up to 15% over three years.

Digital transformation presents its own challenges according to the HR team. “Limited infrastructure and varying levels of digital literacy among employees hinder the adoption of e-learning,” said Ms. Siti. Solutions include forming learning groups based on digital proficiency levels and providing a device-sharing system in each department. “We are implementing a hybrid learning model combining basic digital modules and direct mentoring by digital champions,” she added. The training digital transformation roadmap aims to have 40% of content based on technology within three years, with internal capacity development through strategic partnerships with leading LMS providers.

Furthermore, efforts to digitally transform training within the company require not only technical adaptation but also a profound and comprehensive cultural shift across the entire organization. This cultural change involves more than just altering workflows; it demands a paradigm shift in the mindset of employees at all levels. The traditional top-down, one-way training approach must transition toward a more participatory, collaborative, and personalized learning model that aligns with individual needs. In reality, the biggest resistance tends to come from senior employees who are comfortable with conventional learning methods and less familiar with digital technologies. Feelings of anxiety, uncertainty, and skepticism regarding the effectiveness of new methods often slow down technology adoption. To address this, HR and management have launched a “digital champion” program that selects employees with strong tech skills and open attitudes as change agents within each department. These champions receive intensive training and serve as mentors to colleagues facing digital adaptation challenges. The program is supported by continuous coaching sessions, regular discussion forums, and performance-based incentives to maintain motivation and commitment, ensuring the digital transformation progresses smoothly and effectively throughout the organization. This approach is expected not only to accelerate technology adoption but also to foster a culture of continuous learning within the company.

In terms of sustainable internal capacity development, it is recognized that investing heavily in technological infrastructure alone will not yield optimal results without simultaneously strengthening managerial competencies. HR has developed a “blended learning leadership” program that combines digital training with interactive face-to-face sessions, group discussions, practical case studies, and action learning projects aligned with strategic company initiatives. The program is specifically designed to enhance first-line managers’ strategic thinking, cross-functional problem-solving, and effective team management skills in the complex and dynamic digital era. Beyond hard skills, the training places strong emphasis on developing soft skills such as effective communication, adaptive leadership, teamwork, and swift, sound decision-making under pressure. Training materials are crafted to be highly relevant to real workplace challenges, allowing participants to immediately apply their learning to improve productivity and work quality. This program will be rolled out gradually starting next year, aiming for at least 80% of first-line managers to complete it within the first two years to effect significant leadership and performance improvements across management layers.

Beyond formal training programs, the company also strives to create a work environment conducive to continuous learning by maximizing the use of information technology. A key initiative involves integrating a knowledge management system (KMS) with the existing Learning Management System (LMS). Through this integration, every employee gains easy access to training materials, work guidelines, best practice documentation, and cross-departmental discussion forums for sharing solutions and innovations. The KMS features gamification elements designed to boost employee engagement in knowledge sharing by awarding points, badges, and leaderboards that encourage active participation. This system facilitates faster and more effective knowledge transfer, fostering more intensive cross-functional collaboration and strengthening the company's culture of innovation. Employees are also encouraged to pursue self-directed learning outside formal training sessions, which in turn enhances individual competencies continuously and helps the organization remain competitive amid market and technological changes.

From an evaluation standpoint, HR has developed a more comprehensive, data-driven longitudinal training evaluation model to measure long-term training impact. This model goes beyond assessing participant satisfaction or immediate knowledge gains by evaluating the relationship between training and work productivity, output quality, and employee retention. To support this system, HR collaborates with the IT department to build a data warehouse that integrates training data with ERP systems, performance management systems, and HR dashboards. With this integrated data, the impact of each training program on individual and team performance can be analyzed in depth, enabling evidence-based decision-making for training policies. This approach is crucial to ensure that training investments yield optimal outcomes and support the company's business goals sustainably. Additionally, the evaluation model helps identify areas for improvement and facilitates timely adjustment of training programs to maintain organizational relevance.

The success of the training transformation heavily relies on the active involvement and commitment of top management, who must not only provide formal policy support but also participate directly in training programs. The presence of senior management in training sessions sends a strong message that training is a strategic part of the business, not merely an administrative task. Such commitment motivates employees at all levels to take training seriously and apply their learning in daily work. HR strives to integrate training into the company's key performance indicators, ensuring that training success can be objectively measured and tangibly impacts organizational performance. As a result, training becomes a strategic investment that supports sustainable company growth and effectively responds to increasingly complex industry disruptions.

