Revolutionizing HR Management: The Impact of Digital Transformation on Organizational Success and Business Sustainability

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Abstract: Digital transformation in human resource (HR) management has become critical to improving organizational performance and commercial sustainability. The purpose of this research is to evaluate the success of applying the Darwin Box application in human resource management at PT Bukit Muria Jaya, as well as its effects on organizational effectiveness and business sustainability. Furthermore, this study investigates disparities in views of digitalization efficacy across work roles and highlights barriers in digital transformation implementation. The study takes a quantitative approach, including survey methodologies and statistical analysis. A Likert-scale questionnaire was used to collect data from 1,241 employees, which were then evaluated with Pearson correlation tests and linear regression. The study found that using Darwin Box had a considerable impact on organizational performance, with a correlation value of $r = 0.72$ ($p < 0.01$) and a 51.8% contribution ($R^2 = 0.518$, $p < 0.01$). HR digitization also improves corporate sustainability, with operational efficiency being the most important aspect (39.7%). This study is unique in that it employs a thorough quantitative methodology to empirically examine the effects of HR digitization on organizational efficiency and business sustainability. These findings emphasize that HR digitization is more than just a technology breakthrough; it is a basic strategy for increasing business competitiveness. Key recommendations include improving training, upgrading technology infrastructure, and performing frequent reviews to maximize the benefits of digital transformation.

Keyword: Digital Transformation, HR Management, Organizational Effectiveness, Business Sustainability, Darwin Box.

INTRODUCTION

Digital transformation has become an unavoidable global phenomenon, particularly in the context of Human Resource Management (HRM). The development of information and communication technology has brought significant changes in how organizations manage HR, from recruitment and training to performance evaluation (Deloitte, 2022). Companies across various sectors, including manufacturing, have begun to recognize the importance of adopting digital technology to enhance operational efficiency and effectiveness. Effective HR

management is key to an organization's success in achieving its business objectives. With digital transformation, previously manual and time-consuming HR processes can be automated, allowing companies to focus on employee development strategies and productivity improvement (Lou, Y., Hong, A., & Li, Y. 2024; Stef, A., & Crisan, E. 2024; McKinsey, 2023; Teofilović, Ž. et al., 2023). According to research by Stef, A., & Crisan, E. (2024) and Deloitte (2022), companies that adopt digital technology in HR management tend to have higher productivity levels and are more adaptable to rapid market changes.

PT Bukit Muria Jaya, as one of the leading manufacturing companies, faces challenges in managing a large and diverse workforce. With 1,241 employees (1,196 men and 45 women), HR administrative processes such as attendance, payroll, and training have become increasingly complex (Bersin, 2021). The previously used conventional system often led to administrative errors, inefficiencies, and employee dissatisfaction (Teng, X., Wu, Z., & Yang, F., 2022). To address these challenges, PT Bukit Muria Jaya decided to adopt the Darwin Box application as a digital solution for HR management. This application was chosen for its ability to integrate various HR functions, from attendance and payroll management to career development (Starchenko, G., 2024; Gartner, 2023). Thus, the company hopes to enhance organizational effectiveness and ensure business sustainability in the future (Zekiy, A., 2023).

Organizational effectiveness and business sustainability are two critical aspects that companies must consider in facing global challenges. Organizational effectiveness refers to a company's ability to achieve its goals using resources optimally, while business sustainability relates to the company's ability to survive and grow in the long term (World Economic Forum, 2023). Digital transformation is expected to support both aspects. According to McKinsey (2023) and Starchenko, G. (2024), digital transformation in HR not only improves operational efficiency but also creates a more inclusive and sustainable work environment.

By automating HR processes, companies can reduce administrative burdens and focus resources on strategic activities that drive business growth (Deloitte, 2022). Additionally, digital technology enables companies to collect and analyze HR data in real time, facilitating better decision-making (Wang, L., Li, X., & Zhang, Y., 2024; Anshori, M., 2023; Malik, S., 2024). Business sustainability depends not only on financial performance but also on a company's ability to adapt to changes in the business environment. Digital transformation in HR management can help companies identify and develop the talent needed to face future challenges (Solabarrieta, J., 2021; Miloloza, I., 2021; BCG, 2023). Furthermore, digital technology allows companies to respond more quickly to regulatory and market changes.

