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THE CRITICAL ROLE OF TECHNOLOGY ADOPTION AND COMPETENCY THROUGH IMPROVING TEAMWORK AND KNOWLEDGE TRANSFORMATION IN THE FURNITURE BUSINESS IN JEPARA

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Abstract: The Jepara furniture industry, facing global pressure and intense competition, must integrate technology and increase competence to maintain competitiveness. This article analyzes the critical role of technology adoption and competency development through improving teamwork and knowledge transformation in the context of the furniture business in Jepara. Using quantitative research methods and conducting surveys on furniture companies in Jepara, data was analyzed through questionnaires that focused on critical variables, such as technology adoption, teamwork, knowledge transformation, and business competency indicators. The research results show that technology adoption, improved teamwork, and knowledge transformation positively correlate with business competency. Technology integration provides operational efficiency, while improved teamwork and knowledge transformation improve employee skills and response to market dynamics. This article provides insight into the importance of this strategy in creating an efficient and responsive business model in the Jepara furniture industry. The practical implications include guidance for furniture business players to increase competitiveness through technology adoption, strong teamwork and effective knowledge management.

Keywords: technology adoption, competence, teamwork, knowledge transformation

INTRODUCTION

Advances in digital technology have triggered the transformation of the modern global economy. This technology has rapidly transformed the business world, increasing business efficiency and driving innovation in many areas. Industry 4.0 is one concept that plays a vital role in this change as it brings

innovations such as automation, the Internet of Things (IoT), Big Data, and cloud technology that fundamentally change the manufacturing process. The concept of Society 5.0 reflects significant societal changes and marks an era where technology increasingly permeates everyday life. The development of this technology has greatly influenced many aspects of life, including economics and business (Hendarsyah, 2019). However, the dramatic changes in business triggered by digital transformation also bring significant challenges. Companies must adopt innovative technologies and business models that enable them to remain competitive in an increasingly changing marketplace.

The technology adoption, primarily Industry 4.0, can increase operational efficiency and company competitiveness. However, the successful use of technology does not only depend on the implementation of automation systems. Instead, the abilities and qualities of employees are critical. Therefore, to gain a competitive advantage, businesses must create digital business strategies that involve specialized approaches and new business models (Wijaya et al., 2022).

This research involves aspects of digital business strategy, relevance to Sustainable Development Goals (SDGs), and adaptation to technological developments. Proper use of technology can increase individual and organizational productivity. The ability to complete tasks faster and more efficiently allows individuals to increase their work efficiency (Mercader et al., 2021).

When individuals adopt new technology, they must learn new skills related to the use of that technology. This learning process can improve individual technical skills competency. Technology adoption often involves solving technology-related problems and allows individuals to develop digital competencies, which include an understanding of various digital tools and platforms. Organizations that are able to adopt and integrate new technology well can achieve a competitive advantage. This impacts the overall competency of the organization in a competitive market.

In many literatures, other factors influence competence, such as teamwork (Wang et al., 2022); collaboration in teams allows team members to learn from each other, increase understanding of different tasks, and develop communication and adaptability. Knowledge transformation can also affect competence (Norris & Lefrere, 2011) because transformation is the process of turning knowledge into more profound understanding, action change, or innovation. This process allows individuals to optimize existing knowledge and better address problems.

Effective teamwork can speed up the technology adoption process. In collaborative teams, team members can share knowledge about new technologies, discuss their benefits, and support each other in adopting the technology. Therefore, teamwork influences technology adoption by helping individuals feel more comfortable and confident in taking steps towards integrating new technology and ultimately influencing competence (Salman & Hassan, 2016).

When looking at the furniture business in Jepara, this challenge becomes increasingly relevant, and in the face of rapid technological change, developing employee competencies, primarily through increased teamwork and knowledge transformation, becomes critical to ensuring business continuity and the ability to adapt successfully. This research aims to study how technology adoption and employee competency development, mainly through teamwork and knowledge transformation, are essential to ensure business sustainability and the ability to adapt successfully in the face of rapid technological change.

