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Leveraging Enterprise Social Media for Sustainable Workforce Agility: The Importance of Digital Learning and Organizational Support in Manufacturing

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ABSTRACT

This study aims to evaluate the influence of Enterprise Social Media (ESM) on workforce agility mediated by digital learning and organizational support in manufacturing companies in West Java. In the digital era, ESM has become a crucial tool for enhancing internal communication and collaboration, though its effectiveness in improving workforce agility still needs further investigation. Using a quantitative approach, this study involved 108 employees from various manufacturing companies in West Java. Data were collected through online questionnaires and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results indicate that ESM significantly affects workforce agility. Additionally, organizational support significantly mediates the relationship between ESM and workforce agility, while digital learning does not show a significant mediating effect. These findings underscore the importance of organizational support in optimizing the use of ESM to enhance workforce agility. Manufacturing companies in West Java should focus on developing strategies that integrate ESM into organizational culture and work processes, and provide adequate support to ensure its effective use. This study contributes both theoretically and practically to understanding the role of ESM, digital learning, and organizational support in enhancing workforce agility in the manufacturing sector.

Keywords: Enterprise Social Media, Workforce Agility, Digital Learning, Organizational Support, Manufacturing.

INTRODUCTION

In recent years, digitalization has transformed how companies operate, communicate, and interact with their external environment. Enterprise Social Media (ESM) has emerged as an essential tool used by companies to enhance internal communication, collaboration, and knowledge sharing (Leonardi et al., 2013). ESM enables employees to interact more efficiently and effectively, ultimately improving workforce agility (Qi & Chau, 2016). Workforce agility refers to the ability of employees to quickly adapt to changes and challenges in a dynamic work environment.

However, despite the increasing adoption of ESM, there are still doubts about its effectiveness in enhancing workforce agility. Many companies face challenges in integrating ESM with adequate digital learning strategies and organizational support (Razmerita et al., 2014). This creates a need to better understand how ESM can be optimally utilized to enhance workforce agility through the right mechanisms. Manufacturing companies in West Java face significant challenges in maintaining workforce agility amid global competition and rapid technological changes. Issues such as low digital technology adoption, lack of organizational support, and suboptimal digital learning often pose major obstacles (Khatri et al., 2010). This study aims to examine how ESM can influence workforce agility by considering the mediating roles of digital learning and organizational support (Cai et al., 2018).

Most previous studies have focused more on the adoption of ESM in the context of communication and collaboration (Oostervink et al. 2016; Naim & Lenka 2017) without directly linking it to workforce agility. Moreover, earlier studies have not extensively explored the mediating roles of digital learning and organizational support in the relationship between ESM and workforce agility (Kwahk & Park, 2016). Therefore, this study seeks to fill this gap by

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comprehensively examining the influence of ESM on workforce agility, mediated by digital learning and organizational support, specifically in the context of manufacturing companies in West Java.

West Java is known as one of the largest manufacturing hubs in Indonesia, with many companies operating in this sector (Tambunan, 2019). The selection of manufacturing companies in West Java as the research object is based on several reasons. First, the availability of data and good accessibility, given the numerous manufacturing companies that can provide relevant and representative data for this study. Second, the high industry dynamics, including technological changes and intense competition, which demand high workforce agility (Sherehiy et al., 2007). Third, many manufacturing companies in West Java have started implementing digital technologies, including ESM, thus providing a relevant context for examining its impact on workforce agility (Asmara & Rahayu, 2013). Finally, economic relevance, as the manufacturing industry in West Java is a major contributor to regional and national economies, making this research valuable for developing HR management strategies in this sector.

This study is expected to make significant contributions to HR management literature by revealing how ESM can be used to enhance workforce agility through digital learning and organizational support (Muduli, 2016). The results of this study are also expected to provide practical guidance for manufacturing companies in West Java to optimize the use of ESM to achieve higher workforce agility (Gunasekaran et al., 2018).

HYPOTHESIS DEVELOPMENT

Enterprise Social Media (ESM) has become a crucial instrument in enhancing workforce agility in the digital era. According to Leonardi et al. (2013), ESM is a web-based platform that enables employees to communicate with colleagues, disseminate messages across the organization, make explicit connections, and access messages, connections, and information shared by other colleagues. The use of ESM can increase employees' flexibility and responsiveness to dynamic business environment changes. Research by Kwahk & Park (2016) shows that ESM facilitates knowledge sharing and collaboration among employees, ultimately enhancing their ability to quickly adapt to changes. Cai et al. (2018) found that ESM can enhance employee agility by improving their psychological conditions, such as feelings of connectedness and empowerment. Qi & Chau (2018) add that ESM supports organizational learning and knowledge management, which are essential elements of workforce agility. By providing quick access to information and expertise within the organization, ESM enables employees to make faster and better decisions and adapt more effectively to market and technological changes. Based on these findings, it can be said that the use of ESM within an organization has the potential to significantly improve workforce agility.

H1: Enterprise social media affects workforce agility.

