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Sustainability of Business Strategy Based on Indigenous Product Creativity in the Weaving Industry of Palm Oil Waste in Riau, Indonesia

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ABSTRACT

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This study analyzes knowledge management and innovation based on indigenous product creativity to achieve a sustainable competitive advantage. The unit of analysis in this study was the artisans of the woven handicraft industry from palm oil stem waste, totaling 50 respondents using a census sampling of the entire population. The analysis tool of this research uses SEM PLS. The results of this study indicate that knowledge management and innovation affect sustainable competitive advantage with indigenous product creativity as mediation in the woven handicraft industry from waste palm oil stems. The findings succeeded in filling the gap in previous research that the heterogeneity of company resources is getting higher to achieve sustainable competitive advantage due to the indigenous factor of creativity as a mediation that can provide added value different from competitors. This research implication contributes to developing strategic management science with a resource approach with empirical evidence that original product creativity is a substantial intermediary variable to achieve sustainable competitive advantage. The practical implication of this research is that business actors in the palm oil stem waste industry must pay more attention to their knowledge resources and product innovation on indigenous product creativity.

1. INTRODUCTION

The higher increasing business competition, companies are required to enhance their competitiveness in a sustainable manner. The rapid development of technology and information is a significant factor in this globalized era and cannot be ignored. Market trends also change due to dynamic customer needs and wants, presenting strategic challenges that must be addressed. A company's resources alone cannot determine its strength unless it can create unique value that sets it apart from competitors.

Previous studies have shown a preference for imported products over local ones, suggesting that local products are less desirable [1]. This challenges the local craft industry to add value through unique product appeal [2]. While past research on innovation has emphasized product creativity, there has been little focus on innovation based on indigenous culture. However, it has been suggested that products with an indigenous cultural background can generate higher emotional value for consumers [3-5].

The expansion of oil palm plantations and increased production volume in Indonesia have led to a surge in palm oil waste, including palm oil stick waste. This waste is not being utilized optimally despite its potential. In areas like Rokan Hulu, Riau Province, the waste is often burned or discarded, despite the potential for it to be transformed into valuable commodity products.

The primary hurdle lies in the limitations of knowledge management practices and the need for improved product types to achieve sustainable competitive advantage. The

limited capability for product innovation stems from a lack of knowledge management in design, coloring, and packaging techniques. As such, there is a need for strategies that focus on indigenous product creativity, considering the global market's high interest in unique local cultural products. These strategies could turn palm oil stick waste into innovative products with high economic value, thereby solving waste and competitiveness issues.

Knowledge management is crucial in enabling companies to detect new market opportunities quickly and drive innovation [6]. It also fosters market responsiveness, facilitating sustainable strategies [7]. However, formalization could hinder radical projects which should be managed informally to facilitate knowledge management across all company units [8, 9]. The knowledge management process consists of acquiring, applying, and sharing knowledge and designing knowledge transfer [10, 11]. This process incorporates tacit knowledge, explicit knowledge, and a technology base [12]. The resource-based theory (RBT) supports the notion that knowledge capability resources are essential for achieving sustainable competitive advantage and improving company performance [4]. However, what remains unclear is the specific types of knowledge that provide unique added value and are challenging to transfer.

Creating unique value from scarce resources that are not easily imitated and have no substitutes requires innovative skills. Unfortunately, many companies still view innovation as a domain for newcomers. The strategic management approach suggests that companies that do not actively implement strategic management and remain passive will be overtaken by

competition.

The concept of sustainable competitive advantage was introduced in an article [13], which posits that companies should possess resources that are rare, valuable, and not easily imitated or substituted. A company's human resources can provide a potential source of sustainable competitive advantage [14]. Despite being valuable, rare, and not easily replaced, resources that are easy to imitate bring challenges to achieving sustainability. Patenting could be a solution to this issue [15].

Moreover, heterogeneous resources, combined with imperfect mobility, will achieve a competitive advantage due to the differences in profitability among competitors. If resources are distributed homogeneously, all organizations in the industry will have the same strength and implement the same strategy [15-17].

Research on sustainable competitive advantage is evolving, with recent advancements in communication and information technology leading to new approaches. One such approach centers on knowledge-based system resources with a focus on local cultural elements. However, current literature predominantly uses only the keywords 'sustainable competitive advantage' and 'knowledge management', indicating a significant gap in studies that incorporate knowledge-based system resources into sustainable competitive advantage.

This disparity underlines the need for more exploration into the integration of knowledge management and innovation within the context of sustainable competitive advantage. Specifically, there is a need to study how indigenous product creativity can be leveraged as a strategic approach in the global market. This approach can offer a new perspective on achieving superiority in global competition through cultivating and utilizing knowledge-based system resources. Figure 1 shows research framework which describes research model.