This research gap shows that there are inconsistencies between the results of previous research, especially from (Salman & Hassan, 2016), which states that positive teamwork is related to increased competence. On the other hand, research by (Wijaya et al., 2022) also supports similar findings. However, there are contradictions with the research (Mercader et al., 2021), which shows that damaging teamwork can actually affect competence. In this study, researchers want to know if there is a connecting variable, namely technology adoption, whether it can bridge the relationship between teamwork and competence so that it can produce a significant relationship.

Seeing these differences in findings, this research aims to bridge this knowledge gap by integrating a connecting variable that has not been explored in depth, namely, technology adoption. This research seeks to understand the role of technology adoption in changing the

dynamics of the relationship between teamwork and employee competency levels. The primary research hypothesis is that technology adoption can function as an effective mediator that links the relationship between teamwork and competency.

METHODS

This quantitative research was conducted in Jepara District, Jepara Regency. The data used comes from primary sources collected through distributed questionnaires. To fulfill research variables, such as teamwork, knowledge transformation, technology adoption, and competence. Data collection was carried out through observations, interviews, and the distribution of questionnaires via Google Forms.

Furniture business owners received questionnaires via WhatsApp. Items in the questionnaire are measured using a Likert scale. This research involved all furniture business owners located in Jepara District and Jepara Regency, and the sample consisted of 91 furniture businesses. The analytical method used is the Structural Equation Model (SEM) together with the Partial Least Square (PLS) application version 3.0.

LITERATURE REVIEW

Competence

Competency is the main foundation that every individual must have to carry out their work duties well. (Sutrisno, 2019) defines competency as the ability obtained through a combination of knowledge, skills and work attitudes applied in carrying out tasks and work in accordance with specified requirements. (Spencer & Spencer, 2006) places more emphasis on the characteristics that underlie an individual and contribute to work effectiveness in his or her job. Thus, competency is not only about technical knowledge and skills but also involves a positive work attitude.

According to (Rusvitawati, 2019), Overall, a comprehensive understanding of competency involves the integration of knowledge, skills, work attitudes, and essential behaviors that support a person's effectiveness in carrying out their duties. Competency is not only limited to knowledge and skills but also includes a number of essential behaviours required to carry out particular roles with satisfactory achievement or performance results.

In a broader context, competency has a strategic role in managing human resources, continuous learning, and achieving organizational success. Identifying, developing, and managing individual and group competencies is a critical practice for achieving organizational goals, maintaining competitiveness, and creating a productive and innovative work environment. Therefore, competency management is the key to ensuring that human resources can contribute optimally to organizational success.

Technology Adoption

Technology adoption is a crucial aspect in following the dynamics of changing times, both for organizations and individuals. According to (Sutjipto, 2020), technology adoption is not only the focus of research in management science and information technology but is also a phenomenon that involves the process of integrating new technology into the routines of individuals, groups, or organizations. Technology adoption has a significant role in facing change, increasing efficiency and strengthening operational effectiveness. The technology adoption process is influenced by a number of factors, including the characteristics of the technology itself, the characteristics of the individual or user, and the organizational context (Mangalaraj et al., 2009).

Highlights several vital factors that influence technology adoption, including the quality of technology that is easy to use and has apparent uses, social influence from peers or social groups, organizational support and training for users of new technology, and leadership and organizational culture that supports innovation. Overall, understanding these factors helps understand the complexity of technology adoption as a process involving interactions between technology, individuals, and organizational context.

Factors that influence the process of adopting technological innovation include interpersonal prejudice, views of limited conditions, attitudes towards authority, the individual's role in achieving goals, barriers to accepting innovation, and other psychological factors. (Levis, 1996; Schiffman & Kanuk, 2010). Moreover, (Soekartawi, 1998) emphasizes that innovation characteristics, adopter characteristics, and social norms also play an essential role in the innovation adoption process. Mardikanto, (2009) adding that the speed of technology adoption is influenced by factors such as the nature of the innovation, the characteristics of potential users, the adoption decision-making process, the communication medium, and the abilities of the instructor. Therefore, understanding these factors is critical to designing a successful technology adoption strategy.

