Managing Human Resource in the Digital Economy:
Balancing Challenges and Opportunities

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Abstract
Digital technologies enable the adoption of more efficient working models, such as process automation, predictive analytics for better decision making, and the use of digital platforms for employee development and performance management. This study aims to investigate employee perceptions and experiences of digital transformation in the context of challenges and opportunities at the company PT Charoen Pokphand Indonesia (CP) Food. The research method used is descriptive qualitative with a data collection approach through questionnaires and observations. The questionnaire was designed to collect employee responses on various aspects of digital transformation in terms of opportunities and challenges. Using a purposive sampling approach, which is a sampling method in which the researcher deliberately selects certain participants or sample units based on certain characteristics or criteria that are considered relevant to the research objectives. The results showed that employees have a positive view of digital transformation at the company PT Charoen Pokphand Indonesia (CP) Food. Employees see it as an opportunity for career development and professional growth, and feel supported in developing their digital skills. A work culture that supports collaboration, innovation, and creativity is also considered important in creating a productive and dynamic work environment. The integration of digital technology is considered successful by employees, indicating that the company has successfully implemented technology in daily work processes well. This research provides valuable insights into how digital transformation affects employee perceptions and experiences in the work environment. The implications of these findings can be used by companies to design more effective human resource management strategies to face the challenges and opportunities in the evolving digital economy.

Keywords: Digital Transformation, Human Resource Management, Employee Perceptions, Challenges.

1. Introduction
The digital economy encompasses a wide range of technological advancements that have a significant impact on various sectors, especially in economic development. Various studies have explored various aspects of the digital economy, ranging from its influence on urban innovation [1] to its impact on carbon emissions [2]. Along with the development of information and communication technologies, the global economy has been significantly transformed. The digital economy, which is the result of the integration of digital technologies in all aspects of economic activity, has created new challenges and opportunities for organizations in various sectors. Research has shown that the digital economy plays an important role in enhancing economic growth and development [3], with a focus on high-quality economic development [3]. In addition, the digital economy has been associated with increased ecological resilience in natural resource-based cities [4] indicating a positive impact on sustainability.

Digitalization has played an important role in improving human resource (HR) management functions in various organizational contexts. Research has highlighted that digitization in HR management can help government agencies and companies to modernize their HR functions, provide competitive advantage, and improve performance [5]. Technological innovations such as artificial intelligence, data analytics, and cloud computing have transformed traditional ways of working and business models. In the context of HR management, this presents new challenges in recruiting, developing, and retaining talents who have relevant digital skills. In addition, digitalization has been proven to improve HR management functions on digital platforms, especially in terms of employee recruitment and skills development. [6] This shows that the use of digital technology in HR management can strengthen the recruitment and development process of employees efficiently.

The growth of the digital economy should create a more complex and dynamic business environment. Organizations must be able to adjust to rapid and unpredictable changes in technology, market needs, and consumer behavior. This requires HR management to be more responsive, flexible, and proactive in designing...
HR policies and strategies that are relevant to the dynamics of the digital economy. Studies have also highlighted that the HR management function has now played a strategic role in supporting the achievement of organizational goals [7]. Thus, digitization not only modernizes the HR function, but also helps organizations in achieving their goals more effectively. Changes in the digital economy have brought significant transformations in work paradigms and organizational culture. Digitalization has accelerated mental and structural changes in organizations, which are reflected in the way individuals think, believe, and behave [8].

The industrial revolution 4.0 has driven a paradigm shift involving a mental revolution, which in turn affects the mental structure of individuals in organizations. Changes in the digital economy have also changed the work paradigm and organizational culture. This research will provide concepts such as remote working, time flexibility, and employee engagement have become increasingly important. This research will provide a review of knowledge regarding the analysis of HR management should consider how to integrate technology and build a work culture that supports collaboration, innovation, and creativity in a digital work environment. In addition to challenges, the digital economy also brings great opportunities for HR management to improve organizational performance and efficiency. Digital technologies enable the adoption of more efficient working models, such as process automation, predictive analytics for better decision-making, and the use of digital platforms for employee development and performance management. This research also examines to get a novel picture of how the digital economy can open up new opportunities in terms of talent development and utilization. Organizations can access global talent more easily through digital platforms and global job markets. HR management can leverage technology to implement more effective training and development programs, and evaluate employee performance in real-time. Optimizing the opportunities offered by the digital economy, HR management needs to address some key challenges. One of these is data security and privacy, which are major concerns in the use of digital technologies in the work environment.