PT Bukit Muria Jaya serves as a real-world example of a company that has adopted digital transformation in HR management. With a large and diverse workforce, the company faces challenges in manually managing HR processes (Bersin, 2021). Implementing the Darwin Box application is expected to address these challenges and bring positive impacts on organizational effectiveness and business sustainability. This study aims to analyze the implications of digital transformation in HR management on organizational effectiveness and business sustainability at PT Bukit Muria Jaya.

The research focuses on how the Darwin Box application enhances operational efficiency, transparency, and employee satisfaction while supporting business sustainability (Gartner, 2023). This study adopts a qualitative approach with a case study method. Data is collected through in-depth interviews with HR managers, employees, and IT teams involved in the implementation of the Darwin Box application (Creswell, 2014). Additionally, company documents such as performance reports and HR policies are analyzed to gain a comprehensive understanding.

The findings of this study are expected to contribute both theoretically and practically. Theoretically, this research enriches the literature on digital transformation in HR management (Deloitte, 2022). Practically, the study's findings can serve as a reference for other companies looking to adopt digital technology in HR management. Although digital transformation offers

many benefits, its implementation is not always smooth. The main challenge faced by PT Bukit Muria Jaya is employee adaptation to new technology. Some employees, particularly those less familiar with technology, require additional training to use the application optimally (McKinsey, 2023). To overcome this challenge, the company must provide adequate training and support to employees. Continuous training programs and mentoring by the IT team can help employees adapt to the new system and maximize the use of the Darwin Box application (Bersin, 2021). Besides employee adaptation, data security is also a crucial concern in digital transformation implementation. With an increasing amount of digitally managed data, companies must ensure that the system in use has strong security protocols to protect sensitive information (Gartner, 2023; Zhang, Z., 2024; Fayayola, O., Olorunfemi, O., & Shoetan, P., 2024). Overall, digital transformation in HR management is a strategic move that can help companies achieve long-term business goals. By adopting the right technology and effectively managing change, PT Bukit Muria Jaya can ensure business sustainability in the challenging digital era (World Economic Forum, 2023). This research is expected to provide in-depth insights into the implications of digital transformation on organizational effectiveness and business sustainability.

METHOD
1. Research Design
This study employs a mixed-methods approach, combining qualitative and quantitative descriptive methods (Creswell, J. W. 2014; Nair, S., & Prem, S. 2020; Matović, N., & Ovesni, K. 2021) to analyze the impact of digital transformation in human resource management (HRM) on organizational effectiveness and business sustainability at PT Bukit Muria Jaya. The quantitative approach is used to measure employees' perceptions regarding the effectiveness of the Darwin Box application in enhancing work efficiency, productivity, and job satisfaction. Meanwhile, the qualitative approach explores employees' experiences, challenges, and benefits of implementing this digital HRM system. By integrating both approaches, this study aims to provide a comprehensive overview of the impact of digital transformation on the organization. Quantitative data will reveal patterns and trends within the organization, while qualitative data will offer an in-depth understanding of how technology influences work processes and corporate culture.

2. Research Location and Subjects
This study was conducted at PT Bukit Muria Jaya (BMJ), a manufacturing company specializing in high-quality cigarette paper and packaging production. The company was chosen as the research site due to its implementation of digital transformation in HRM through the Darwin Box system. This system aims to enhance organizational effectiveness by streamlining various HR administrative processes, such as recruitment, performance management, attendance tracking, and employee training. The research subjects include all employees of PT Bukit Muria Jaya who directly or indirectly use the Darwin Box application in their work activities. These subjects encompass various organizational levels, ranging from operational staff, supervisors, HR managers, to company executives. The company has a total of 1,241 employees, consisting of 1,196 male employees and 45 female employees, with diverse educational backgrounds, work experience, and job positions. To obtain deeper insights, this study also involves HR managers and company executives as key informants in in-depth interviews. These interviews aim to further understand how the digital system implementation impacts organizational effectiveness and how the company addresses challenges in the digitalization process. This approach is expected to provide a comprehensive picture of the influence of digital transformation on HR management and business sustainability within the company.