Technology adoption involves the integration of new technology into the routines of individuals, groups, or organizations to meet needs and improve operational efficiency (He & Li, 2019). Competencies related to technology adoption include the ability to adapt and integrate new technology, especially in the context of E-Government (Penpokai et al., 2023). Organizational Transformation Theory (Badia Garganté, Meneses Naranjo, and Garcia Tamarit) emphasizes changes in an organization's culture, structure, processes, and strategy in response to environmental changes.

In the context of the furniture business in Jepara, organizational transformation can involve changes in production, the use of the latest technology, and more adaptive marketing strategies. The adoption of new technologies, such as 3D design software, efficient supply chain management and advanced production methods, can be a crucial aspect of transformation. Organizational Transformation Theory provides a relevant perspective in understanding how furniture business transformation in Jepara can increase individual competence and industrial success in a competitive global market.

H1: Technology adoption has a positive and significant effect on competence.

Teamwork

Teamwork is the main essence in various sectors of life, including the world of business, education, and other aspects. This concept reflects the ability of individuals to work together and share ideas, resources, and responsibilities to achieve common goals (Williams et al., 2020). Teamwork, essentially, is a collaboration between individuals or team members working together with a common goal. This process involves coordination, communication, and shared commitment to achieve desired results and can occur in various contexts, such as work teams at work, study groups at school, or project teams in various fields.

Teamwork is considered the most efficient way to unite employees to complete their work. Apart from that, it is known that teamwork dramatically influences the success of a company. According to (Lawasi & Triatmanto, 2017), teamwork within a company plays a crucial role in achieving organizational goals. The importance of teamwork is increasingly illustrated in this connected and collaborative era, where the ability to operate as part of an effective team is becoming a highly valued skill (Williams et al., 2020).

However, to work together well, it is essential to understand the components that support successful collaboration. Team success depends on effective leadership, clear definition of roles and responsibilities, trust, ability to resolve conflict, support between team members, balanced distribution of roles, recognition of strenuous efforts, and effective communication (Kesonen et al., 2022).

The positive impact of teamwork in organizations is very diverse and significant. Apart from increasing productivity through maximum use of resources and better operational efficiency, teamwork also sparks creativity and innovation by enabling the collaboration of new ideas. Furthermore, team collaboration builds trust and strong relationships, creates a positive work environment and motivates team members. Thus, the positive impacts of teamwork include increased productivity, innovation, trust, and a sense of involvement, all of which contribute to organizational success and growth (Leonard, 2013).

Teamwork is a crucial aspect in various aspects of life, such as the world of business, education and everyday life (Sultan & Chan, 2000). It reflects an individual's ability to work together, sharing ideas, resources, and responsibilities to achieve a common goal, whether at work, school or on a project. In business, teamwork is essential to achieve company goals. A work team consists of two or more individuals who complement each other and have an attitude of responsibility, intensive communication, responsiveness, and focus on tasks.

Diffusion Theory of Innovation by Everett M. Rogers (Corson, 2007) plays a vital role in understanding how individuals or groups receive innovations or new technologies. Knowledge, persuasion, decision, implementation, and confirmation are the five stages identified in adoption theory. Effective teamwork can speed up implementation and persuasion.

Team members who work together and support each other understand the benefits of new technology more quickly and are more confident in adopting it. In the context of furniture production and development in Jepara, teamwork between craftsmen, designers, and company management is critical. By working collaboratively, they more quickly understand the potential of new technologies, adopt them and implement them in the production process.

In Competency Development Theory (Marhayani, 2019), individual competence is the result of continuous learning and experience. Effective teamwork within an organization can be a key driver in developing individual competencies.