Organizations must ensure compliance with regulations pertaining to the protection of personal data and implement strong data governance. Ideas by [9] emphasizes the importance of the digital economy in improving the total green factor productivity of manufacturing, leading to a sustainable development trajectory. The same idea is also described by [10]. The synthesis of the various studies in this background reveals that optimizing the opportunities offered by the digital economy requires a multifaceted approach that integrates sustainability, innovation, international cooperation, and strategic policy making to drive economic growth and competitiveness. Digital inequality is also an issue that needs to be addressed in the context of HR management. Not all employees have the access or skills to use digital technologies well. Therefore, it is important for organizations to ensure digital inclusivity in their HR strategy, by providing the necessary training and support for all employees. According to [11] by understanding the challenges and opportunities faced by HR management in the digital economy, organizations can develop appropriate strategies to achieve balance and long-term success. This involves using technology wisely, developing an adaptive work culture, and investing in the development of employees' digital skills. In HR management, technology is often used to manage employee information, performance evaluation, and other administrative processes [12]. Digital inequality can lead to disparities in the use of these technologies among different groups of employees. This can affect efficiency and fairness in human resource management.

The object of analysis that will be carried out in this research is the livestock company PT Charoen Pokphand Indonesia (CP) Food. As a result of the rapid increase in consumption and the increase in Indonesia's population, the need for animal feed has also increased. In response to these developments, PT Charoen Pokphand Indonesia expanded its business and market by establishing new factories, each in Surabaya in 1976, in Medan in 1979, and in 1992 built a branch animal feed factory in Balaraja sub-district, Tangerang with a production capacity of 250,000 tons per year. Since starting commercial operations in July 1994, the company in Balaraja has become one of the leading companies in the agribusiness sector in Indonesia.

Judging from the timeline of the company's growth, it is certain that the process of digital economic dynamics has been faced for a long time, especially as a large company, of course, a modern and digital-based HR management culture scheme is needed. The purpose of this study is to provide a projection of what an inclusive and collaborative work culture should look like in a digital work environment. However, many issues in the digital age can cause divisions or inequalities in organizational culture, where those who are digitally skilled may be more valued or recognized than those who are not. Overall, HR management in the digital economy is faced with challenges such as changing job structures and ongoing HR governance, but also presented with opportunities to develop new competencies, implement innovative policies, and leverage the digital ecosystem to create added value, which will be comprehensively examined in this research analysis.

2. Research Methods

This research will analyze the phenomenon of the problem using qualitative techniques in order to obtain more in-depth and accurate analysis results with a more comprehensive process of examining research questions in the
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case of seeing the point of view of challenges and opportunities in the dynamics of the digital economy in the aspect of human resource management in a company. The problem focus framework will discuss with a descriptive approach that will describe a solution and factual and accurate information. The research object of the company in question is PT Charoen Pokphand Indonesia (CP) Food, which is a well-known frozen food producer company in Indonesia with various types of processed frozen food brands. The company address is in Surabaya Rungkut Industrial Estate, Jalan Berbek Industri I No. 24, Berbek Village, Waru District, Sidoarjo Regency, East Java. Information and data collection techniques use primary data and secondary data.

Meanwhile, secondary data will include the company's organizational structure and employee contract documents. The data collection method will involve distributing questions in the form of questionnaire distribution and structured interviews to employees in various divisions of PT Charoen Pokphand Indonesia (CP) Food. To ensure the accuracy and reliability of the data obtained, a purposive sampling approach will be used to identify relevant informants. It is expected that this research will provide deep insights and a thorough understanding of PT Charoen Pokphand Indonesia (CP) Food's human resource planning strategy using this method. This research will use data collection and data management techniques involving interviews and observations, with a particular focus on in-depth interview techniques. This in-depth interview technique requires researchers to interact directly with respondents to gain an in-depth understanding of their views, experiences and perceptions related to the research subject. Through in-depth interviews, researchers can explore in detail various aspects relevant to the research topic, such as processes, complexities, interactions, and the role of individuals in the context of human resource planning. Observations will also be conducted to complement the data obtained from interviews, allowing researchers to directly observe situations or conditions related to the research. By using these data collection techniques, it is hoped that this research can obtain a comprehensive and in-depth understanding of the human resource planning strategy at PT Charoen Pokphand Indonesia (CP) Food.

