

# Digital Human Resource Transformation: The Role of Strategic HRM Capability and Learning Agility in Building Organizational Resilience in the Manufacturing Industry

Muhammad Angga Abdulah <sup>1</sup>, Muhamad Ekhsan <sup>2\*</sup>, Anna Wulandari <sup>3</sup>

<sup>1,2\*,3</sup> Management Study Program, Faculty of Economics and Business, Universitas Pelita Bangsa, Bekasi Regency, West Java Province, Indonesia

Email: [anggaabdulah12@gmail.com](mailto:anggaabdulah12@gmail.com) <sup>1</sup>, [muhamad.ekhsan@pelitabangsa.ac.id](mailto:muhamad.ekhsan@pelitabangsa.ac.id) <sup>2\*</sup>, [annawulandari@pelitabangsa.ac.id](mailto:annawulandari@pelitabangsa.ac.id) <sup>3</sup>

Article history:

Received June 3, 2026

Revised July 22, 2026

Accepted July 27, 2026

## Abstract

Digital transformation has reshaped how manufacturing firms organize work and manage employees. In this setting, resilience depends not only on technology, but also on the capacity of the HR function to align people, skills, and organizational priorities. This study investigates whether Strategic Human Resource Management (HRM) Capability strengthens Organizational Resilience directly and through Learning Agility. The research was conducted among employees of manufacturing companies operating in five industrial areas in West Java: KIIC, EJIP, GIIC, Jababeka Industrial Estate-Cikarang, and MM2100 Industrial Town. Using a quantitative explanatory design, data were collected through a survey of 75 permanent employees selected purposively. Eligible respondents had at least one year of work experience and were involved in work processes affected by digital transformation. The model was tested with Partial Least Squares Structural Equation Modeling (PLS-SEM). The results show that Strategic HRM Capability has a positive and significant relationship with both Organizational Resilience and Learning Agility. Learning Agility also contributes positively and significantly to Organizational Resilience. Nevertheless, its indirect role was not statistically significant, indicating that the influence of Strategic HRM Capability on resilience operates mainly through a direct pathway rather than through Learning Agility. These results suggest that manufacturing firms should place greater emphasis on strategic workforce alignment, digital HR practices, competency development, and adaptive work systems. Strengthening these capabilities can help organizations respond more effectively to technological disruption and uncertainty while maintaining continuity during digital transformation.

## Keywords:

Strategic HRM Capability; Learning Agility; Organizational Resilience; Digital Human Resource Transformation; Manufacturing Industry.

## 1. INTRODUCTION

The acceleration of digital transformation in the era of Industry 4.0 and the transition toward Industry 5.0 have fundamentally transformed the manufacturing industry landscape, requiring organizations to possess high adaptability to sustain business continuity amid environmental uncertainty. Manufacturing organizations currently face various challenges, including technological disruption, changing market demand, supply chain disruption, and increasing global competition. In this context, organizational resilience has become a critical strategic capability, enabling organizations to survive, adapt, and recover from internal and external pressures. According to Awad, et.al (2024), organizations with a high level of resilience tend to maintain operational stability, improve organizational flexibility, and sustain competitive advantages in dynamic business environments. Furthermore, Ghobakhloo et al., (2024) emphasized that digital manufacturing development increasingly positions organizational resilience as a key foundation for industrial sustainability because

organizations are expected not only to withstand changes but also to continuously transform through strategic human resource and digital technology capabilities.

Although the implementation of digital transformation in the manufacturing industry has increased significantly, many organizations still encounter difficulties in developing optimal organizational resilience. The acceleration of industrial digitalization is often not accompanied by organizational readiness in managing human resource transformation, technological adaptation, and business process restructuring. Many manufacturing firms continue to experience workforce competency gaps, limited organizational flexibility, and inadequate strategic human resource functions in responding to rapidly changing business environments. According to Wakrim & Khaldi, (2024), the low capability of organizations in integrating Strategic Human Resource Management (SHRM) practices is one of the primary causes of weak organizational resilience, particularly in organizations operating in highly dynamic and uncertain environments. Furthermore Wu et al., (2024) emphasized that successful digital transformation in manufacturing industries requires organizational readiness, innovation capability, and appropriate human resource strategies to effectively respond to technological and operational changes.