3. Population and Sample

The population in this study comprises all 1,241 employees of PT Bukit Muria Jaya from various divisions and job levels. This population was selected because they are users of the Darwin Box system and have firsthand experience with digitalization in HR management. Due to the large population size, a sampling method was employed to obtain a sample that proportionally represents the population's characteristics. The sampling technique used is proportional stratified random sampling, which considers the proportion of employees based on job position (staff, supervisor, and manager) and work experience. This method ensures that each group within the organization has an equal chance of being represented, making the results more accurate and reflective of the company's overall condition. Using Slovin's formula with a 5% margin of error, the minimum sample size was determined to be 303 respondents. This sample includes various job levels and divisions involved in using the Darwin Box system. Additionally, for qualitative data, 10 key informants were selected, consisting of HR managers, supervisors, and company executives with an in-depth understanding of the company's digitalization policies. By combining quantitative and qualitative approaches, this study is expected to provide a more comprehensive evaluation of the impact of digital transformation on organizational effectiveness and business sustainability at PT Bukit Muria Jaya.

3. Data Collection Techniques

This study employs a combination of quantitative and qualitative methods to collect data comprehensively on the implementation of digital systems in HRM at PT Bukit Muria Jaya. The survey method is used to gather quantitative data by distributing Likert-scale (1–5) questionnaires to employees who have used the Darwin Box application for at least six months. These questionnaires are designed to measure various aspects of digital system effectiveness, including employee satisfaction, work efficiency, and ease of technology use in HR management. Additionally, in-depth interviews are conducted with HR managers and company executives directly involved in policy-making and technology implementation to gain a deeper understanding of user experiences. Beyond surveys and interviews, direct observations are carried out to examine how the Darwin Box application is utilized in daily work activities. These observations aim to assess the system's effectiveness in managing HR administration, such as attendance tracking, performance evaluation, and employee data processing. Document analysis is also employed by collecting internal company reports, HR digitalization policies, and application usage data to enrich the analysis. Through this triangulation approach, the data obtained is expected to provide an objective depiction of how digital transformation influences organizational effectiveness and business sustainability.

4. Data Analysis Techniques

Once the data is collected, it is analyzed using both quantitative and qualitative approaches. The quantitative data from the questionnaires is analyzed using descriptive statistics, including frequency, mean, and standard deviation, to understand employee response patterns regarding the implementation of digital systems. This analysis is conducted using SPSS or Microsoft Excel to present the results in tables and graphs for easier interpretation. Through this analysis, the extent to which the Darwin Box application contributes to work efficiency and employee responses to digitalization changes in HR management can be identified. Meanwhile, qualitative data from interviews and observations is analyzed using thematic analysis, which involves three main stages: coding, categorization, and interpretation. In the first stage, interview transcripts and observation notes are coded to identify key themes emerging from respondents' experiences and perspectives. The coded data is then categorized into relevant themes, such as the benefits of digitalization in improving HR efficiency, challenges in technology implementation, and impacts on work culture. Finally, the interpretation stage

connects the findings with supporting theories and concepts to gain deeper insights into the influence of digital transformation on organizational effectiveness and business sustainability.

5. Validity, Reliability and Statistical Tests

To ensure the quality of collected data, this study applies validity and reliability tests. The validity of the research instrument is tested using construct validity through Pearson Product-Moment correlation analysis. This test aims to confirm that each question in the questionnaire accurately measures the intended research aspects. If the correlation results are significant, the instrument is deemed valid and suitable for measurement. Meanwhile, reliability testing, which assesses the consistency of the research instrument, is conducted using Cronbach's Alpha. A reliability coefficient above 0.70 indicates a high level of internal consistency in the questionnaire. If the value is lower, revisions to certain questionnaire items may be necessary to better align with the research context. Additionally, data triangulation is performed by comparing results from various data collection methods—such as questionnaires, interviews, observations, and document analysis—to ensure that the findings genuinely reflect real conditions in the field. To analyze quantitative data, this study applies various statistical tests to ensure result reliability. Descriptive statistical analysis is used to provide an overview of data distribution, including the mean and standard deviation of respondents' answers regarding the effectiveness of the Darwin Box application in HR management. A normality test is also conducted to determine whether the collected data follows a normal distribution, which influences the selection of further statistical analyses. If the data is normally distributed, Pearson correlation analysis is used to examine the relationship between the independent variable (Darwin Box usage) and the dependent variables (organizational effectiveness and business sustainability). If the data is not normally distributed, the Spearman Rank test is applied as an alternative.