Effective teams create an environment where individuals can share knowledge, learn from each other, and develop their skills more quickly and effectively (Sudarmanto, 2015). In the context of the furniture industry in Jepara, where high competence is required in design, furniture manufacturing skills, project management and the use of the latest technology, teamwork is of crucial importance. In a furniture production team, craftspeople can collaborate, share knowledge, and leverage each other's experience to expand skills, overcome design and technical challenges, and apply new technologies in production.

Thus, Competency Development Theory provides a strong understanding of how collaboration within teams can be an essential catalyst in developing individual competencies in the furniture industry in Jepara. This can support quality improvement, furniture product innovation, and company competitiveness in the global market.

H2: Teamwork has a positive and significant effect on technology adoption.

H3: Teamwork has a positive and significant effect on competence.

Knowledge Transformation

The knowledge transformation process is a critical step in turning knowledge into more profound understanding, action change, or innovation. These stages include identification of relevant knowledge, collection, analysis, synthesis, and application of that knowledge in an appropriate context (Gabbay et al., 2020). Knowledge transformation enables individuals, organizations, or society to understand and utilize existing knowledge to solve problems, improve processes, or create added value. In an organizational context, knowledge transformation can contribute to competitive advantage by enabling innovation and better decision-making.

According to (Gabbay et al., 2020), the process of knowledge transformation significantly impacts organizations and everyday life. Individuals' ability to transform knowledge helps them develop more profound insights into the problems they face and formulate better solutions.

Knowledge transformation also plays a role in supporting individual development, helping them to continue learning and developing. In the era of abundant information, companies understand how to acquire, absorb, transfer and explore their business knowledge. Knowledge transformation is not only about the technology used but also sociocultural processes (Fischer et al., 2020).

Knowledge is considered a unique asset that is important for companies to update and modify this field (Côte-Real et al., 2020). Well-managed knowledge can provide competitiveness and accelerate the implementation of digital transformation (Mizintseva & Gerbina, 2018). In an organizational context, the role of knowledge transformation becomes increasingly important. Organizations that effectively carry out the knowledge transformation process can

utilize existing knowledge to create the innovations needed to compete in the market (Barinua, 2022).

They also have an advantage in decision-making because they have access to relevant knowledge and can apply it in various situations. Thus, organizations that invest resources in knowledge transformation processes tend to be more adaptive (Barinua, 2022), innovative, and able to maximize added value for their stakeholders. In conclusion, the knowledge transformation process is a strong foundation for creating more profound understanding, significant action changes, and crucial innovation at various levels, both individual, organizational, and societal.

According to (Schon, 2015), in Learning Organization Theory, understanding that organizations can actively transform and manage knowledge becomes critical. Organizations that are effective in learning are able to transform individual knowledge into knowledge that can be applied collectively (Schon, 2015). Support for effective knowledge transformation mechanisms can increase organizational readiness in adopting new technologies, especially in the context of digital transformation. A culture of learning and innovation is also vital in preparing organizations to integrate new technologies into their operations.

In the context of the furniture industry in Jepara, the concept of Learning Organization Theory is very relevant (Schon, 2015). The furniture industry in Jepara requires adaptation to new technology and changes in design and production processes. Learning organizations in the furniture industry can transform individual knowledge into knowledge that can be applied collectively.

By creating a learning culture that supports knowledge exchange, innovation and the application of the latest technology, furniture companies in Jepara will be better prepared to face technological challenges and increase their competitiveness in the global market. Thus, Learning Organization Theory provides a relevant framework in explaining how knowledge transformation at the organizational level can influence the ability of furniture companies in Jepara to face technological challenges and increase their competitiveness in the global market.

Organizational Development Theory (Mohr & Dichter, 2001) highlights the importance for organizations, especially the furniture industry in Jepara, to effectively manage and develop themselves to respond to environmental changes and remain relevant.