Strategic Human Resource Management (HRM) Capability has become an essential factor in strengthening organizational resilience in manufacturing industries undergoing digital transformation. The increasingly complex business environment requires the human resource function to move beyond administrative responsibilities and assume a strategic role in aligning workforce competencies with organizational objectives. Strategic HRM Capability enables organizations to develop talent management systems, workforce planning, competency-based training, and digital workforce transformation strategies that support organizational sustainability. According to Georgescu et al., (2024) strategic human resource management practices integrated with organizational culture significantly enhance organizational resilience by strengthening workforce adaptability, organizational flexibility, and long-term sustainability in dynamic business environments. Furthermore, Nelson et al., (2025) argued that organizations integrating strategic human resource practices with business objectives are more likely to strengthen organizational resilience and maintain business continuity during periods of disruption and technological change.

Learning Agility plays an important role in enhancing organizational adaptability in rapidly changing business environments. Employees with high learning agility tend to learn from experience, adapt to new situations, and effectively apply knowledge in different working conditions, allowing organizations to respond more effectively to technological changes and industrial dynamics. In the manufacturing industry, employees with strong learning agility are more capable of understanding new working systems, adopting digital technologies, and adjusting to operational changes. According to Ghosh & Muduli, (2021), organizations with highly adaptive and learning-oriented employees are more likely to maintain business continuity and organizational resilience during periods of uncertainty. Furthermore, Kim & Ko, (2024) emphasized that learning agility significantly contributes to organizational resilience by improving workforce adaptability, flexibility, and readiness to respond to unexpected disruptions. Therefore, learning agility serves as an important mechanism that strengthens the relationship between Strategic HRM Capability and Organizational Resilience.

At the local level, the implementation of digital transformation in manufacturing companies across major industrial areas in West Java demonstrates a relatively high level of development, although organizational readiness and workforce adaptability still vary significantly. The focus of this study includes five major industrial areas, namely Karawang International Industrial City (KIIC), East Jakarta Industrial Park (EJIP), Greenland International Industrial Center (GIIC), Jababeka Industrial Estate-Cikarang, and MM2100 Industrial Town. Various digital systems, such as Human Resource Information Systems (HRIS), Enterprise Resource Planning (ERP), automation technologies, and digital workforce management systems, have been increasingly implemented in these industrial areas. However, differences in organizational readiness and strategic human resource capability indicate that successful digital transformation does not necessarily guarantee equal levels of organizational resilience. According to Yamin et al., (2024) manufacturing organizations that integrate strategic human resource management with digital capabilities are better positioned to enhance organizational agility and resilience in responding to technological disruption.

## Level of Implementation of Digital Human Resource Transformation in Five Industrial Areas in West Java

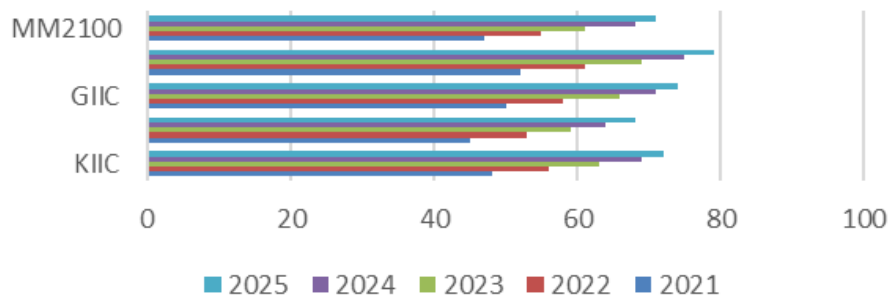


Figure 1. Level of Implementation (2021–2025)

Previous studies have extensively examined the relationships between Strategic Human Resource Management (HRM) Capability, Learning Agility, and Organizational Resilience in different organizational contexts. Existing literature demonstrates that Strategic HRM Capability contributes to organizational effectiveness, adaptability, and resilience through workforce development and strategic alignment with business objectives. Likewise, Learning Agility has been widely recognized as an important factor influencing employee adaptability and organizational responsiveness to environmental changes. However, according to Gong et al., (2020), most previous studies have primarily investigated these relationships separately, focusing on organizational performance, employee adaptability, or digital transformation without comprehensively integrating Strategic HRM Capability, Learning Agility, and Organizational Resilience into a unified research model. Furthermore, empirical studies examining the mediating role of Learning Agility in the relationship between Strategic HRM Capability and Organizational Resilience remain limited, particularly in the context of manufacturing industries experiencing rapid digital transformation. Therefore, this study seeks to address this research gap by examining the mediating role of Learning Agility in strengthening the influence of Strategic HRM Capability on Organizational Resilience within manufacturing companies in major industrial areas of West Java.