3. Results and Discussion

The role of Human Resource Management (HRM) in achieving organizational balance can be comprehensively understood. HRM plays an important role in ensuring a balance between organizational goals and employee well-being. The application of HRM practices, such as competency development, work-life balance, and organizational citizenship behaviors, contribute to achieving this balance. The concept of work-life balance, as explored by [13], is critical to ensuring that employees can effectively manage their personal and professional lives. This balance contributes to increased organizational commitment and citizenship behavior, which ultimately leads to a more harmonious and productive work environment.

It is important to maintain open and transparent communication among management, employees, and HR teams regarding the changes brought about by HRM digitization. This includes clearly communicating the goals, benefits, and impact of digital transformation to the entire organization. It is important to understand that human resource management (HRM) covers various aspects such as compensation, performance, development, and safety. This is in line with a broader understanding of HRM as a field that involves managing the workforce to achieve organizational goals. [14] the impact of individual characteristics, teamwork, and skills on productivity, as studied by [15] provides insight into the factors that influence employee performance, which is an important aspect of HRM.

PT Charoen Pokphand Indonesia Tbk has various core and supporting business activities. Among its core business activities are the animal food sector, food processing industry, preservation of chicken and beef, and breeding and cultivation of broiler chickens. In addition, the company is also involved in supporting business activities such as importing and selling pharmaceutical materials. PT Charoen Pokphand Indonesia Tbk is also involved in the manufacture and sale of industrial and livestock equipment, as well as the production of sacks or packaging and household goods from plastic. One of the subsidiaries studied in this research is PT Charoen Pokphand Indonesia (CP) Food. Based on the results of observations through the media questionnaires distributed to 100 informants from approximately 400 employees who work, the 100 informants have met the research criteria using a purposive sampling approach, which is a sampling method in which the researcher deliberately selects certain participants or sample units based on certain characteristics or criteria that are considered relevant to the research objectives. In this approach, the researcher has clear objectives in selecting the sample and selects participants who are believed to be able to provide the most relevant information or represent the population well. The purposive sampling approach is often used in qualitative research where the focus is on an in-depth understanding of a particular phenomenon and the researcher wants to select participants or sample units that can best provide deep insight into the research topic. This method allows the researcher to optimize the use of resources and time by selecting samples that are most relevant to the research objectives. The following presents the results of 100 observations.

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Table 1. Percentage of Answer for Each Question

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>Total 100 Informants (100%)</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Agree</td>
</tr>
<tr>
<td>1</td>
<td>I believe that digital transformation brings new opportunities for my career development in this company.</td>
<td>60%</td>
</tr>
<tr>
<td>2</td>
<td>I feel that the company provides adequate support in developing digital skills for employees.</td>
<td>65%</td>
</tr>
<tr>
<td>3</td>
<td>Flexible working policies, such as remote working or flexible working hours, have helped me maintain a work-life balance.</td>
<td>70%</td>
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<tr>
<td>4</td>
<td>I feel that the work culture in this company supports collaboration, innovation, and creativity in the digital economy era.</td>
<td>55%</td>
</tr>
<tr>
<td>5</td>
<td>I believe that the use of data and analytics in employee performance management has improved my efficiency and performance.</td>
<td>75%</td>
</tr>
<tr>
<td>6</td>
<td>I feel that the company has successfully integrated digital technology into the daily work process.</td>
<td>80%</td>
</tr>
<tr>
<td>7</td>
<td>In my opinion, the data privacy policy implemented by the company is adequate to protect employees' personal information.</td>
<td>70%</td>
</tr>
<tr>
<td>8</td>
<td>I believe that my involvement in training and development programs related to digital technology will improve my performance at work.</td>
<td>65%</td>
</tr>
<tr>
<td>9</td>
<td>I think the shift towards a digital economy has created new opportunities for cross-team collaboration in this company.</td>
<td>85%</td>
</tr>
<tr>
<td>10</td>
<td>I am confident that the company is providing adequate support in overcoming the challenges posed by digital transformation.</td>
<td>75%</td>
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3.1. Implications of Digital Transformation on Labor Needs

Digital transformation has fundamentally changed the business landscape, affecting various aspects of company activities, including workforce needs. This change creates new challenges as well as opportunities for organizations in managing their human resources. The analysis of this research found that employees believe that digital transformation brings new opportunities for their career development in the company. This shows that they see digital transformation as something that can increase their career potential and professional growth. Research by Wazari and Agustiurini [16] highlighted the influence of the digital economy on formal and informal employment, showing that digital transformation also affects the structure of employment in various sectors.
The results of the questionnaires that have been distributed also provide information from the company that the company is considered to provide adequate support in developing digital skills for employees. This indicates that the company’s efforts in providing technology-related training and development are considered effective by employees. One of the main implications of digital transformation is the increased demand for technology skills. PT Charoen Pokphand Indonesia (CP) Food has been innovating for a long time in seeing the predictions of digitalization that occurred, namely with many memorandum of understanding agreements with its partners that can be developed with human resource management management such as transferring a competent workforce to match the company’s SOP standards. digital transformation also affects the need for skills and competencies. [17] emphasizes that technological advances bring changes to the demands in the world of work, including the shift of work towards digitalization. This suggests that the workforce needs to develop digital skills to remain relevant in an increasingly digitally connected work environment.