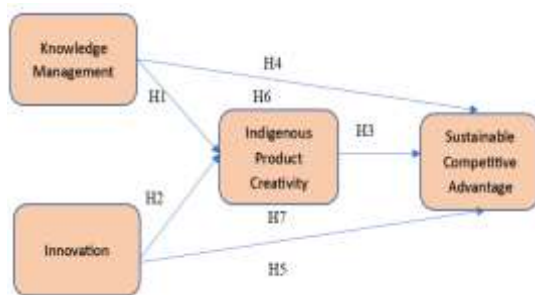


Figure 1. Research framework

2. LITERATURE REVIEW

Competitive advantage originates from a company's skills and resources, including technical, managerial, and operational capabilities. The uniqueness and differences among competitors revealed through competitive advantage analysis enable companies to maintain their advantage, significantly impacting performance [18]. Activities such as business design, production, marketing, and distribution can create a sustainable competitive advantage by facilitating a company's relative cost position and establishing a basis for differentiation. Lower costs allow a company to offer more value to customers than its competitors can.

Micro and Small Enterprises can develop alternative

strategies by leveraging both internal and external factors [19, 20]. Internal factors include marketing, production, human resources, and finance, while external ones encompass socioeconomic conditions, technology, buyers, and competitors. In the global business competition, companies need to focus on internal perspectives in addition to industrial structure, carefully examining and combining their resources to gain core competencies and competitive advantages.

Strategy plays a significant role in an organization's ability to stretch and fulfill its aspirations. It demands careful planning and commitment to continuously enhance its resources [21].

Knowledge management encompasses three primary functions: knowledge generation, storage, and sharing. Knowledge generation includes innovation and accumulation of new knowledge, which is then combined with existing knowledge. Knowledge sharing allows the dissemination of skills, experiences, and knowledge within an organization.

A knowledge management process that involves gathering experiences, clarifying knowledge, and creating, acquiring, storing, and sharing that knowledge can lead to the development of unique core skills and competencies. These unique skills, which businesses, employers, and employees acquire, create, store, share, and disseminate, are difficult to imitate. Consequently, a sustainable competitive advantage can be achieved when these skills are challenging to replicate [22].

Knowledge can be the basis of a sustainable competitive advantage if it can be quickly disseminated within the firm that owns it but not easily transferred to other firms. This declaration intends that knowledge that cannot be quickly disseminated within a company belongs to many people who do not belong to the company. As a result, the ability to create value for the company is limited. The Knowledge Base View (KBV) approach assumes that companies are business entities capable of creating, integrating, and distributing knowledge. The functionality created by the KBV approach is based on something other than tangible resources, such as physical or financial resources. KBV analysis includes human resources, social and organizational resources, and other organizational resources such as technical and economic resources [23].

The knowledge-Based View approach is closely related to the RBV in that knowledge is a strategic resource to achieve a sustainable competitive advantage [24]. Knowledge management is a management tool for rapid growth. Company employees can move to new companies and start using that knowledge. Only the constantly learning company will gain a competitive advantage compared to competitors in the market [25]. Different stakeholders need to know how best to serve consumers. The corporate culture needs to change and foster attribution and collaboration among employees. Technology and infrastructure are the driving force to beat the competition.

Companies use the knowledge and disseminate it everywhere, including the internet, databases, documents, e-mail, podcasts, and websites. Companies can also conduct video conferencing and social networking forums. This media is used to share knowledge. On the one hand, many things can be learned from the literature on success stories elsewhere. Further research is needed to determine its effectiveness. Organizations are a way to protect intellectual capital and strengthen and maintain a company's competitive advantage [25].

Many researchers have researched the importance of innovation in small industries. Innovation is a performance

factor; innovation positively impacts the performance of high-tech and low-tech industries [26]. Survey results from small industries in Romania indicate that most of these businesses are considering adopting a learning-oriented organizational culture [26]. The innovation process in small industries relies on internal and external learning resources. Best practices for internal learning resources for small industry cases in Romania are represented by networking with companies and external partners as internal learning resources for small businesses.

Market changes, technology changes, and expert and consultant support are the reported external sources of learning. The survey results also show that most small industries tend to innovate. Especially in terms of business models and the main obstacles they face. Due to the lack of funds and the high costs they face. They are identifying the most common barriers to innovation presented by small industries in Romania as a starting point for setting future directions breaking through barriers one by one To support innovation activities and results. This survey's concrete results are linked to similar surveys of small industries in other countries. It can form the basis of recommendations and initiatives to consider aspects of a particular innovation.