Considering the growing challenges of digital transformation in the manufacturing industry, organizational resilience has become a critical strategic capability that enables organizations to sustain operational stability and respond effectively to environmental uncertainty. Despite extensive discussions regarding Strategic Human Resource Management (HRM) Capability and Learning Agility, limited empirical evidence has comprehensively explained the mechanism through which Strategic HRM Capability enhances Organizational Resilience through Learning Agility, particularly within manufacturing industries undergoing digital transformation. Therefore, the novelty of this study lies in the integration of Strategic HRM Capability, Learning Agility, and Organizational Resilience into a comprehensive research framework within the context of manufacturing companies in major industrial areas of West Java. Specifically, this study aims to analyze the effect of Strategic HRM Capability on Organizational Resilience, examine the influence of Strategic HRM Capability on Learning Agility, investigate the effect of Learning Agility on Organizational Resilience, and evaluate the mediating role of Learning Agility in the relationship between Strategic HRM Capability and Organizational Resilience.

## 2. RESEARCH METHOD

An explanatory cross-sectional survey was used to estimate how Strategic Human Resource Management (HRM) Capability is associated with Organizational Resilience, both directly and indirectly through Learning Agility. The unit of analysis was the individual employee in a manufacturing firm. Because the proposed framework contains latent constructs and an intervening pathway, the hypotheses were estimated with variance-based structural equation modeling (PLS-SEM). This approach permits the measurement and structural components to be examined within one model and is appropriate for analysis with a predictive orientation (Hair, et al. 2021).

The empirical setting covered manufacturing firms operating in five industrial estates in West Java: Karawang International Industrial City (KIIC), East Jakarta Industrial Park (EJIP), Greenland International Industrial Center (GIIC), Jababeka Industrial Estate-Cikarang, and MM2100 Industrial Town. These estates were chosen because digital systems have increasingly become part of both production activities and human resource practices in the area. Respondents were recruited purposively so that the data would come from

employees with direct experience of the phenomenon being studied. Participation was limited to permanent employees who had worked for at least one year, performed duties affected by digital transformation, and consented to complete the questionnaire. Seventy-five usable responses met these requirements. Considering the limited complexity and prediction focus of the model, this number was treated as sufficient for PLS-SEM analysis (Hair, et al., 2024)

Responses were obtained through a closed-ended questionnaire scored from 1 (strongly disagree) to 5 (strongly agree). Strategic HRM Capability was operationalized through strategic workforce alignment, digital HR transformation, HR agility, and HR business partnership. Learning Agility, which functioned as the intervening construct, was represented by mental agility, people agility, change agility, results agility, and self-awareness. Organizational Resilience was captured through the ability to anticipate disruption, cope with pressure, adapt, recover promptly, and learn from crisis. SmartPLS 3 was used in two analytical stages. First, the adequacy of the indicators and constructs was examined through the measurement model. Second, the structural relationships were estimated, and both direct and indirect effects were assessed through bootstrapping. Statistical decisions were made at the 5% level using the resulting t values and p values. PLS-SEM was also considered suitable because it accommodates mediation analysis, moderate sample sizes, and data that are not required to meet multivariate normality assumptions.

### 3. RESULTS AND DISCUSSION

#### 3.1. Results

##### 3.1.1. Respondent Profile

Usable questionnaires were obtained from 75 employees working in manufacturing companies across five industrial estates in West Java: KIIC, EJIP, GIIC, Jababeka Industrial Estate-Cikarang, and MM2100 Industrial Town. Before the structural model was assessed, the sample was described in terms of gender, age, and length of service to clarify the composition of the respondents represented in the analysis.

Table 1. Gender Distribution of the Respondents

| Gender | Frequency | Percentage (%) |
|--------|-----------|----------------|
| Male   | 17        | 22.7           |
| Female | 58        | 77.3           |
| Total  | 75        | 100.0          |

Source: Authors' processing of the 2026 survey data.