Enterprise Social Media (ESM) has great potential to facilitate and enhance digital learning within organizations. Through ESM platforms, employees can engage in various learning activities that support the continuous development of their skills and knowledge. Anders (2016) found that ESM can serve as an effective informal learning platform, where employees can share knowledge, collaborate on projects, and learn from the experiences of their colleagues. This platform enables the exchange of ideas and best practices in real-time, which is crucial in a rapidly changing business environment. Oostervink et al. (2016) show that ESM can help overcome institutional complexities in knowledge sharing, allowing for freer knowledge flow and more effective learning. Ellison et al. (2015) emphasize the role of ESM in supporting organizational learning, with increased visibility of communication through ESM enabling employees to learn by seeing, observing the interactions and work practices of their peers, which supports learning and skill development. By facilitating access to learning resources, encouraging collaboration, and providing a platform for knowledge sharing, ESM can significantly enhance digital learning processes and outcomes within organizations.

H2: Enterprise social media affects digital learning.

Enterprise Social Media (ESM) has the potential to significantly enhance organizational support by creating a more connected, transparent, and collaborative work environment. Organizational support refers to the extent to which employees feel that their organization values their contributions and cares about their well-being. Treem & Leonardi (2013) found that ESM can increase the visibility of information and interactions within the organization, making it easier for employees to access the resources and support they need and enhancing their perception of organizational

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support. Madsen (2017) revealed that the use of ESM can facilitate two-way communication between management and employees, allowing employees to voice their opinions, provide feedback, and engage in dialogue with management, which enhances their perception of organizational support. Van Zoonen et al. (2017) found that ESM can help build and maintain social relationships in the workplace, increasing employees' sense of belonging and their perception of support from colleagues and the organization as a whole. By enhancing transparency, facilitating two-way communication, and supporting social relationships in the workplace, ESM can significantly contribute to improving employees' perceptions of organizational support.

H3: Enterprise social media affects organizational support.

Digital learning has great potential to enhance workforce agility in a rapidly changing business environment. Digital learning refers to the use of digital technology to facilitate and enhance the learning process, including e-learning, mobile learning, and various other forms of technology-based learning. Sousa & Rocha (2019) revealed that digital learning can facilitate the development of skills necessary for Industry 4.0, such as digital literacy, complex problem-solving, and creativity. Joo et al. (2017) found that digital learning can enhance employees' self-efficacy and their ability to manage change, providing access to flexible and personalized learning opportunities, increasing employees' confidence in facing new challenges and adapting to change. By facilitating the development of relevant skills, enhancing flexibility in learning, and encouraging adaptability, digital learning can significantly contribute to improving workforce agility within organizations.

H4: Digital learning affects workforce agility.

Organizational support plays a crucial role in enhancing workforce agility. Organizational support refers to the extent to which employees feel that their organization values their contributions and cares about their well-being, encompassing managerial support, peer support, and the provision of necessary resources. Muduli (2017) found that organizational support is one of the key factors facilitating workforce agility, with employees who feel supported by their organization more likely to take risks, innovate, and adapt to changes. Cai et al. (2018) found that organizational support can enhance employee agility by improving psychological conditions such as feelings of empowerment and connectedness, which increase their ability to quickly adapt to changes. Alavi et al. (2014) found that organizational support can facilitate employee learning and skill development, with organizations that provide support for employee learning and development more likely to have agile and adaptive workforces. By increasing employee motivation, facilitating risk-taking and innovation, and supporting learning and development, organizational support can significantly contribute to enhancing workforce agility within an organization.

H5: Organizational support affects workforce agility.

ESM enhances workforce agility not only directly but also through the improvement of digital learning within the organization. Qi & Chau (2018) found that ESM can facilitate knowledge management and organizational learning, with ESM platforms providing a supportive environment for knowledge sharing and collaborative learning, which enhances workforce agility. Anders (2016) found that ESM can serve as an effective informal learning platform, with employees using ESM to access information, collaborate on projects, and learn from their colleagues' experiences. Ellison et al. (2015) found that increased communication visibility through ESM allows employees to "learn by seeing," observing and learning from their peers' work practices, which enhances their ability to quickly adapt to changes. By facilitating digital learning through knowledge sharing, collaboration, and increased communication visibility, ESM can enhance workforce agility.

H6: Enterprise social media affects workforce agility mediated by digital learning.

ESM enhances workforce agility not only directly but also through the enhancement of employees' perceived organizational support. Treem and Leonardi (2013) found that ESM can increase the visibility of information and interactions within the organization, helping employees feel more connected to the organization and more supported in their work, which enhances their agility. Madsen (2017) found that the use of ESM can facilitate two-way communication between management and employees, with ESM platforms allowing employees to voice their opinions, provide feedback, and engage in dialogue with management, which enhances employees' perceptions of organizational support. Van Zoonen et al. (2017) found that ESM can help build and maintain social relationships in

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the workplace, increasing employees' sense of belonging and their perception of support from colleagues and the organization as a whole. By increasing the visibility of information, facilitating two-way communication, and supporting social relationships in the workplace, ESM can enhance employees' perceptions of organizational support, which enhances workforce agility.

H7: Enterprise social media affects workforce agility mediated by organizational support.