To determine significant differences between respondent groups (e.g., employees vs. managers), an independent sample t-test is performed if the data is normally distributed, or a Mann-Whitney test if it is not. Additionally, simple linear regression analysis is conducted to measure the extent to which digital system implementation affects organizational effectiveness. This regression analysis assesses whether Darwin Box usage has a significant impact on key variables such as operational efficiency and employee satisfaction. By applying appropriate statistical tests, the research findings are expected to provide a more accurate conclusion regarding the impact of digital transformation on HR management and business sustainability at PT Bukit Muria Jaya.

RESULTS AND DISCUSSION

This survey included 303 respondents from various divisions of PT Bukit Muria Jaya (BMJ). The bulk of participants were male (85%), with female employees accounting for barely 15%. This suggests that the manufacturing business employs more males, particularly in operations and production divisions. Furthermore, the majority of respondents (68%) were between the ages of 25 and 40, which is considered a productive age group and more willing to adopt digital transformation in human resource management. Meanwhile, 22% of employees were over 40 years old, with the majority holding management or supervisory jobs, and the remaining 10% were under 25 years old, mostly new employees who had just started working.

The majority of respondents had a sufficient educational background to assist the transition to digital technologies in human resource management. A total of 60% of respondents had a Diploma or Bachelor's degree (D3/S1) in areas such as administration, engineering, and human resources. Meanwhile, 22% had a Master's degree (S2) or above, and most worked as managers or supervisors. In contrast, 18% were high school graduates (SMA/SMK), with the majority working in operations and manufacturing. In terms of work experience, 53% of workers had worked for more than five years, demonstrating that they had successfully

acclimated to the prior management structure. Meanwhile, 27% had between two and five years of experience, and 20% were new hires with less than two years of experience.

The majority of respondents (61% were operational personnel) used the Darwin Box system to track attendance, seek leave, and evaluate performance. In addition, 29% of respondents worked as supervisors or team leaders, supervising work teams and evaluating employee performance using digital tools. On the other side, 10% of respondents were managers or executives in charge of developing digital HR management policies and plans. This research included respondents from various employment levels and provided a complete assessment of PT Bukit Muria Jaya's deployment of digital technology, as well as its influence on organizational efficiency and commercial sustainability.

The Darwin Box application's adoption at PT Bukit Muria Jaya (BMJ) has resulted in major improvements in human resource management. This program is intended to automate a variety of HR administrative activities, including attendance tracking, leave management, and employee performance review. Prior to the implementation of this system, the majority of HR administration was done manually, which frequently caused data processing delays and increased the risk of recording mistakes (Saputra, M., 2023; Andriani, A. et al., 2023). Darwin Box has helped the organization increase operational efficiency by integrating all employee data into a cloud-based solution that allows both management and staff real-time access.