The gender distribution was uneven. Women accounted for 58 participants (77.3%), whereas 17 respondents (22.7%) were men. The evidence generated in this study therefore reflects predominantly the perceptions of female employees in the selected manufacturing companies.

Table 2. Age Profile of the Respondents

| Age         | Frequency | Percentage (%) |
|-------------|-----------|----------------|
| < 25 Years  | 51        | 68.0           |
| 25–34 Years | 16        | 21.3           |
| 35–44 Years | 1         | 1.3            |
| ≥ 45 Years  | 7         | 9.3            |
| Total       | 75        | 100.0          |

Source: Authors' processing of the 2026 survey data.

The sample was concentrated in the youngest age category. Fifty-one respondents (68.0%) were below 25 years of age, followed by 16 respondents (21.3%) aged 25–34. Seven participants (9.3%) were 45 years or older, and only one respondent (1.3%) fell within the 35–44 age group. Thus, most observations were obtained from early-career employees who are likely to encounter changing digital work systems during the formative stage of their employment.

Table 3. Respondents by Length of Service

| Work Experience | Frequency | Percentage (%) |
|-----------------|-----------|----------------|
| 1–3 Years       | 50        | 66.7           |
| 4–6 Years       | 13        | 17.3           |
| > 6 Years       | 12        | 16.0           |
| Total           | 75        | 100.0          |

Source: Authors' processing of the 2026 survey data.

A similar concentration appeared in length of service. Fifty employees (66.7%) had worked for one to three years, 13 (17.3%) had four to six years of experience, and 12 (16.0%) had been employed for more than six years. Accordingly, the sample mainly represents employees at an early stage of organizational tenure while still including a meaningful proportion of more experienced staff.

### 3.1.2. Measurement Model Evaluation

Before the proposed relationships were tested, the quality of the measurement model was examined for the three latent constructs: Strategic HRM Capability, Learning Agility, and Organizational Resilience. Indicator performance was reviewed through standardized loadings, while construct-level convergent validity was assessed from the Average Variance Extracted (AVE). Internal consistency was evaluated with Cronbach's alpha and composite reliability. The adopted reference values were above 0.70 for indicator loadings and reliability coefficients and above 0.50 for AVE (Sugiyono, 2022).

After indicators that did not satisfy the required standard had been removed, every retained item loaded above 0.70 on its intended construct. This pattern indicates that the remaining indicators shared sufficient variance with the concepts they were designed to represent.

Table 4. Standardized Indicator Loadings

| Construct                 | Indicator | Standardized Loading |
|---------------------------|-----------|----------------------|
| Strategic HRM Capability  | SHC.1     | 0.799                |
|                           | SHC.2     | 0.840                |
|                           | SHC.3     | 0.768                |
|                           | SHC.4     | 0.786                |
|                           | SHC.5     | 0.788                |
| Learning Agility          | LA.1      | 0.758                |
|                           | LA.2      | 0.864                |
|                           | LA.3      | 0.865                |
| Organizational Resilience | OR.1      | 0.827                |
|                           | OR.2      | 0.822                |
|                           | OR.3      | 0.793                |
|                           | OR.4      | 0.810                |
|                           | OR.5      | 0.794                |

Source: Authors' calculations from SmartPLS 3 output (2026).

The estimates in Table 4 range from 0.758 to 0.865. Since each loading exceeds the adopted cutoff, none of the retained indicators required further deletion, and indicator reliability was judged to be adequate.

At the construct level, AVE values were 0.635 for Strategic HRM Capability, 0.690 for Learning Agility, and 0.655 for Organizational Resilience. Each estimate is higher than 0.50, meaning that the construct explains a larger proportion of indicator variance than the variance attributable to measurement error. The convergent-validity requirement was therefore met.

Table 5. Average Variance Extracted by Construct

| Construct                 | AVE   |
|---------------------------|-------|
| Strategic HRM Capability  | 0.635 |
| Learning Agility          | 0.690 |
| Organizational Resilience | 0.655 |

Source: Authors' calculations from SmartPLS 3 output (2026).

Internal consistency was also satisfactory. Cronbach's alpha ranged from 0.773 to 0.869, whereas composite reliability ranged from 0.870 to 0.905. Because all coefficients were higher than 0.70, the three measurement scales provided sufficiently consistent scores for the next stage of analysis.