RESEARCH METHODOLOGY

This study employs a quantitative approach with a cross-sectional survey design to investigate the influence of Enterprise Social Media on Workforce Agility mediated by Digital Learning and Organizational Support. The study population includes all employees working in manufacturing companies in the West Java region, Indonesia. The sample size was determined using Hair et al.'s formula, which is the number of indicators multiplied by 5-10. With a total of 12 indicators from four main constructs (Enterprise Social Media, Workforce Agility, Digital Learning, and Organizational Support), the targeted sample size is 108 respondents (12 indicators x 9). The sampling technique used is purposive sampling, with the criteria for respondents being employees who have worked for at least one year in manufacturing companies in West Java and actively use Enterprise Social Media platforms in their work. Data were collected through online questionnaires using Google Forms. The questionnaire consists of two parts: the first part covers respondents' demographic information, while the second part includes measurement items for each construct. All items were measured using a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The research instrument was developed based on previously validated studies. The Enterprise Social Media construct was measured using three dimensions: Communication, Collaboration, and Knowledge Sharing, adapting items from Leonardi et al. (2013), Sun & Shang (2014), Kwahk & Park (2016), and Nisar et al. (2019). Workforce Agility was measured through three dimensions: Proactive, Adaptive, and Resilience, with items adapted from Muduli (2016), Sherehiy & Karwowski (2014), and Qin & Nembhard (2015). Digital Learning was measured using three dimensions: Access to Learning Resources, Collaborative Learning, and Engagement in Learning, adapting items from Sousa & Rocha (2019). Finally, Organizational Support was measured through three dimensions: Managerial Support, Organizational Justice, and Organizational Rewards, with items adapted from Riggle et al. (2009), Vardaman et al. (2016), and Eisenberger et al. (1986). Before the main data collection, a pilot test was conducted with 30 respondents to test the validity and reliability of the instrument. The pilot test results were used to refine the questionnaire before being distributed to a larger sample. Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) with the help of SmartPLS software. The choice of PLS-SEM was based on its ability to handle complex models with relatively small sample sizes and not requiring multivariate normal distribution assumptions. Data analysis includes two stages: evaluation of the measurement model (outer model) and evaluation of the structural model (inner model). In the evaluation of the measurement model, tests for convergent validity (through factor loadings and Average Variance Extracted/AVE), discriminant validity (through cross-loadings and Fornell-Larcker criteria), and reliability (through Cronbach's Alpha and Composite Reliability) were conducted. In the evaluation of the structural model, tests for coefficient of determination (R^2), predictive relevance (Q^2), effect size (f^2), and significance and relevance of path coefficients through bootstrapping procedures were conducted. To test the mediation effects of Digital Learning and Organizational Support, a bootstrapping approach with procedures recommended by Hair et al. (2017) was used. Additionally, a multi-group analysis (MGA) was conducted to investigate whether there are significant differences in the relationships between variables based on respondents' demographic characteristics. This research methodology is designed to ensure the rigor and reliability of the study results and provide comprehensive insights into the role of Enterprise Social Media in enhancing Workforce Agility, considering the mediation effects of Digital Learning and Organizational Support in the context of the manufacturing industry in West Java, Indonesia.

RESULTS AND DISCUSSION

Profil Respondent

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Table 1. Respondent Profile

Characteristics of Respondents		Person	Percentage
Gender	Male	39	36%
	Female	69	64%
	Total	**108**	**100%**
Aged	Aged < 25	67	62%
	25-34 years	25	23%
	35-44 years	5	5%
	45-54 years	9	8%
	> 55 years old	2	2%
	Total	**108**	**100%**
Level of Education	High School/Vocational School or equivalent	75	69%
	Diploma	1	1%
	Bachelor (S1)	28	26%
	Pascasarjana (S2/S3)	4	4%
	Total	**108**	100%
Length of Service at the Company	< 1 years	17	16%
	1-3 years	38	35%
	4-6 years	31	29%
	7-10 years	8	7%
	> 10 years	14	13%
	Total	**108**	**100%**
Department	Production Department	60	55%
	Marketing Department	9	8%
	Department of Finance	5	5%
	Department of Human Resources	5	5%
	Other	29	27%
	Total	**108**	**100%**
Position	Staff	97	90%
	Supervisor	3	3%
	Manager	8	7%
	Total	**108**	**100%**
Frequency of Enterprise Social Media Use in Work	Never	23	21%
	Rarely (1-2 Times Per Week)	30	28%
	Sometimes (3-4 Times Per Week)	28	26%
	Often (5-6 Times Per Week)	10	9%
	Always (Every Day)	17	16%
	Total	**108**	**100%**
Participation in Digital Learning Programs	Never	22	20%
	Rarely (1-2 times per year)	38	35%
	Sometimes (3-4 times per year)	31	29%
	Often (5-6 times per year)	12	11%
	Always (>6 times per year)	5	5%
	Total	**108**	**100%**
Perception of Organizational Support in the Use of Enterprise Social Media and Digital Learning	Very Low	8	7%
	Low	11	10%
	Medium	61	56%
	High	24	23%

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	Very High	4	4%
	Total	**108**	**100%**
Industrial Area	MM2100 Industrial Town	27	25%
	Jababeka Industrial Estate	19	18%
	East Jakarta Industrial Park (EJIP)	22	20%
	Greenland International Industrial Center (GIIC)	3	3%
	Karawang International Industrial City (KIIC)	1	1%
	Other	36	33%
	Total	**108**	**100%**