With a focus on improving quality, efficiency and innovation, furniture companies in Jepara adopt best practices, utilizing teamwork, collaboration and continuous learning. In this way, they successfully manage global and technological change, making organizational development key to maintaining the sustainability and competitiveness of the furniture industry at a global level.

H4: Knowledge transformation has a positive and significant effect on technology adoption.

H5: Knowledge transformation has a positive and significant effect on competence.

FINDING AND DISCUSSIONS

Respondent Identity

As shown in Table 1 below, gender and age are some of the factors associated with empirical data from respondents.

Table 1: Respondent Demographics

Information	Amount	%
Gender :		
a) Man	46	50.5%
b) Woman	45	49.5%
Age :		
a) < 30 years	12	13%
b) 30 – 40 years	38	42%
c) > 40 years	41	45%
Last education :		
a) elementary school	20	21.98%
b) Junior High School	47	51.65%
c) Senior High School	14	15.38%
d) S1	10	10.99%

Information	Amount	%
Furniture Experience		
a) < 3 years	11	12.09%
b) 3-5 years	25	27.47%
c) > 5 years	55	60.44%

The majority of this sample were men 50.5%, and most of them were over 40 years old. This is related to the cultural solid heritage factor in Jepara, where the traditions of carpenters and furniture craftsmen have become an inseparable element of people's lives. These skills were often passed from father to son, forming a legacy that remained in carpenter families. The average age of furniture craftsmen exceeds 40 years, reflecting an accumulated legacy of traditions, skills, and experience that took time to develop. A very complex profession, this shows that the majority of furniture owners or craftsmen have an educational background of at least junior high school, as many as 47 people. Only a few, namely ten people, continued their education to bachelor's level. This may be due to the increasing professional demands in this industry. The length of experience in the furniture industry also has a significant impact, so many furniture artisans have been active for more than five years. Other contributing factors include the stability of the job market in the furniture industry, professional self-esteem, the younger generation's lack of interest in maintaining these traditions, local economic conditions that influence career choices, and the challenges of adapting to modernization.

Results of Quantitative Analysis

SmartPLS requires that the data is valid and reliable, so in the initial stage, it evaluates the validity and reliability of each construct. This measurement can be seen in Table 2 which summarizes the loading factor, AVE, and CR criteria for each construct.

Table 2: Validity and reliability criteria for each construct

Variables	Indicator	Items	Loading factors*)	AVE**)	Composite reliability***)	Chronbach Alpha****)
Teamwork	Participative Leadership	TW1	0.782	0.664	0.908	0.874
	Responsibility	TW2	0.832			
	Goal Alignment	TW3	0.835			
	Intensive Communication	TW4	0.808			
	Talent Recruitment	TW5	0.815			
Knowledge Transformation	Socialization	TP1	0.783	0.624	0.892	0.848
	Representation	TP2	0.868			
	Connection	TP3	0.800			
	Justification	TP4	0.722			
	Internalisation	TP5	0.768			
Technology Adoption	Acceptance Rate	AT1	0.854	0.731	0.916	0.877
	Usage Rate	AT2	0.876			
	Adoption Speed	AT3	0.886			
	Dependency Level	AT4	0.800			
Competence	Knowledge (Knowledge)	KMP1	0.850	0.774	0.911	0.854
	Skills	KMP2	0.879			
	Attitude (Attitude)	KMP3	0.910			

*) Loading factor should be more than 0.7; **) AVE should be more than 0.5 ***) Composite reliability should be more than 0.7; ****) Chronbach Alpha should be more than 0.7.

The results of the convergent validity analysis through the average variance extracted (AVE) for each construct must be more than 0.70. At the same time, the AVE must exceed 0.50 because the sum of the squares of external loadings must be at least 50 per cent of the variable variance. Also, the Chronbach Alpha must exceed 0.70. Based on the analysis of Table 2, all items

meet the criteria generated using SmartPLS version 3.2.8 (Ringle et al., 2015). Next, test discriminant validity by assessing the heterotrait-monotrait correlation ratio (HTMT). One method to assess is through the heterotrait-monotrait correlation ratio (HTMT), as suggested by (Henseler et al., 2015). The resulting value should not exceed 0.85. As shown in Table 3.