Table 6. Construct Reliability and Convergent Validity

| Construct                 | Cronbach's Alpha | Composite Reliability | AVE   | Assessment   |
|---------------------------|------------------|-----------------------|-------|--------------|
| Strategic HRM Capability  | 0.857            | 0.897                 | 0.635 | Criteria met |
| Organizational Resilience | 0.869            | 0.905                 | 0.655 | Criteria met |
| Learning Agility          | 0.773            | 0.870                 | 0.690 | Criteria met |

Source: Authors' calculations from SmartPLS 3 output (2026).

Taken together, the loading, AVE, Cronbach's alpha, and composite-reliability results support the adequacy of the measurement model. The retained indicators could therefore be used to estimate the structural paths linking Strategic HRM Capability, Learning Agility, and Organizational Resilience.

### 3.1.3. Structural Model Assessment (Inner Model)

The second analytical stage focused on the structural component of the model. Four aspects were considered: possible collinearity, the amount of variance explained in each endogenous construct, the direction and magnitude of the path estimates, and the statistical support for the direct and mediated relationships. Bootstrapped *t* values above 1.96 accompanied by *p* values below 0.05 were used as the decision rule (Hair et al., 2021)

Potential collinearity was inspected through the Variance Inflation Factor (VIF). Hair et al. (2021) recommend an upper reference point of 5.00; values beyond this level may indicate excessive linear overlap that could distort coefficient estimates. The observed VIF statistics were therefore compared with this criterion before the hypotheses were interpreted.

Table 7. Indicator-Level VIF Statistics

| Construct                 | Indicator | VIF   | Assessment   |
|---------------------------|-----------|-------|--------------|
| Strategic HRM Capability  | SHC.1     | 1.975 | Within limit |
|                           | SHC.2     | 2.638 | Within limit |
|                           | SHC.3     | 1.948 | Within limit |
|                           | SHC.4     | 1.818 | Within limit |
|                           | SHC.5     | 1.735 | Within limit |
| Organizational Resilience | OR.1      | 2.010 | Within limit |
|                           | OR.2      | 2.155 | Within limit |
|                           | OR.3      | 1.855 | Within limit |
|                           | OR.4      | 2.571 | Within limit |
|                           | OR.5      | 2.558 | Within limit |
| Learning Agility          | LA.1      | 1.305 | Within limit |
|                           | LA.2      | 2.122 | Within limit |
|                           | LA.3      | 2.050 | Within limit |

Source: Authors' calculations from SmartPLS 3 output (2026).

As reported in Table 7, the VIF values ranged from 1.305 to 2.638. All estimates were well below 5.00, providing no evidence that problematic collinearity was present among the indicators. The structural estimates could therefore be interpreted without a material collinearity concern.

Explanatory power was evaluated from the R-squared values of Learning Agility and Organizational Resilience. The benchmarks proposed by Hair et al. (2021) were used as interpretive guidance, with values of approximately 0.25, 0.50, and 0.75 representing weak, moderate, and substantial explanatory capacity, respectively.

Table 8. Explained Variance in the Endogenous Constructs

| Endogenous Construct          | R <sup>2</sup> | Adjusted R <sup>2</sup> |
|-------------------------------|----------------|-------------------------|
| Learning Agility (M)          | 0.216          | 0.205                   |
| Organizational Resilience (Y) | 0.405          | 0.388                   |

Source: Authors' calculations from SmartPLS 3 output (2026).

Strategic HRM Capability accounted for 21.6% of the observed variation in Learning Agility ( $R^2 = 0.216$ ; adjusted  $R^2 = 0.205$ ). The remaining variation is associated with factors that were not specified in the present model. Relative to the stated benchmarks, the explanatory capacity for Learning Agility is modest.

For Organizational Resilience, Strategic HRM Capability and Learning Agility jointly explained 40.5% of the variance ( $R^2 = 0.405$ ; adjusted  $R^2 = 0.388$ ). This represents stronger, although not high, explanatory performance and places the outcome between the weak and moderate benchmarks. The two predictors therefore provide a meaningful but incomplete account of resilience in the sampled manufacturing firms.