However, it is essential to make this comparison based on the current small industry situation as a national development framework. More recommended based on survey results considering carefully the need for innovation for small industries, especially related to barriers to certain types of innovation. Another possible direction for future research would be to consider the primary factors that small industries consider when a company selects and implements a particular type of innovation that can be applied as a basis for developing an innovation model at the corporate level.

Previous research suggests that innovation influences sustainable competitive advantage [27]. However, this study's findings do not indicate a significant impact of innovation on sustainable competitive advantage. These results align with the viewpoint [28], suggesting that only sometimes do companies' innovations lead to a sustainable competitive advantage. It is because a company has a sustainable competitive advantage if its potential competitors cannot imitate the product innovations it produces or competitors have to carry out reconstruction that requires a lot of capital and investment so that competitors cannot do it.

3. RESEARCH METHODS

This study uses a quantitative descriptive method. The sample of this research is 50 business actors who are also craftsmen of the woven industry from palm oil stick waste in Rokan Hulu downstream district, Riau, Indonesia. They are members of a group of craftsmen woven from palm oil stick waste in Rokan Hulu Downstream district, Riau, Indonesia. This sample was taken as a whole from the entire existing population using census sampling. Census sampling was used in this study because the population was considered small or less than 100 [29]. The research location was determined in the palm oil stem waste craft business in Rokan Hulu, Riau, Indonesia, because the research location was a group of craftsmen who first started this craft business and was the largest in Riau Province, Indonesia. Although the first and the largest in Riau Province, Indonesia, they still have problems that deserve scrutiny from knowledge management factors, innovation to achieve a sustainable competitive advantage with indigenous product creativity as a mediating variable.

The qualifications for the length of service for the research sample in the woven industry business are those who have been active in this industry for more than three years. Of their educational background, as much as 56% have a bachelor's degree, 40% have a high school certificate and the rest are below the bachelor's and high school level. The data collection technique in this study relied on questionnaires to collect primary data. Besides that, the researchers also made direct observations at the research location. There are 65 questions in the test on the questionnaire—questions in the questionnaire regarding knowledge management, innovation, indigenous knowledge product creativity, and sustainable competitive advantage. Secondary data was obtained through literature review and documentation. Each question was scored using a 5-point Likert scale.

The validity and reliability in this study refer to the opinion [30] namely using a minimum validity index of 0.5 and a minimum reliability index of 0.6. Data analysis in this study used the PLS-SEM. The analysis tools in this study used the Structural Equation Modeling (SEM) method with PLS. Partial Least Square (PLS) analysis is used because PLS can be used without a solid theoretical basis, ignoring non-parametric assumptions and the accuracy of the prediction model parameters based on the value of the determinant coefficient (R-square), so PLS is very appropriate for research to develop theory [30].

4. RESEARCH RESULT

Convergent validity relates to the principle that the manifest variables of a construct should be highly correlated. Convergent validity with PLS software can be seen from the loading factor for each construct indicator. While to assess Convergent validity, the loading factor value must be more than 0.7, as well as the average extracted (AVE), and the communality value must be greater than 0.5, and the results are as follows following.

Table 1 shows loading factor provides information about the loading factor values for each manifest variable. The loading factor values of all indicators for the latent variables show >0.7, so the indicators are declared valid.

Table 1. Loading factor

Variable	Indicator	Loading Factor
KNOWLEDGE MANAGEMENT	KNOWLEDGE	0.880
	KOGNITIF	0.853
	TECHNIQUE	0.726
INOVATION	INOV1	0.756
	INOV2	0.787
	INOV3	0.864
INDIGENOUS PRODUCT CREATIVITY	IPC1	0.930
	IPC2	0.938
	IPC3	0.865
SUSTAINABLE COMPETITIVE ADVANTAGE	SCA1	0.957
	SCA2	0.936
	SCA3	0.928
	SCA4	0.951

Source: Data Processing, 2023

In Table 1 provides loading factor, it can be seen that the four latent variables have an AVE value that is greater than the specified value of 0.5. So that all variables are declared valid in explaining the latent variables, which indicates that the use of these manifest variables fulfills the AVE requirements.

Therefore all manifest variables are declared to have met the requirements of convergent validity. Convergent validity is proven if the scores obtained by instruments that measure concepts or concepts with different methods have a high correlation.