Table 3: HTMT Results

Variables	Technology Adoption	Competence	Teamwork	Knowledge Transformation
Technology Adoption				
Competence	0.757			
Teamwork	0.658	0.756		
Knowledge Transformation	0.653	0.781	0.691	

Assessment of Model and Hypothesis Testing

The structural model assessment explored the hypothesized relationships through a bootstrapping process from 91 samples with 95% confidence intervals (Figure 1). The model is shown in Table 4, with path coefficients, standard errors, t values, and p values (Ramayah, T. et al., 2018). The basis used in testing the hypothesis is the value contained in the output path coefficients.

Table 4: Path beta, t-value, and P-value

Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values	Results
Technology Adoption Competence	0.303	0.308	0.107	2,845	0.004	Accepted
Teamwork Technology Adoption	0.373	0.369	0.118	3,155	0.002	Accepted
Teamwork Competence	0.292	0.284	0.130	2,246	0.025	Accepted
Knowledge Transformation Technology Adoption	0.344	0.353	0.123	2,789	0.005	Accepted
Knowledge Transformation Competence	0.328	0.328	0.110	2,989	0.003	Accepted

*) t-value should be more than 1.99; **) P-value should be less than 0.5 (**).

Based on the results of the Partial Least Squares (PLS) analysis, it was found that technology adoption has a positive and significant influence on competence with a coefficient value (β_1) of 0.303 and a t-value of 2.845 at a significance level of $\alpha=0.004$. The teamwork variable has a positive and significant influence on technology adoption with a coefficient value (β_2) of 0.373 and a t-value of 3.155 at a significance level of $\alpha=0.002$. Apart from that, teamwork also has a positive and significant influence on competence, with a coefficient value (β_3) of 0.292 and a t-value of 2.246 at a significance level of $\alpha=0.025$.

The knowledge transformation variable also makes a positive and significant contribution to technology adoption, with a coefficient value (β_5) of 0.344 and a t-value of 2.789 at a significance level of $\alpha=0.005$. Apart from that, this variable also has a positive and significant influence on competence, with a coefficient value (β_6) of 0.328 and a t-value of 2.989 at a significance level of $\alpha=0.003$.

Thus, it can be concluded that teamwork and knowledge transformation have a significant positive impact on technology adoption and increasing competence. The use of technology also contributes positively to increasing individual or group competence. This conclusion is supported by the results of hypothesis testing, where the null hypothesis (H_0) which states there is no influence between the independent and dependent variables is rejected, and the alternative hypothesis (H_a) which states there is an influence is accepted. With a p-value of less than 0.05 and a t-value of more than 1.99, these results indicate that there is a significant influence of the independent variable on the dependent variable. Thus, these findings indicate that teamwork and knowledge transformation play an essential role in increasing technology adoption and competence.

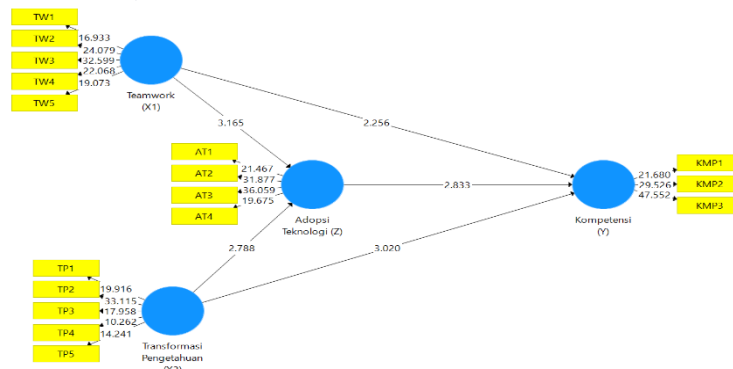


Figure 1: Bootstrapped Model

Table 4 and Figure 1 show the n-determination test value of the effect size R^2 and Q^2 . In this study, the R^2 value was 0.410 for technology adoption and 0.614 for competence. This R^2 coefficient has moderate prediction accuracy because it is below 0.50(Hair, 2007). Likewise, the Q^2 value has a high contribution because it is above 0.5. Thus, the model in this study has relatively good predictive validity based on these coefficients.