Once the explained variance had been established, attention turned to the estimated structural paths. The sign of a coefficient shows whether the associated constructs move in the same or opposite direction, while its absolute size reflects the relative strength of the relationship. Statistical support for each path was determined from bootstrapped *t* and *p* statistics at the 5% level.

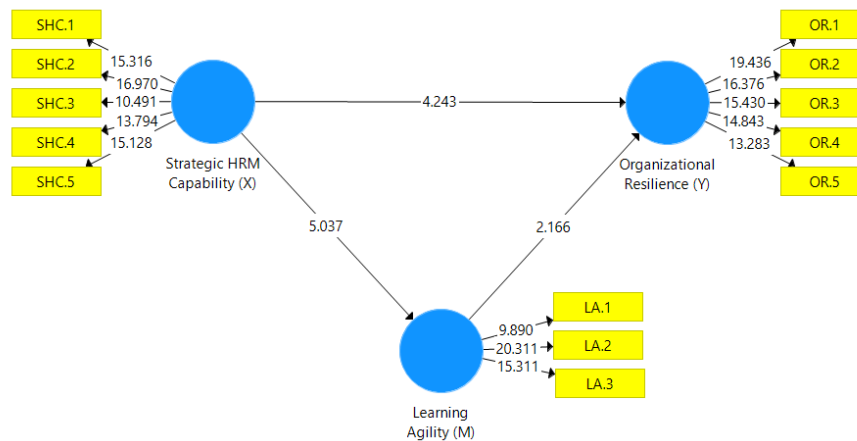


Figure 2. Bootstrapped Structural Model Estimates

### 3.1.4. Hypothesis Testing

Bootstrapping was used to generate the sampling distribution for the three direct effects and the proposed indirect effect. A relationship was regarded as statistically supported when the *t* value was greater than 1.96 and the *p* value was below 0.05 (Hair et al., 2021). The path coefficients and hypothesis decisions are summarized in Table 9.

Table 9. Structural Path Estimates and Hypothesis Decisions

| H  | Path                                                                    | $\beta$ | <i>t</i> | <i>p</i> | Result    |
|----|-------------------------------------------------------------------------|---------|----------|----------|-----------|
| H1 | Strategic HRM Capability → Organizational Resilience                    | 0.447   | 4.243    | 0.000    | Supported |
| H2 | Strategic HRM Capability → Learning Agility                             | 0.464   | 5.037    | 0.000    | Supported |
| H3 | Learning Agility → Organizational Resilience                            | 0.291   | 2.166    | 0.031    | Supported |
| H4 | Strategic HRM Capability → Learning Agility → Organizational Resilience | 0.135   | 1.754    | 0.080    | Rejected  |

Source: Authors' calculations from SmartPLS 3 output (2026).

Three of the four hypotheses received empirical support. Strategic HRM Capability was positively associated with Organizational Resilience ( $\beta = 0.447$ ,  $t = 4.243$ ,  $p < 0.001$ ), confirming H1. It was also positively related to Learning Agility ( $\beta = 0.464$ ,  $t = 5.037$ ,  $p < 0.001$ ), so H2 was supported. Learning Agility showed a smaller but still significant positive relationship with Organizational Resilience ( $\beta = 0.291$ ,  $t = 2.166$ ,  $p = 0.031$ ), providing support for H3. By contrast, the indirect path from Strategic HRM Capability to Organizational Resilience through Learning Agility was not significant ( $\beta = 0.135$ ,  $t = 1.754$ ,  $p = 0.080$ ). H4 was therefore not supported.

### 3.2. Discussion

The model indicates that Strategic HRM Capability is directly connected with both organizational resilience and employees' capacity to learn under changing conditions. Its coefficient for Organizational Resilience ( $\beta = 0.447$ ) suggests that manufacturing firms are more resilient when the HR function can align people, competencies, and workforce systems with strategic demands. This interpretation is consistent with Georgescu et al. (2024), who link strategic HR practices to flexibility and adaptive capacity, and with Nelson et al. (2025), who identify workforce development as an important basis for continuity during disruption. The positive relationship with Learning Agility ( $\beta = 0.464$ ) provides a complementary insight: strategically organized HR practices also create conditions that help employees learn from unfamiliar tasks and adjust to organizational change. This pattern supports Ulrich's (2024) view that a strategically positioned HR function contributes to the development of a more adaptive workforce during digital transformation.