Effectiveness of the Darwin Box Application Implementation

The analysis results indicate that the use of Darwin Box in HR management at PT Bukit Muria Jaya has a high level of effectiveness. Based on a Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), the overall average score related to the effectiveness of this system reached 4.21, indicating that the majority of respondents perceive the application as providing tangible benefits in HR management. The digitalization of employee administrative processes, such as attendance recording, leave requests, and performance evaluations, has had a positive impact on the company's operational efficiency. Additionally, this cloud-based system enables real-time data access, facilitating better coordination between management and employees across various aspects of HR management.
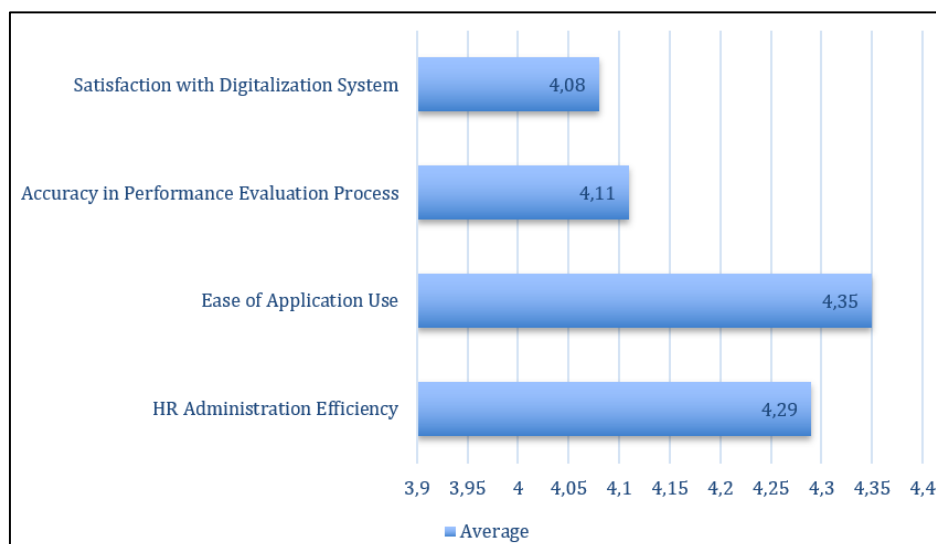
Figure 1. Effectiveness of Darwin Box Application Implementation

When assessed in terms of particular elements, the program's simplicity of use obtained a score of 4.35, suggesting that the majority of employees find the application straightforward and do not require much training to operate. The user-friendly design and Employee Self-Service (ESS) functionality enable employees to access their personal information, such as

work schedules, attendance records, and pay stubs, without relying on the HR department. Furthermore, because the program is mobile-friendly, employees may use it at any time and from any location, giving them greater freedom in managing their own work-related demands.

The program received a rating of 4.29 for HR administrative efficiency, suggesting a faster and more accurate handling of previously manual activities. One example of this efficiency benefit is the ability to approve leave applications in less than a day, as opposed to the prior manual procedure, which took several days. Furthermore, geotagging and verification elements in attendance records have decreased the possibility of mistakes and deterred fraudulent activities such as proxy attendance.

The program obtained a 4.11 rating for the speed of the performance review process, suggesting that it aids in the acceleration of employee performance assessments. Managers may easily view individual and team performance reports, which include statistics on productivity, job engagement, and target attainment, thanks to AI-powered analytics tools. This allows the organization to create data-driven strategies for personnel management, promotions, and incentive distribution. However, while the program makes the evaluation process easier, some employees still need help comprehending their performance data, especially in terms of promotion criteria and skill development.

Finally, the satisfaction score with the digitization of HR management was 4.08, which is still good but lower than the other components. Some hurdles in using this application include senior workers' technological adaptability and integration restrictions with other systems still in use inside the organization (Bolatan et al., 2022; Piyarlall, 2024). However, ongoing training and technological assistance could potentially reduce these barriers. Overall, the Darwin Box implementation has been successful in improving HR management efficiency, transparency, and speed at PT Bukit Muria Jaya, hence contributing to organizational effectiveness and commercial sustainability.

Relationship between HR digitalization and organizational effectiveness
PT Bukit Muria Jaya has demonstrated a strong correlation between the installation of Darwin Box and organizational success. HR digitization allows the organization to automate different administrative operations, increase data quality, and speed up data-driven decision-making. We used a Pearson correlation test to assess the association between Darwin Box utilization and organizational effectiveness. The results indicated a substantial positive connection ($r = 0.72$, $p < 0.01$), indicating that the higher the utilization of this application, the more successful the organization's HR management. This association suggests that organizations that include more digital aspects into HR administration have more efficient processes, more transparent communication, and greater productivity.

Furthermore, a simple linear regression analysis was used to estimate the impact of HR digitization on organizational effectiveness. The study found that digital systems improve organizational performance by 51.8% ($R^2 = 0.518$, $p < 0.01$). This suggests that the installation of digital HR management systems accounts for more than half of the organization's effectiveness. Other elements that influence organizational success include organizational culture, leadership, and technology infrastructure. However, these findings show that digitization has a major influence on increasing the company's operational efficiency and effectiveness.