Companies increasingly need employees who understand and are skilled in using digital technologies, such as data analytics, artificial intelligence, and software development. In addition to technological skills, soft skills are also key in this digital era. The ability to adapt to change, work in teams, communicate effectively and have creativity is becoming increasingly important. In this digital era, companies need technology to facilitate their work, improve employee performance, and enable digital innovations that can increase the competitiveness of the company [18] [19] [20].

Based on the conceptualized chart from the research, it can be explained that digital transformation also accelerates shifts in the structure of work. Many jobs previously performed by humans can now be automated or replaced by technology. Conversely, the emergence of new jobs related to technology requires special attention in employee recruitment and development. Digital transformation has also resulted in changes in the structure of employment, economic transformation from the agricultural sector to the industrial and service sectors, and a shift in the characteristics of rural areas to urban areas [21]. Organizations need to pay attention to the skill gaps that exist among their employees.

Training and development programs tailored to specific technological needs are key to ensuring employees remain relevant and competitive in an increasingly digitized job market. Digitization is also affecting the competencies needed in the workforce, with demand for human resource professionals who have different competencies [22]. Flexibility is becoming increasingly important in the digital workforce. Remote workers or flexible work schedules allow organizations to attract and retain the best talent, while providing employees with a work-life balance. The implementation of digital technology can also help companies expand their market reach and improve operational efficiency [23] [24].

The use of digital platforms and tools in human resource management (HRM) has become the norm. From recruitment to performance management and career development, technology plays an important role in improving the efficiency and effectiveness of HR processes. Employee engagement is key in managing the changes brought about by digital transformation. The role of human resource management (HRM) in influencing organizational culture change and creating a positive environment has been highlighted, emphasizing the potential of HRM to contribute to employee engagement and well-being during digital transformation [25]. Organizations need to proactively engage employees in decision-making processes, provide open feedback, and create a work culture that supports innovation and adaptation.

3.2. Effect of Organizational Culture on Innovation and Collaboration

The influence of organizational culture on innovation and collaboration is a relevant and important topic in the context of human resource management and business strategy. The results of data processing that have been analyzed from the questionnaire questions distributed provide an overview that the work culture in the company is considered to support collaboration, innovation, and creativity in the digital economy era. This shows that employees of PT Charoen Pokphand Indonesia (CP) Food feel that their work environment encourages teamwork, new ideas, and innovative experiments. The results of this study have similarities with [26] investigating the influence of organizational culture, work motivation, and transformational leadership on organizational commitment. This research provides insight into the impact of organizational culture on employee commitment, which is critical to fostering innovation and collaboration in organizations.
Organizational culture reflects the values, norms, and behaviors shared by organizational members. When organizational culture encourages innovation and collaboration, it can create a creative and productive work environment. Exploring the mediating role of information technology in the relationship between organizational culture and knowledge sharing capabilities. Understanding how organizational culture affects knowledge sharing is critical to promoting collaboration and innovation in organizations [27] culture that supports innovation provides space for employees to think out-of-the-box, propose new ideas, and take controlled risks in creating new solutions or improving existing work processes.

Collaboration within organizations involves working together between individuals or teams in achieving a common goal. An organizational culture that promotes collaboration facilitates the exchange of ideas, knowledge, and experiences among organizational members [28]. That by studying the relationship between organizational culture, organizational commitment, and job satisfaction. It is important to always add insight into how organizational culture affects employee commitment and satisfaction, which are important factors for driving innovation and collaboration [29].

The importance of organizational culture in driving innovation and collaboration is amplified in the digital age. Technology facilitates easier communication and collaboration among employees, but a supportive culture is key to optimizing the potential of this technology. An organizational culture that allows room to fail wisely also plays a role in driving innovation. Employees need to feel that they can learn from failure without fear of punishment or negative judgment. The use of management techniques that facilitate innovation, such as design thinking or agile methods, can also shape a more innovative and collaborative organizational culture. These methodologies promote creative thinking, experimentation and rapid iteration.