Learning Agility also made a direct contribution to Organizational Resilience ( $\beta = 0.291$ ). Although this coefficient was lower than the direct contribution of Strategic HRM Capability, it shows that the ability to reinterpret experience, modify behavior, and remain effective in unfamiliar situations has consequences at the organizational level. In manufacturing environments undergoing technological change, agile learners can adjust more readily when procedures, systems, or job expectations are altered. This result is in line with Ghosh and Maduli et al., (2021) who describe learning agility as a source of workforce flexibility and adaptive response.

The indirect effect did not reach statistical significance ( $\beta = 0.135$ ,  $p = 0.080$ ). Learning Agility therefore cannot be treated as the mechanism that carries the influence of Strategic HRM Capability to Organizational Resilience in this sample. One plausible interpretation is that strategic HR capability strengthens resilience through several channels operating simultaneously, including workforce planning, competency systems, talent deployment, and organizational coordination. The pathway through individual learning agility may

consequently be too limited to account for the overall effect. Learning Agility remains relevant because its direct relationship with resilience is significant, but its role in the model is complementary rather than mediating.

From a managerial standpoint, the findings point to the need for an integrated HR agenda. Manufacturing firms should align workforce planning with digital priorities, use competency-based development to address emerging skill requirements, strengthen talent development, and incorporate HR analytics into employment decisions. Learning Agility should be cultivated alongside these organizational systems rather than treated as a substitute for them. The absence of a significant indirect effect indicates that resilience is unlikely to arise from employees' learning capacity alone; it also depends on strategic HR arrangements that support organizational flexibility and readiness for disruption. This recommendation is consistent with Mangra, (2024), who emphasize integrated human resource practices as a foundation for sustainable organizational resilience.

#### 4. CONCLUSION

This research assessed a model in which Strategic Human Resource Management Capability was expected to strengthen Organizational Resilience directly and indirectly through Learning Agility. Evidence from manufacturing employees in five industrial estates in West Java supports all three direct relationships. Strategic HRM Capability was associated with stronger Organizational Resilience and higher Learning Agility, while Learning Agility was itself positively linked to Organizational Resilience. The proposed indirect pathway was not supported. Accordingly, the contribution of Strategic HRM Capability to resilience appears to operate mainly through a direct route rather than through Learning Agility.

For manufacturing firms, these results place strategic HR capability at the center of resilience-building efforts. Workforce planning, competency development, talent management, digital HR practices, and adaptive learning arrangements need to be aligned with the requirements of increasingly digital operations. Learning Agility remains valuable, but it should be developed alongside, rather than in place of, broader HR systems that improve organizational flexibility and preparedness for disruption.

Conceptually, the study connects digital human resource transformation with organizational resilience in a manufacturing setting. Its interpretation is nevertheless bounded by the use of 75 respondents drawn from five industrial estates within one province. Broader samples, additional industrial sectors, and comparisons across regions would provide a stronger basis for generalization. Future models may also examine digital leadership, organizational culture, innovation capability, employee engagement, and digital readiness as alternative antecedents or mechanisms (Alexandro, 2025). Overall, the evidence identifies Strategic HRM Capability as an important organizational resource for maintaining continuity and competitiveness in a rapidly changing industrial environment.

#### ACKNOWLEDGEMENTS

The authors gratefully acknowledge the financial support provided by the Ministry of Higher Education, Science, and Technology of the Republic of Indonesia (Kemdiktisaintek) through the 2026 Master's Thesis Research Grant Program, under contract numbers 283/C3/DT.05.00/PL-BARU/2026; 1997/LL4/PG/2026; and 005/7/KP.H/UPB/2026. The authors also extend sincere appreciation to the Master of Management Program, Universitas Pelita Bangsa, for its academic support throughout the research process. The authors are deeply grateful to all respondents and manufacturing companies located in the major industrial areas of West Java, including KIIC, EJIP, GIIC, Jababeka Industrial Estate–Cikarang, and MM2100 Industrial Town, for their valuable participation. Appreciation is also extended to all parties who provided support, guidance, and assistance during the completion of this study.