Source: Output SmartPLS 3 (2024)

Table 1 presents a comprehensive profile of the 108 respondents in the study. The majority of participants were female (64%), under 25 years old (62%), and had a high school or vocational school education (69%). Most respondents were staff-level employees (90%) with 1-3 years of service (35%), primarily working in the production department (55%). Regarding enterprise social media usage, the frequencies were distributed fairly evenly, with "rarely" (28%) and "sometimes" (26%) being the most common. Participation in digital learning programs was predominantly "rarely" (35%) or "sometimes" (29%). The perception of organizational support for enterprise social media and digital learning was mainly "medium" (56%). Respondents were from various industrial areas, with MM2100 Industrial Town (25%) and East Jakarta Industrial Park (20%) being the most represented. This profile provides a clear overview of the diverse characteristics of the study participants, offering context for the research on enterprise social media, digital learning, and workforce agility.

Validity and Reliability Test

Table 2. Validity Test Results

	Cronbach's Alpha	**rho_A**	**Composite Reliability**	**Average Variance Extracted (AVE)**
Digital Learning	0,929	0,931	0,945	0,741
Entreprise Social Media	0,929	0,932	0,944	0,739
Organizational Support	0,937	0,946	0,950	0,762
Workforce Agility	0,891	0,893	0,917	0,649

Source: Output SmartPLS 3 (2024)

Table 2 presents the validity and reliability test results for the study's key constructs. All four variables - Digital Learning, Enterprise Social Media, Organizational Support, and Workforce Agility - demonstrate excellent internal consistency and reliability. The Cronbach's Alpha values range from 0.891 to 0.937, well above the acceptable threshold of 0.7. Composite Reliability scores are even higher, ranging from 0.917 to 0.950, indicating strong internal consistency. The rho_A values, which provide a more accurate reliability estimate, are also high (0.893 to 0.946). Importantly, the Average Variance Extracted (AVE) for all constructs exceeds 0.5, with values ranging from 0.649 to 0.762, suggesting good convergent validity. These results collectively indicate that the measurement model is robust and reliable, providing a solid foundation for further analysis in the study of enterprise social media's impact on workforce agility.

Coefficient of Determination Test

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Table 3. Determination Coefficient Test Results

	R Square	R Square Adjusted
Digital Learning	0,443	0,437
Organizational Support	0,245	0,238
Workforce Agility	0,505	0,491

Source: Output SmartPLS 3 (2024)

Table 3 presents the results of the Coefficient of Determination test, which measures the predictive power of the model. The R Square values indicate the proportion of variance in the dependent variables that can be explained by the independent variables. For Digital Learning, the R Square value of 0.443 (adjusted R Square 0.437) suggests that approximately 44.3% of its variance is explained by the model. Organizational Support has a lower R Square value of 0.245 (adjusted 0.238), indicating that about 24.5% of its variance is accounted for. Notably, Workforce Agility shows the highest R Square value of 0.505 (adjusted 0.491), meaning that 50.5% of its variance is explained by the predictors in the model. These results suggest that the model has moderate to strong explanatory power, particularly for Workforce Agility, while also indicating that there may be other factors not included in the model that contribute to the variance in these variables.

Path Coefficient Test

Table 4. Path Coefficient Test Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
DL-> WA	0,176	0,176	0,116	1,518	0,130
ESM -> DL	0,665	0,675	0,078	8,518	0,000
ESM -> OS	0,495	0,498	0,088	5,632	0,000
ESM -> WA	0,403	0,401	0,105	3,849	0,000
OS -> WA	0,254	0,261	0,090	2,829	0,005

Source: Output SmartPLS 3 (2024)

Table 4 presents the Path Coefficient Test results, which illustrate the strength and significance of relationships between variables in the model. Enterprise Social Media shows significant positive effects on Digital Learning ($\beta = 0.665$, $p < 0.001$), Organizational Support ($\beta = 0.495$, $p < 0.001$), and Workforce Agility ($\beta = 0.403$, $p < 0.001$). Organizational Support also significantly influences Workforce Agility ($\beta = 0.254$, $p = 0.005$). However, the relationship between Digital Learning and Workforce Agility is not statistically significant ($\beta = 0.176$, $p = 0.130$). These results suggest that Enterprise Social Media plays a crucial role in enhancing Digital Learning, Organizational Support, and Workforce Agility directly. While Organizational Support contributes to Workforce Agility, the data does not support a significant direct effect of Digital Learning on Workforce Agility. These findings provide valuable insights into the complex relationships between these variables in the context of enterprise social media and workforce dynamics.