In terms of implementation, digitizing HR through Darwin Box has made many parts of the organization more effective. These include managing attendance and leaves, evaluating performance, and making plans for employee development. This technology enables managers to obtain employee performance data in real time, resulting in faster and more objective decisions on promotions, training, and talent management. Furthermore, the automation capabilities in this program have decreased the administrative strain in the HR department by up to 40%, since many formerly manual operations have been simplified. As a consequence,

HR professionals can devote more time to strategic issues like employee competency development and enhancing worker engagement in order to achieve company goals.

Another benefit is enhanced openness and responsibility in HR management. Prior to digitization, many HR decisions were dependent on subjective evaluations and frequently lacked correct supporting data. All operations, from performance evaluation to compensation planning, are now more visible thanks to the Darwin Box system, which is based on well-documented data. This has resulted in better employee satisfaction since they feel more appreciated and have direct access to information on their professional progress inside the firm. Overall, the study's findings show that HR digitization improves administrative efficiency, data quality, management transparency, and data-driven decision-making. As technology advances, firms that can embrace and optimize digital HR management systems will have a competitive edge in meeting future business issues (Degtyareva, V. et al., 2021). As a result, PT Bukit Muria Jaya must continue to engage in digital system development while also ensuring that all staff gain the skills required to adapt to these changes.

Comparison of Digitalization Effectiveness by Job Position

This study investigates if views of the efficacy of the digital system vary depending on employee job levels at PT Bukit Muria Jaya. We used an independent t-test to compare the perceptions of HR supervisors/managers and operational workers. According to the analysis results, HR supervisors and managers have an average application effectiveness score of 4.35, which is higher than operational staff's average score of 4.05. This suggests that managers and supervisors get larger benefits from the Darwin Box application than operational people. Furthermore, the independent t-test findings indicate a significant difference between the two groups $(t(301) = 2.89, p = 0.004)$. A p-value < 0.01 suggests a significant difference in digital system experience based on work position. HR supervisors and managers frequently use the application's managerial capabilities, which include employee performance monitoring, HR data analysis, training planning, and salary and incentive management. These characteristics enable them to make strategic decisions and increase their team's operational effectiveness. On the other side, operational workers generally use basic administrative tools like attendance monitoring, leave requests, and pay stub access. Despite the usefulness of these functionalities, operational workers primarily use the program for everyday administrative duties. This might explain why their perceived effectiveness scores are lower than those of HR supervisors and managers.

Furthermore, several operational workers expressed difficulty adapting to new technology, particularly those inexperienced with digital systems in their regular job. The intensity with which applications are used is another aspect that contributes to the perceived difference in efficacy. HR supervisors and managers utilize Darwin Box for a variety of tasks, including performance review, recruiting, and staff productivity measurement. Meanwhile, operational workers often use the tool simply to manage attendance statistics or submit leave requests. As a result, operational workers perceive the benefits of digitization to be less than those of supervisors and managers. Overall, the study found that using digitalization in human resource management benefits supervisors and managers more than operational people. To increase the system's overall efficacy, PT Bukit Muria Jaya should strengthen digital training for operational staff so that they can make the most use of the application. Furthermore, system features or customization should be updated to better coincide with the demands of each job level, ensuring that the advantages of digitalization are equitably disseminated across all organizational levels.

The Effect of Digitalization on Business Sustainability.

In the era of Industry 4.0, digital transformation in human resource management (HRM) has become critical to corporate sustainability. HR digitalization allows businesses to increase

operational efficiency, employee happiness, and organizational effectiveness, all of which contribute to long-term competitiveness and sustainability (Li, Y., Cui, L., Wu, L., Lowry, P., Kumar, A., & Tan, K., 2023). To further understand how digital transformation influences company sustainability at PT Bukit Muria Jaya, a factor analysis was performed on three key variables: operational efficiency, employee happiness, and organizational effectiveness. According to the analysis results, operational efficiency is the most important factor in business sustainability (39.7%), followed by employee satisfaction (34.2%) and organizational effectiveness (26.1%). These findings show that increasing operational efficiency due to digitization is the most important aspect in ensuring firm sustainability. The Darwin Box system allows for more efficient and precise execution of administrative duties like attendance management, payroll, performance evaluation, and staff development planning. This not only saves time and money on operations but also minimizes the possibility of mistakes that are typical in manual procedures (Awwad, E., 2023). Companies that improve operational efficiency can adjust more readily to market changes while remaining competitive in the sector.