<table>
<thead>
<tr>
<th>No.</th>
<th>Challenge</th>
<th>Opportunities</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Changing Skills: Rapid changes in technology and business needs require employees to continuously develop new skills. A key challenge is ensuring employees have skills that are relevant to the company's needs in the digital economy.</td>
<td>Employee Engagement: Digital technologies enable greater employee engagement through collaborative platforms, real-time feedback, and participation in decision-making processes. These opportunities can boost employee motivation, creativity, and performance.</td>
</tr>
<tr>
<td>2</td>
<td>Global Competition: The digital economy allows companies to operate globally more easily. However, it also presents stiffer competition in recruiting and retaining valuable talent in the global job market.</td>
<td>HR Analytics: Data generated by digital technologies can be used to improve HR decision-making. HR analytics allows companies to make data-driven decisions, such as more effective recruitment, better performance management, and more targeted employee development.</td>
</tr>
<tr>
<td>3</td>
<td>The Need for Flexibility: Flexibility is key in managing the workforce in the digital economy. A key challenge is creating policies and practices that allow employees to work flexibly without compromising productivity or quality of work.</td>
<td>Global Engagement: The digital economy opens the door for global engagement in recruitment, collaboration and employee development. Companies can access a wider pool of talent in the global market and leverage cross-border cooperation for innovation and growth.</td>
</tr>
</tbody>
</table>
Figure 2 description:
1. Skills Development: Companies need to invest in employee training and development to address the changing skills needs in the digital economy. This includes building adaptive training programs and facilitating continuous learning.
2. Flexible Policies: Companies should develop flexible work policies that allow employees to work from anywhere, at any time, and in a way that is most effective for them. This includes introducing remote working, flexible working hours, and the use of technology that supports remote collaboration.
3. Culture of Innovation: Companies need to build an organizational culture that supports innovation and collaboration. This involves promoting experimentation, encouraging employee involvement in the innovation process, and rewarding new ideas and successful collaborations.
4. Use of HR Technology: Companies should utilize advanced HR technologies to improve the efficiency and effectiveness of HR management. This includes adopting digital performance management systems, online training platforms, and HR analytics tools to make better decisions.
5. Strategic Partnerships: Companies can form strategic partnerships with educational institutions, technology providers, and other companies to access top talent, share resources, and collaborate on innovative projects. This can help companies meet their HR needs in the evolving digital economy.

These strategies are organized in such a way that the analysis can be useful for scientific studies, especially in the field of HRM. Based on the results of this study, recent research studies have indicated that employees see changes towards the digital economy as a new opportunity for cross-team collaboration in the company. The strategy that has been prepared will then show that all employees of the company will always be ready to face opportunities and already know the risks and challenges that will be undertaken. [30] addresses workforce readiness and changing perceptions in the context of digitalization, highlighting the need for HRM strategies that address workforce readiness. This emphasizes the importance of HRM strategies that support organizational change and digital transformation. [31] explores the alignment of HRM with digital technology, highlighting the role of HRM in organizational outcomes. This emphasizes the potential of digital-based HRM strategies to improve organizational performance. Employees believe that the company provides adequate support in overcoming challenges arising from digital transformation. This indicates that they feel supported by the company in dealing with the changes and challenges associated with digital transformation.
3. Conclusion

The conclusion of this set of findings shows that employees have a positive view of digital transformation at the company PT Charoen Pokphand Indonesia (CP) Food. Employees see it as an opportunity for career development and professional growth, and feel supported by the company in developing their digital skills. In addition, a work culture that supports collaboration, innovation, and creativity is an important factor in creating a productive and dynamic work environment in the digital economy era. Furthermore, the integration of digital technology is considered successful by employees, indicating that the company PT Charoen Pokphand Indonesia (CP) Food has successfully implemented technology in the daily work process well. In addition, employees' belief in the company's data privacy policy and adequate support in overcoming the challenges of digital transformation show that they feel safe and supported in dealing with the changes that occur. Overall, these findings provide evidence that digital transformation has had a positive impact on employees and companies, and highlight the importance of a supportive work culture in creating an adaptive and innovative work environment in the face of the challenges and opportunities of the digital economy.

References

KINERJA PERUSAHAAN BERDASARKAN PERSEPSI KARYAWAN (STUDI KASUS PADA PT. INDONESIA POWER UPJP KAMOJANG), Jurnal Mitra Manajemen, 4(9). Available at: https://doi.org/10.52160/ejmm.v4i9.462.