Indirect Specific Test

Table 5. Indirect Specific Test Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
ESM -> DL -> WA	0,117	0,121	0,084	1,395	0,164
ESM -> OS -> WA	0,126	0,129	0,051	2,453	0,015

Source: Output SmartPLS 3 (2024)

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Table 5 presents the results of the Indirect Specific Test, which examines the mediating effects in the model. The analysis reveals two potential indirect pathways from Enterprise Social Media to Workforce Agility. The first pathway, mediated by Digital Learning, shows a positive but non-significant effect (β = 0.117, p = 0.164). This suggests that while Enterprise Social Media may indirectly influence Workforce Agility through Digital Learning, this mediation effect is not statistically significant. In contrast, the second pathway, mediated by Organizational Support, demonstrates a significant positive indirect effect (β = 0.126, p = 0.015). This indicates that Enterprise Social Media significantly enhances Workforce Agility through the mediating role of Organizational Support. These findings highlight the complex nature of the relationships between these variables and suggest that while both Digital Learning and Organizational Support may play mediating roles, the support provided by the organization appears to be a more critical factor in translating the benefits of Enterprise Social Media into improved Workforce Agility.

DISCUSSION

The Relationship Between Enterprise Social Media and Workforce Agility

This study reveals that Enterprise Social Media (ESM) significantly influences Workforce Agility. The findings indicate that the use of ESM within organizations has a positive impact on enhancing workforce agility. This is relevant to the profile of the study respondents, where the majority (51%) of employees use ESM at least 3-4 times a week or more frequently in their work. This high level of usage indicates that ESM has become an integral part of work routines in manufacturing companies in West Java. The positive influence of ESM on Workforce Agility can be explained through three main dimensions measured in this study: communication, collaboration, and knowledge sharing. Leonardi et al. (2013) assert that ESM facilitates more effective and transparent communication within organizations, allowing employees to quickly access the information and resources they need. This is particularly important for the study's respondent profile, where 90% are staff-level employees who require quick access to information to improve their performance. Additionally, the enhanced collaboration aspect through ESM contributes to increased Workforce Agility. Kwahk & Park (2016) found that the ESM environment encourages knowledge-sharing activities and improves job performance. In the context of this study, where 55% of respondents are from the production department, the ability to collaborate and share knowledge efficiently is crucial in facing dynamic manufacturing challenges. The study's findings also align with Cai et al. (2018), who show that ESM can enhance employee agility by improving their psychological conditions. In this study, 83% of respondents stated that their perception of organizational support in using ESM and digital learning is at a medium to very high level. This indicates that the organization has created a supportive environment for utilizing ESM, which in turn contributes to increased Workforce Agility. The practical implication of these findings is that manufacturing companies in West Java need to continue encouraging and optimizing the use of ESM among their employees. Considering that 21% of respondents reported never using ESM in their work, there is significant potential to increase ESM adoption. Companies can achieve this through more intensive training and creating a culture that encourages the use of ESM as a tool to enhance workforce agility. Furthermore, given that 69% of respondents have a high school or equivalent educational background, companies need to ensure that the ESM platforms used are intuitive and easily accessible to all employee levels. This will ensure that the benefits of ESM in enhancing Workforce Agility are felt uniformly throughout the organization.

The Relationship Between ESM and Digital Learning

The study results show that Enterprise Social Media (ESM) significantly influences Digital Learning. These findings confirm that the use of ESM within organizations can positively contribute to the enhancement of digital learning among employees. This aligns with the characteristics of the study respondents, where 51% of employees use ESM at least 3-4 times a week or more frequently in their work, indicating a high level of adoption of this digital platform. Anders (2016) asserts that ESM can serve as an effective informal learning platform, allowing employees to share knowledge and learn from their colleagues' experiences. In the context of this study, where 69% of respondents have a high school or equivalent educational background, ESM becomes a highly valuable tool for facilitating continuous learning and skill development in the workplace. Additionally, Qi & Chau (2018) found that ESM can facilitate knowledge management and organizational learning, which is highly relevant to the respondent profile of this study, where 55% are from the production department. These findings are also consistent with the study by Ellison et al. (2015), which shows that increased communication visibility through ESM allows employees to learn by seeing. This

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is important considering that 64% of respondents are women and 62% are under the age of 25, a demographic group that tends to be more comfortable with technology-based learning and social learning. However, despite the positive influence of ESM on Digital Learning, 20% of respondents reported never participating in digital learning programs, and another 35% participated only 1-2 times per year. This indicates a gap between the potential of ESM to support digital learning and its realization in organizational practice. The practical implication of these findings is that manufacturing companies in West Java need to integrate ESM more effectively into their digital learning strategies. This can be done by designing training programs that leverage ESM features, encouraging the formation of online learning communities, and using ESM to disseminate digital learning materials. Given that 90% of respondents are staff-level employees, companies need to ensure that the digital learning content provided through ESM is relevant to daily job needs. Lastly, with 83% of respondents stating that their perception of organizational support in using ESM and digital learning is at a medium to very high level, companies have a strong foundation to further optimize the use of ESM in supporting Digital Learning.