According to Miranda et al. (2024), strong employee happiness is crucial for corporate survival. HR digitization enables businesses to deliver a better work experience for their workers, such as improved access to personal information, more transparency in performance reviews, and more efficient vacation and overtime requests. Increased employee happiness has a direct influence on retention rates and productivity, eventually contributing to organizational stability. In today's increasingly competitive company market, keeping a high-quality team is one of the most important tactics for long-term corporate success. In terms of organizational performance, digital system deployment has increased interdepartmental cooperation and hastened data-driven decision-making. With Darwin Box's analytical dashboard capabilities, managers can simply obtain real-time employee performance reports, allowing them to take strategic HR management actions quickly. Although organizational effectiveness is less important than operational efficiency and employee happiness, it is nonetheless critical to guarantee that all organizational parts can adapt efficiently to digital technology in order to preserve long-term economic viability. A multiple regression study indicates that HR digitization improves company sustainability by 47.3% ($R^2 = 0.473$, $p < 0.01$). This suggests that properly implementing digital solutions in HR management may account for approximately half of corporate sustainability considerations. According to Miranda, Saunila, Cruz-Cázares, and Ukko (2024), successful implementation of digital systems leads to increased corporate sustainability. In other words, firms that efficiently manage human resources digitally will have a more adaptable organizational structure, a more productive staff, and a greater flexibility to negotiate dynamic business changes. Therefore, PT Bukit Muria Jaya must continue to innovate in HR digitization, including strengthening technology integration with other business systems, to preserve its competitive edge and guarantee long-term commercial viability.

Challenges of Implementing Digital Transformation

Although digitization of human resource management (HRM) at PT Bukit Muria Jaya has provided several benefits, its implementation has not been without hurdles. According to interviews and observations, various impediments continue to impede digital transformation effectiveness, both technically and in terms of human resource preparation. These issues must be addressed immediately in order to improve the digital system, notably the Darwin Box application, so that it performs more efficiently and provides the most advantages to the firm.

One of the most significant problems in undertaking digital transformation is a lack of personnel training. According to research findings, 48% of respondents believe the training offered is insufficient, making it difficult for them to grasp and utilize the system successfully. As a result, some employees continue to use manual methods or seek assistance from colleagues who are more digitally savvy. Inadequate training also causes data input mistakes, which might jeopardize system accuracy and slow down HR administrative activities. As a result, the

organization must develop a more extensive and long-term training program to guarantee that all workers have a thorough grasp of the digital system in use.

In addition to training concerns, technical impediments provide a considerable hurdle. Approximately 37% of respondents reported encountering technical challenges at least once a month, such as system outages, data entry mistakes, or delays in information processing. These technological issues might impede job productivity and undermine employee faith in the system. Furthermore, when technological difficulties develop, employees frequently struggle to discover answers on their own, particularly if IT assistance is not immediately available. To solve this issue, the organization must ensure that its technological infrastructure promotes system efficiency, which includes improving technical support services and performing routine system maintenance.

Another obstacle to adopting digital transformation is pushback from top personnel. According to research findings, older personnel have a more difficult time adjusting to digital systems than younger ones. This is due to long-standing working habits using manual systems and a lack of expertise with digital technologies. Senior employees who struggle to adjust to the Darwin Box application frequently feel overwhelmed and accomplish jobs slower than their younger colleagues. To overcome this opposition, the organization should implement a change management strategy that includes individual assistance, specific training sessions for senior staff, and creating a work climate that encourages technology adoption.