#### REFERENCES

- Alexandro, R. (2025). Strategic human resource management in the digital economy era: An empirical study of challenges and opportunities among MSMEs and startups in Indonesia. *Cogent Business & Management*, 12(1), 2528436. <https://doi.org/10.1080/23311975.2025.2528436>
- Awad, Jeehan A. R. and Martín-Rojas, R. (2024). Digital transformation influence on organisational resilience through organisational learning and innovation. *Journal of Innovation and Entrepreneurship*, 13(1), 69. <https://doi.org/10.1186/s13731-024-00405-4>
- Chia-Hung Wu a Che-Wei Chou b, Chen-Fu Chien c, & Yun-Siang Lin. (2024). Digital transformation in manufacturing industries: Effects of firm size, product innovation, and production type. *Technological*

Forecasting and Social Change, 207, 12362.  
<https://doi.org/https://doi.org/10.1016/j.techfore.2024.123624>

- Georgescu, I., Bocean, C. G., Vărzaru, A. A., Rotea, C. C., Mangra, M. G., & Mangra, G. I. (2024). Enhancing Organizational Resilience: The Transformative Influence of Strategic Human Resource Management Practices and Organizational Culture. *Sustainability (Switzerland)*, 16(10). <https://doi.org/10.3390/su16104315>
- Ghobakhloo, M., Amoozad, H., Mohammad, M., Vahid, I., & Sadeghi, J. (2024). From Industry 4 . 0 Digital Manufacturing to Industry 5 . 0 Digital Society : a Roadmap Toward Human-Centric , Sustainable , and Resilient Production. In *Information Systems Frontiers (Issue 0123456789)*. Springer US. <https://doi.org/10.1007/s10796-024-10476-z>
- Ghosh, S., & Muduli, A. (2021). Learning agility, culture and outcome: an empirical study. *International Journal of Indian Culture and Business Management*, 23(1), 95. <https://doi.org/10.1504/ijicbm.2021.115413>
- Gong, Y., Wu, Y., Huang, P., Yan, X., & Luo, Z. (2020). Psychological Empowerment and Work Engagement as Mediating Roles Between Trait Emotional Intelligence and Job Satisfaction. *Frontiers in Psychology*, 11(March), 1–7. <https://doi.org/10.3389/fpsyg.2020.00232>
- Hair, Joseph F. Jr. and Hult, G. Tomas M. and Ringle, Christian M. and Sarstedt, M. (2021). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (3rd ed.). Sage Publications.
- Jr., J. F. H., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2024). *Advanced Issues in Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). Sage Publications.
- Kim, J., & Ko, K. R. (2024). Green Business Model and Green Media Coverage for a Successful Initial Public Offering : Evidence from the Korean Firms. *Sustainability (Switzerland)*, 16(11), 45. <https://doi.org/https://doi.org/10.3390/su16114520>
- Mangra, I. G. C. G. B. A. A. V. C. C. R. M. G. M. G. I. (2024). Enhancing Organizational Resilience: The Transformative Influence of Strategic Human Resource Management Practices and Organizational Culture. *Sustainability (Switzerland)*, 16(10), 4315. <https://doi.org/10.3390/su16104315>
- Nelson, A., Lie, W., & Setyawan, A. (2025). Do Organizational Innovation and SHRM Practices Improve Organizational Resilience ? The Mediating Role of Employee Resilience. *Jurnal Manajemen Bisnis*, 16(1). <https://doi.org/10.18196/mb.v16i1.24797>
- Sugiyono. (2022). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D* (2nd ed.). Alfabeta.
- Susmita Ghosh, Muduli, A., & Pingle, S. (2021). Role of e-learning technology and culture on learning agility: An empirical evidence. *Human Systems Management*, 40(2), 235–248. <https://doi.org/10.3233/HSM-201028>
- wakrim, & khaldi. (2024). Strategic human resource management practices and organizational resilience: A theoretical nexus. *Alternatives Managériales et Économiques*, 6(3), 184–202. <https://doi.org/10.48374/IMIST.PRSM/ame-v6i3.48497>
- Yamin, M. A., Almuteri, S. D., Bogari, K. J., & Ashi, A. K. (2024). The Influence of Strategic Human Resource Management and Artificial Intelligence in Determining Supply Chain Agility and Supply Chain Resilience. *Sustainability (Switzerland)*, 16(7), 268. <https://doi.org/10.3390/su16072688>