The Relationship Between ESM and Organizational Support

The study results indicate that Enterprise Social Media (ESM) significantly influences Organizational Support. These findings confirm that the use of ESM within organizations can enhance employees' perceptions of organizational support. This is reflected in the respondent profile, where 83% stated that their perception of organizational support in using ESM and digital learning is at a medium to very high level. Treem & Leonardi (2013) show that ESM can increase the visibility of information and interactions within the organization, helping employees feel more connected to the organization and more supported in their work. In this study, where 90% of respondents are staff-level employees, this increased visibility can help employees feel more connected to the organization and more supported in their work. Furthermore, Madsen (2017) shows that the use of ESM can facilitate two-way communication between management and employees. With 55% of respondents from the production department, the ability to communicate effectively with management through ESM can enhance perceptions of organizational support. These findings are also consistent with the study by Van Zoonen et al. (2017), which shows that ESM can help build and maintain social relationships in the workplace. Although ESM positively influences Organizational Support, 21% of respondents reported never using ESM in their work. This indicates untapped potential to enhance perceptions of organizational support through broader ESM use. The practical implication of these findings is that manufacturing companies in West Java need to optimize the use of ESM as a tool to enhance perceptions of organizational support. This can be achieved by encouraging active management participation in the ESM platform, using ESM to communicate organizational policies and initiatives that support employees, and leveraging ESM to recognize and reward employee contributions. Given that 69% of respondents have a high school or equivalent educational background, companies need to ensure that ESM usage to convey organizational support is done inclusively and is easily understood by all educational levels. Lastly, with 35% of respondents having a tenure of 1-3 years, companies can use ESM to build a sense of belonging and organizational support from the early stages of employees' careers.

The Relationship Between Digital Learning and Workforce Agility

The research findings indicate that Digital Learning does not have a significant impact on Workforce Agility. This suggests that, despite the efforts to implement digital learning, it has not made a meaningful contribution to enhancing workforce agility within the studied organizations. This is noteworthy given that 45% of respondents reported participating in digital learning programs at least 3-4 times a year or more frequently. These findings contrast with Sousa & Rocha (2019), who state that digital learning plays a crucial role in developing the skills needed for an organization's digital transformation. In the context of this study, where 55% of respondents are from the production department and 62% are under 25 years old, there appears to be a gap between the potential of digital learning and its realized benefits in enhancing workforce agility. However, the findings of this study indicate that other factors may hinder the transformation of digital learning into increased workforce agility. Several factors that might contribute to this outcome can be seen from the respondents' profiles. With 69% of respondents having a high school or equivalent educational background, there may be difficulties in applying digital learning to more complex job contexts. Furthermore, 20% of respondents reported never participating in digital learning programs, indicating a gap in access or interest in digital learning initiatives. The practical implication of these findings is that manufacturing companies in West Java need to reassess their digital learning strategies. Given that 35% of

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respondents have a tenure of 1-3 years, companies can focus on integrating digital learning into early employee development programs, emphasizing how such learning can enhance agility in specific job contexts.

The Relationship Between Organizational Support and Workforce Agility

The research findings show that Organizational Support significantly influences Workforce Agility. This indicates that organizational support positively contributes to enhancing workforce agility within the organization. This is evident from the respondent profile, where 83% stated that their perception of organizational support in using Enterprise Social Media and digital learning is at a medium to very high level, indicating a supportive organizational climate. Muduli (2017) states that organizational support is a key factor facilitating workforce agility. In the context of this study, where 55% of respondents are from the production department, organizational support is crucial in helping employees adapt to rapid technological and process changes. This is especially relevant given that 62% of respondents are under 25 years old, a generation that needs support to develop skills and confidence in a dynamic work environment. Furthermore, Alavi et al. (2014) show that organizational support can facilitate employee learning and skill development, which are key components of workforce agility. In this study, with 90% of respondents being staff-level employees, organizational support in the form of development and learning opportunities can significantly enhance their ability to adapt to changes. These findings are also consistent with Cai et al. (2018), who show that organizational support can enhance employee agility by improving their psychological conditions. Given that 64% of respondents are women, organizational support can play an important role in creating an inclusive and supportive work environment, which in turn can enhance workforce agility. Interestingly, despite the positive influence of Organizational Support on Workforce Agility, 17% of respondents still perceive organizational support to be at a low or very low level. This indicates room for improvement in how organizations communicate and deliver support to employees. The practical implication of these findings is that manufacturing companies in West Java need to prioritize developing comprehensive organizational support strategies. This can include mentoring programs, clear career development opportunities, and effective feedback systems to help employees identify their development areas. Additionally, given that 69% of respondents have a high school or equivalent educational background, companies need to ensure that organizational support is delivered inclusively, considering the needs and aspirations of employees from diverse educational backgrounds. This can include tailored training programs and flexible career paths. Lastly, with 35% of respondents having a tenure of 1-3 years, companies can focus on providing strong support during the early years of employees' careers. Comprehensive onboarding programs, mentoring, and early development opportunities can help build a strong foundation for long-term workforce agility.