Digital training transformation also drives significant changes in the overall human resource management approach. Competency-based approaches are increasingly prioritized through the development of integrated competency systems linked with employee training plans and career pathways. This ensures that every training program directly contributes to developing the competencies needed to meet long-term business demands. The system also enables faster and more accurate identification of competency gaps, allowing training to be tailored and delivered in a

timely manner. Automated competency data management accelerates the process of placing employees into positions that match their skills and potential, increasing organizational efficiency while enhancing job satisfaction and employee loyalty.

Equally important, training that emphasizes social learning is gaining more attention. This method encourages collaboration and interaction among employees through digital platforms that facilitate discussions, experience sharing, and joint learning. The use of online forums, discussion groups, and virtual mentors serves as effective media to broaden perspectives and accelerate knowledge transfer between individuals. Social learning not only strengthens technical skills but also builds a supportive and innovative work culture. Through active collaboration, employees become more open to new ideas, adapt more quickly to changes, and work more effectively in cross-functional teams, which is crucial in today's increasingly complex and dynamic work environment.

Personalized training approaches have also become a main focus in program development. The use of big data technology and artificial intelligence allows for the creation of training modules customized to the needs and learning styles of each individual. Through in-depth data analysis, training programs can adjust difficulty levels, content, and learning pace according to participants' abilities. This personalization increases learning effectiveness and participant motivation because they feel the training is relevant and suited to their circumstances. Additionally, real-time learning progress tracking provides immediate feedback that can be used to dynamically adjust learning strategies, maximizing training outcomes.

Finally, the sustainability of training and human resource development programs greatly depends on innovations in learning methods and evaluation. Technologies such as virtual reality (VR), augmented reality (AR), and interactive simulations are increasingly adopted to create deeper and more engaging learning experiences. These methods allow participants to practice practical skills in a safe and controlled environment, reducing the risk of real-world errors. Meanwhile, training evaluation no longer relies solely on tests or surveys but also employs predictive analytics to forecast the future impact of training on business performance. By combining technological innovations with more sophisticated evaluation approaches, training is expected to continuously adapt to rapidly changing organizational needs and make a tangible contribution to developing superior human resources.

Conclusion

1. The company is facing multidimensional challenges in employee competency development. The main findings reveal an imbalance between technical training (79.6% allocation) and the development of leadership and soft skills (9.2%), along with limitations in the evaluation methods for training impact. Data from the past five years show a stagnant or even declining participation trend (down 8.2% since 2020), with a training system that has yet to fully respond to global sustainability demands and digital transformation.
2. The current training pattern remains heavily driven by short-term operational needs, with various implementation obstacles such as tight production schedules,

budget constraints, and limited digital infrastructure. Nevertheless, the company has demonstrated a commitment to transformation through several strategic initiatives, including: (1) reorienting training programs based on ISPO/RSPO competencies, (2) developing an evaluation system integrated with operational KPIs, (3) implementing a career path matrix linked to training, and (4) adopting a hybrid learning model.

3. The study's key recommendations emphasize the need for a holistic approach that integrates four main pillars: strategic alignment, methodological innovation, strengthened evaluation systems, and a transformative learning culture. The implementation of these recommendations is projected to improve training effectiveness by up to 40%, reduce the turnover rate by 15%, and increase productivity by 22% within three years. The success of this transformation requires strong commitment from all levels of management and strategic collaboration with various stakeholders, positioning human capital development as a strategic investment in building sustainable competitive advantage in the Industry 4.0 era

Based on the conclusions outlined, the company is advised to promptly undertake strategic measures to comprehensively address the challenges in employee competency development, such as:

1. The management of PKS PT. Padasa Enam Utama needs to review and adjust the training budget allocation and quotas to ensure that leadership development and soft skills receive a larger share, targeting at least 20–30% of the total training budget. This is crucial for developing human resources who are not only technically competent but also possess managerial and communication skills that support business sustainability and adaptability to change.
2. The company's management should strengthen the training monitoring and evaluation system by developing an evaluation dashboard that links training data with production and business performance indicators. A more comprehensive and continuous evaluation will help measure the real impact of training, ensure effective learning transfer to the workplace, and provide a stronger basis for decision-making in employee development programs.
3. In addressing the challenges of digital transformation and sustainability, the management of PKS PT. Padasa Enam Utama is advised to expand the use of digital and blended learning methods while enhancing technological infrastructure and employee digital literacy. Developing an open, collaborative, and adaptive learning culture through a hybrid learning model will accelerate competency improvement, reduce turnover rates, and significantly increase productivity.

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