Overall, adopting the correct tactics can mitigate the problems of digital transformation. Company management must improve system-related socialization and training, ensure that technical infrastructure functions properly, and take a more participatory approach to managing workplace transformation. This allows for more effective digital transformation, increased organizational efficiency, and long-term corporate sustainability.

The implications of research findings

The outcomes of this study have important significance for PT Bukit Muria Jaya and other firms looking to embrace digitalization in human resource management. As technology evolves in the workplace, firms must adapt in order to remain competitive and maintain maximum operational efficiency. The study's conclusions include numerous critical recommendations for firms looking to enhance digital transformation in HR management.

One of the most significant consequences of this study is the importance of improving staff training and assistance. While the Darwin Box application has proven beneficial in boosting HR management efficiency, challenges still exist owing to workers' lack of knowledge of the technology. Employees that struggle with technology adaptation require more extensive training, notably seminars, interactive tutorials, and direct mentorship sessions. This method not only improves employees' digital abilities, but it also lessens opposition to technology change, which is common among top executives.

Furthermore, this study emphasizes the need to enhance the quality of digital infrastructure within the organization. One of the biggest problems that has been pointed out is the high number of technical errors and data entry mistakes that make digital system deployment less effective. So, the people in charge of the company need to make sure that the digital system they use has a strong foundation, a reliable way to back up data, and quick technical support. By doing so, the organization may lower the danger of data loss while also improving the system's dependability in supporting everyday operations.

Another finding of this study is the necessity for individualized features in digital HR apps. Each division within a corporation has unique HR management requirements; hence, the digital system must be adaptable to each division's distinct demands. Companies may guarantee that every employee and manager can utilize the Darwin Box application according to their needs by including customizable capabilities, such as attendance management, performance

evaluation, and staff training planning. This not only improves the user experience but also the overall efficacy of the system.

Finally, this study emphasizes the significance of regularly assessing employee happiness and the efficacy of the digital system to guarantee that digital transformation continues to benefit the organization. Organizations should undertake frequent assessments using employee satisfaction surveys, interviews, and application usage data analysis (Lin et al., 2022; Mustafa, 2023). Systematic monitoring allows management to spot developing concerns more rapidly and adopt remedial steps before they have a substantial influence on organizational performance.

Overall, the outcomes of this study underscore the need to implement digitalization in HR management through a well-planned approach. More extensive training, stronger digital infrastructure, adaptable features, and constant monitoring are critical elements that may help businesses reap the benefits of digital transformation. By implementing these guidelines, PT Bukit Muria Jaya and other businesses may guarantee that HR digitization not only improves operational efficiency but also contributes to long-term company viability.

CONCLUSION

Based on the findings of this study, it can be concluded that the application of Darwin Box in human resource management at PT Bukit Muria Jaya has a high degree of effectiveness. The fact that digitalization contributes 51.8% to organizational effectiveness serves as a clear demonstration. Another interesting finding from the Pearson correlation tests is that there is a strong and positive link between using this app and how well the organization works ($r = 0.72$, $p < 0.01$). The study also revealed differences in perceived efficacy according to job status. Managers and supervisors had more advantages than operational workers ($t(301) = 2.89$, $p = 0.004$). This was the case when compared to the overall workforce. One of the most interesting aspects of this study is that it takes a complete quantitative approach to conduct an in-depth investigation of the influence that HR digitization has on the performance of organizations and the long-term viability of businesses. Additionally, this study reveals that HR digitization makes a substantial contribution to the sustainability of businesses, with operational efficiency being the most important aspect. This is in addition to the fact that it improves organizational performance. There are, nevertheless, issues that continue to be roadblocks that demand the attention of management. These challenges include insufficient training, technological barriers, and opposition from senior personnel. It is therefore necessary to establish proper mitigation techniques in order to guarantee the most effective deployment of digital systems. In general, the findings of this study highlight the fact that digital transformation in human resource management is not only a change in administrative systems; rather, it is a strategic move that, in the long term, will boost the effectiveness of organizations and the competitiveness of businesses. For this reason, it is recommended that the management of the firm enhance staff training, build digital infrastructure, and perform frequent reviews of the efficacy of the system in order to guarantee that the benefits of digitalization continue to be maximized.

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