The Relationship Between ESM and Workforce Agility Mediated by Digital Learning

The research findings indicate that Digital Learning does not mediate the relationship between Enterprise Social Media (ESM) and Workforce Agility. This suggests that, although ESM has the potential to enhance workforce agility, the role of digital learning as an intermediary in this relationship is not significant. This is noteworthy, given that 51% of respondents use ESM at least 3-4 times a week or more frequently, yet only 45% participate in digital learning programs with similar frequency. These findings contrast with Qi & Chau (2018), who state that ESM can facilitate knowledge management and organizational learning. In the context of this study, where 55% of respondents are from the production department and 62% are under 25 years old, there appears to be a gap between the use of ESM and its utilization for effective digital learning in enhancing workforce agility. Anders (2016) states that ESM can serve as an effective informal learning platform. However, in this study, with 90% of respondents being staff-level employees, there may be barriers to translating social interactions and knowledge sharing through ESM into structured digital learning that contributes to increased agility. Furthermore, Ellison et al. (2015) show that increased communication visibility through ESM allows employees to learn by seeing. However, the findings of this study indicate that other factors may hinder the transformation of observation and social interaction through ESM into effective digital learning and increased workforce agility. Several factors that might contribute to this outcome can be seen from the respondents' profiles. With 69% of respondents having a high school or equivalent educational background, there may be difficulties in integrating the use of ESM with more formal and structured digital learning. Additionally, 20% of respondents reported never participating in digital learning programs, indicating a gap between the use of ESM and engagement in digital learning initiatives. The practical implication of these findings is that manufacturing companies in West Java need to reassess their strategies for integrating ESM and digital learning. Given that 35% of

respondents have a tenure of 1-3 years, companies can focus on integrating ESM and digital learning into early employee development programs, emphasizing how these elements can synergize to enhance agility in specific job contexts.

The Relationship Between ESM and Workforce Agility Mediated by Organizational Support

The research findings indicate that Organizational Support successfully mediates the relationship between Enterprise Social Media (ESM) and Workforce Agility. This suggests that organizational support plays a crucial role in transforming the use of ESM into enhanced workforce agility. This is reflected in the respondent profile, where 83% stated that their perception of organizational support in using ESM is at a medium to very high level, while 51% use ESM at least 3-4 times a week or more frequently. These findings align with Treem & Leonardi (2013), who show that ESM can increase the visibility of information and interactions within the organization. In the context of this study, where 55% of respondents are from the production department and 90% are staff-level employees, organizational support in using ESM seems to facilitate better access to information and resources, which in turn enhances workforce agility. Furthermore, Cai et al. (2018) reveal that organizational support can enhance employee agility by improving their psychological conditions. In this study, with 62% of respondents under 25 years old, organizational support in using ESM might help create a more connected and collaborative work environment, encouraging young employees to be more adaptive and responsive to changes. Additionally, Van Zoonen et al. (2017) show that ESM can help build and maintain social relationships in the workplace. This study's findings confirm that organizational support in using ESM can amplify the positive effects of these social relationships on workforce agility. This is particularly relevant given that 64% of respondents are women, who may value the social and collaborative aspects of ESM more. The practical implication of these findings is that manufacturing companies in West Java need to focus on optimizing organizational support in using ESM to enhance workforce agility. By focusing on organizational support in using ESM, companies can create a conducive environment for increasing workforce agility, enabling them to be more responsive to changes in the dynamic manufacturing industry.

CONCLUSION, LIMITATION AND FUTURE RESEARCH

This study highlights the crucial role of Enterprise Social Media (ESM) in enhancing Workforce Agility in manufacturing companies in West Java. The main findings indicate that ESM has a significantly positive influence on workforce agility, with Organizational Support acting as an effective mediator in this relationship. However, contrary to expectations, Digital Learning did not significantly mediate the relationship between ESM and Workforce Agility. The respondent profile, dominated by young and staff-level employees, as well as a relatively high adoption of ESM, suggests substantial potential for developing workforce agility through this platform. These findings underscore the importance of organizational support in optimizing the use of ESM to enhance employees' adaptability and responsiveness to changes in the manufacturing industry. However, this study has several limitations that should be considered. The focus on manufacturing companies in West Java limits the generalizability of the findings to other sectors or regions. The use of a cross-sectional method also limits the ability to see the long-term impacts and developments of the relationships between variables over time. Additionally, this study did not consider external factors such as technological changes or market conditions that might affect workforce agility. Based on these findings and limitations, several recommendations for future research can be proposed. First, conducting longitudinal studies to understand the long-term impacts of ESM on Workforce Agility. Second, expanding the scope of research to other industrial sectors or different geographical areas to improve the generalizability of the findings. Third, further investigating why Digital Learning did not act as a significant mediator, including exploring factors that might inhibit its effectiveness. Fourth, integrating additional variables such as organizational culture or individual characteristics that might influence the relationship between ESM and Workforce Agility. Lastly, using mixed-method research to gain a deeper understanding of the mechanisms behind the relationships between variables. By considering these recommendations, future research can enrich the understanding of the role of ESM in enhancing workforce agility and provide more comprehensive insights for management practices in the digital era.

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REFERENCES

[1] Alavi, S., Abd. Wahab, D., Muhamad, N., & Arbab Shirani, B. (2014). Organic structure and organisational learning as the main antecedents of workforce agility. *International Journal of Production Research*, *52*(21), 6273–6295.

[2] Anders, A. (2016). Team Communication Platforms and Emergent Social Collaboration Practices. *International Journal of Business Communication*, *53*(2), 224–261. https://doi.org/10.1177/2329488415627273

[3] Asmara, A. Y., & Rahayu, S. (2013). Meningkatkan daya saing industri kecil menengah melalui inovasi dan pemanfaatan jaringan sosial: pembelajaran dari klaster industri software di India. *Proceeding of International Conference Sustainable Competitive Advantage*, *3*(1).