Table 5: R-square and Q-square

Construct	R-square*)	Q-square **)
Technology Adoption	0.410	0.287
Competence	0.614	0.451

*) A path with an r-square less than 0.5 is considered as weak predictive accuracy; **) A path q-square of more than 0 is considered to predict the model well

Discussion

The results of the Partial Least Squares analysis show that elements such as teamwork and knowledge transformation are essential to increase technology adoption and organizational capabilities. This finding is in line with previous research conducted by (Norris and Lefrere, 2011), which emphasizes that technology adoption has a crucial role in increasing competence. The success of an organization in adopting technology does not only depend on the technological infrastructure itself. However, it is also greatly influenced by the level of teamwork and the organization's ability to manage knowledge transformation. Thus, the results of this analysis provide a solid basis for understanding that investment in teamwork development and knowledge transformation strategies can be the key to increasing competitiveness through mastery of technology.

Technology adoption and competency enhancement play an essential role in the evolution of modern organizations. The results of the Partial Least Squares analysis highlight that factors such as teamwork and knowledge transformation not only contribute positively to technology adoption but also significantly increase organizational competence. Previous research (Norris & Lefrere, 2011)has underscored the importance of technology adoption in enhancing organizational capabilities. This research also shows that targeted knowledge transformation strategies and effective team collaboration can be critical factors for success in technology adoption. Therefore, innovative management will consider investing in the development of these two aspects as an integral part of their organizational strategy to achieve competitive advantage through mastery of technology. The results of interviews with furniture business owners in Jepara can provide valuable insight into how teamwork relates to technology adoption and competency.

“As a furniture business owner, I consider teamwork important in increasing furniture production efficiency so as to create quality products. I believe the team's synergy creates a positive work environment and provides a solid foundation to address changing industry and customer needs.”

“As a furniture business owner, I recognize the important role of teamwork in technology adoption and increasing competency. Teamwork ensures a good

understanding of technological changes and allows us to implement innovations and address industry changes more efficiently. "Apart from that, team involvement in developing employee skills and sharing knowledge is an important thing that must be improved through solid collaboration."

"As a furniture business owner, I agree that teamwork is crucial in facing technological changes and increasing competence in this industry. Effective collaboration helps optimize technology implementation, something that is very relevant in the dynamic furniture business. Team involvement in employee skills development is also important."

Through interviews with furniture business owners in Jepara, it can be seen that teamwork has a significant impact on technology adoption and the competence of their employees. This shows the importance of teamwork in the furniture industry so that it becomes the basis for overcoming the latest technological challenges.

The adoption of technology in teams enables the enhancement of individual knowledge and skills, creating a dynamic work environment (Penpokai et al., 2023). Through teamwork, employees can exchange ideas regarding new technology, especially in the furniture industry in Jepara, which requires collaboration to optimize the benefits of technology. Teamwork also encourages increased employee competency by facilitating knowledge transfer, strengthening understanding of technology, and overcoming obstacles together. Thus, teamwork not only supports individual development but also builds the foundation for increasing organizational competence as a whole (Daghfous et al., 2018).

Through interviews with furniture business owners in Jepara, the importance of teamwork in the context of increasing employee competency can be seen. Collaboration between teams facilitates knowledge transfer, better understanding of technology and shared learning. In the process of technology adoption, employees not only gain new skills but can also overcome obstacles and challenges together. Thus, teamwork not only supports individual development but also builds the foundation for increasing overall organizational competence.

The results of interviews with furniture business owners in Jepara can provide valuable insight into how knowledge transformation relates to technology adoption and competency.

"As a furniture business owner, I see knowledge transformation as the key to increasing the company's competitiveness. This involves not only the application of technology but also the effective development and management of knowledge across the organization."

"As a furniture business owner, I realize the importance of knowledge transformation, technology adoption and competency development in facing industry changes. I prioritize employee training to ensure they have the latest knowledge of design and materials while also adopting the latest technology, such as production management systems and design software. In addition, I encourage employee competency development through technical and leadership skills training. With this focus, I am confident that our furniture company can remain competitive and successful amidst ever-growing competition."

Through interviews with furniture business owners in Jepara, it can be seen that knowledge transformation has a significant impact on technology adoption and the competence of their employees, in line with research (de Bem Machado et al., 2022). This shows the importance of knowledge transformation in the furniture industry, which plays a crucial role in accelerating technology adoption and increasing the competence of their employees. The business owners highlighted that a deep understanding of the latest developments in design, materials and production technology provides a strong foundation for integrating innovation into their business.

With increased knowledge, companies can be more responsive to market changes, leading to the application of the latest technology in the production process. Apart from that, knowledge transformation is also linked to the development of employee competencies, through related training and education. Overall, the interview results highlight knowledge transformation as a critical driver of positive change in the furniture industry, confirming that to remain relevant and competitive, a deep understanding of trends and technology is necessary. The results of interviews with furniture business owners in Jepara can provide valuable insight into how technology adoption relates to competency.

“As a furniture business owner, technology adoption is considered key to increasing production efficiency and customer comfort. Even though it offers many benefits, business owners realize the importance of increasing employee competency to implement these technologies successfully. By focusing on training and development, the company aims to remain relevant and competitive in an increasingly digital marketplace.”

Through interviews with furniture business owners in Jepara, it can be seen that technology adoption has a significant impact on the competence of their employees. This shows that technology not only increases production efficiency but also opens up skills development opportunities for employees. By using advanced machines and devices, employees can learn skills, increase accuracy and reduce human error. Additionally, technology adoption also gives employees confidence, enabling them to contribute more effectively within the team.

Furniture business owners in Jepara consider technology adoption to be the key to adapting to changing market trends and customer demands. They see technology not only as a tool to improve operational efficiency but also as a strategy to expand their business capabilities and competitiveness. With this understanding, it can be seen that technology adoption not only influences the technical aspects of production but also becomes a catalyst for increasing employee competency and sustainability of the furniture business in Jepara.

CONCLUSION

This research is in line with the theory that states that teamwork and knowledge transformation play a crucial role in increasing organizational competence through the adoption of technology. Therefore, Jepara furniture industry management needs to promote collaboration between departments and exchange knowledge between employees. Investments in technology must be accompanied by mechanisms that facilitate knowledge transfer across the organization. In addition, alignment between performance appraisal systems and compensation schemes is needed to support teamwork. Regular evaluation of the effectiveness of knowledge management and collaboration initiatives also needs to be carried out by management to ensure continuous improvement in competence through technology adoption in the Jepara furniture industry.

The conclusion of the research shows that the role of teamwork and knowledge transformation has a significant positive impact on increasing competence, primarily through technology adoption. These findings are in line with previous research, which emphasizes the importance of team collaboration and knowledge change in improving capabilities through technology. The implications of this research are very relevant, especially in the context of the furniture industry in Jepara, where expertise and technological innovation play a key role. Therefore, furniture industry players in Jepara must focus not only on developing technology, but also strengthening teamwork and effectively managing knowledge.

Thus, furniture industry players in Jepara need to take concrete steps to build a work culture that encourages collaboration and increases employee knowledge capabilities. Investments in technological development must be accompanied by severe efforts in managing knowledge change so that it can be integrated efficiently into production processes. In this way, the furniture industry in Jepara can continue to develop and compete globally through the use of better technology, supported by a strong foundation of teamwork and knowledge transformation.

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