[4] Cai, Z., Huang, Q., Liu, H., & Wang, X. (2018). Improving the agility of employees through enterprise social media: The mediating role of psychological conditions. *International Journal of Information Management*, *38*(1), 52–63.

[5] Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, *71*(3), 500.

[6] Ellison, N. B., Gibbs, J. L., & Weber, M. S. (2015). The use of enterprise social network sites for knowledge sharing in distributed organizations: The role of organizational affordances. *American Behavioral Scientist*, *59*(1), 103–123.

[7] Gunasekaran, A., Yusuf, Y. Y., Adeleye, E. O., & Papadopoulos, T. (2018). Agile manufacturing practices: the role of big data and business analytics with multiple case studies. *International Journal of Production Research*, *56*(1–2), 385–397.

[8] Hair, J., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). SAGE Publications.

[9] Joo, Y. J., Lim, K. Y., & Kim, N. H. (2017). The effects of secondary teachers' technostress on the intention to use technology in South Korea. *Computers & Education*, *95*, 114–122.

[10] Khatri, N., Baveja, A., Agrawal, N. M., & Brown, G. D. (2010). HR and IT capabilities and complementarities in knowledge-intensive services. *The International Journal of Human Resource Management*, *21*(15), 2889–2909.

[11] Kwahk, K.-Y., & Park, D.-H. (2016). The effects of network sharing on knowledge-sharing activities and job performance in enterprise social media environments. *Computers in Human Behavior*, *55*, 826–839.

[12] Leonardi, P. M., Huysman, M., & Steinfield, C. (2013). Enterprise social media: Definition, history, and prospects for the study of social technologies in organizations. *Journal of Computer-Mediated Communication*, *19*(1), 1–19.

[13] Madsen, V. T. (2017). The challenges of introducing internal social media–the coordinators' roles and perceptions. *Journal of Communication Management*, *21*(1), 2–16.

[14] Muduli, A. (2016). Exploring the facilitators and mediators of workforce agility: an empirical study. *Management Research Review*.

[15] Muduli, A. (2017). Workforce agility: Examining the role of organizational practices and psychological empowerment. *Global Business and Organizational Excellence*, *36*(5), 46–56.

[16] Naim, M. F., & Lenka, U. (2017). The impact of social media and collaboration on Gen Y employees' engagement. *International Journal of Development Issues*, *16*(3), 289–299.

[17] Nisar, T. M., Prabhakar, G., & Strakova, L. (2019). Social media information benefits, knowledge management and smart organizations. *Journal of Business Research*, *94*, 264–272.

[18] Oostervink, N., Agterberg, M., & Huysman, M. (2016). Knowledge sharing on enterprise social media: Practices to cope with institutional complexity. *Journal of Computer-Mediated Communication*, *21*(2), 156–176.

Research Article

[19] Qi, C., & Chau, P. Y. K. (2016). *An empirical study of the effect of enterprise social media usage on organizational learning*.
[20] Qin, R., & Nembhard, D. A. (2015). Workforce agility in operations management. *Surveys in Operations Research and Management Science*, *20*(2), 55–69.
[21] Razmerita, L., Kirchner, K., & Nabeth, T. (2014). Social media in organizations: leveraging personal and collective knowledge processes. *Journal of Organizational Computing and Electronic Commerce*, *24*(1), 74–93.
[22] Riggle, R. J., Edmondson, D. R., & Hansen, J. D. (2009). A meta-analysis of the relationship between perceived organizational support and job outcomes: 20 years of research. *Journal of Business Research*, *62*(10), 1027–1030.
[23] Sherehiy, B., & Karwowski, W. (2014). The relationship between work organization and workforce agility in small manufacturing enterprises. *International Journal of Industrial Ergonomics*, *44*(3), 466–473.
[24] Sherehiy, B., Karwowski, W., & Layer, J. K. (2007). A review of enterprise agility: Concepts, frameworks, and attributes. *International Journal of Industrial Ergonomics*, *37*(5), 445–460.
[25] Sousa, M. J., & Rocha, Á. (2019). Digital learning: Developing skills for digital transformation of organizations. *Future Generation Computer Systems*, *91*, 327–334.
[26] Sun, Y., & Shang, R.-A. (2014). The interplay between users' intraorganizational social media use and social capital. *Computers in Human Behavior*, *37*, 334–341.
[27] Tambunan, T. (2019). Recent evidence of the development of micro, small and medium enterprises in Indonesia. *Journal of Global Entrepreneurship Research*, *9*(1), 18.
[28] Treem, J. W., & Leonardi, P. M. (2013). Social media use in organizations: Exploring the affordances of visibility, editability, persistence, and association. *Annals of the International Communication Association*, *36*(1), 143–189.
[29] Van Zoonen, W., Verhoeven, J. W. M., & Vliegenthart, R. (2017). Understanding the consequences of public social media use for work. *European Management Journal*, *35*(5), 595–605.
[30] Vardaman, J. M., Allen, D. G., Otondo, R. F., Hancock, J. I., Shore, L. M., & Rogers, B. L. (2016). Social comparisons and organizational support: Implications for commitment and retention. *Human Relations*, *69*(7), 1483–1505.