Table 2. AVE and communality

Average Variance Extracted (AVE)	
INOVIATION	0.646
IPC	0.831
SCA	0.889
KM	0.676

Source: Data Processing, 2023

Table 2 shows the discriminant validity from the cross-loading factor with the construct and the comparison of AVE with the correlation of latent variables. If the correlation between the construct and the primary measurement (each indicator) is more significant than the other construct measures, then the variable is said to have high discriminant validity. The cross-loading value is presented as follows:

Table 3. Cross loading factor

	KM	INOVIATION	IPC	SCA
KNOWLEDGE	0.880	0.326	0.475	0.382
KOGNITIF	0.853	0.160	0.454	0.416
TECHNIQUE	0.726	0.263	0.481	0.351
INOV1	0.247	0.756	0.519	0.369
INOV2	0.189	0.787	0.433	0.407
INOV3	0.288	0.864	0.591	0.378
IPC1	0.575	0.661	0.930	0.792
IPC2	0.567	0.595	0.938	0.644
IPC3	0.399	0.484	0.865	0.560
SCA1	0.523	0.452	0.736	0.957
SCA2	0.378	0.508	0.668	0.936
SCA3	0.440	0.423	0.702	0.928
SCA4	0.414	0.420	0.686	0.951

Source: Data Processing, 2023

Based on the PLS software results Table 3 shows cross-loading factor correlation value for each latent construct for the corresponding indicator is higher than the other constructs. So the indicators used to measure the latent variable meet the requirements. The reliability test in Partial Least Square (PLS) can use two methods, namely Composite Reliability (CR) and Cronbach's Alpha, which are presented as follows:

Table 4. Composite Reliability (CR) and Cronbach's Alpha

	Cronbach's Alpha	Composite Reliability
INNOVATION	0.724	0.845
IPC	0.899	0.937
SCA	0.958	0.970
KM	0.756	0.862

Source: Data Processing, 2023

The test results above show that the Composite Reliability (CR) value is more significant than 0.7, and the Cronbach Alpha value is greater than 0.6. It can be concluded that the data is reliable, indicating that all indicators consistently measure each variable. The hypothesis in this study was tested using path coefficient values and t-values to see whether there was a significant effect. In addition, the results of the path significance test also show the parameter coefficient values (original sample).

In this study, researchers used a confidence level of 95%. The path coefficient score indicated by the T-statistic value must be above 1.96 for the two-tailed hypothesis. Based on the Path Coefficient and T-Statistics in the table above, it can be explained as follows: that to test the hypothesis above, a t-value is used to see the effect of knowledge management on Indigenous Product Creativity with a t-value of 2.815; this value is more significant than 1.96 with $\alpha = 0.05$, so it can be concluded that H1 is accepted, meaning that there is a significant influence of knowledge management on Indigenous Product Creativity. The knowledge management variable on Indigenous Product Creativity has an original sample of 0.415 with a positive direction meaning that the better the knowledge management, the Indigenous Product Creativity will also increase by 0.415.

Furthermore, the effect of knowledge management on sustainable competitive advantage is used t-value to see the effect of knowledge management on Sustainable Competitive Advantage with a t-value of 0.424; this value is smaller than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is rejected, meaning that knowledge management has no significant effect on Sustainable Competitive Advantage (SCA). The knowledge management variable on Sustainable Competitive Advantage has an original sample of 0.064 with a positive direction meaning that the better the knowledge management, the Sustainable Competitive Advantage will also increase by 0.064.

The effect of innovation on indigenous product creativity with a t-value of 3.768 is more significant than 1.96 with $\alpha = 0.05$; H1 is accepted, meaning that innovation has a significant influence on Indigenous Product Creativity. The innovation variable on Indigenous Product Creativity has an original sample of 0.519 with a positive direction meaning that the better the innovation, the Indigenous Product Creativity will also increase by 0.519. Then for the t-value to see the effect of innovation on Sustainable Competitive Advantage with a t-value of 0.040, this value is smaller than 1.96 with $\alpha = 0.05$. So H1 is rejected, meaning that innovation has no significant influence toward Sustainable Competitive Advantage. The innovation variable on Sustainable Competitive Advantage has an original sample of 0.006 with a positive direction meaning that the better the innovation, the Sustainable Competitive Advantage will also increase by 0.006.

Table 5. Path analysis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
MP -> IPC	0.415	0.420	0.148	2.815	0.005
INNOVATION -> IPC	0.519	0.513	0.138	3.768	0.000
IPC -> SCA	0.700	0.666	0.210	3.337	0.001
MP -> SCA	0.064	0.093	0.152	0.424	0.671
INNOVATION -> SCA	0.006	0.005	0.159	0.040	0.968
KM -> IPC -> SCA	0.291	0.267	0.109	2.661	0.008
INNOVATION -> IPC -> SCA	0.363	0.356	0.166	2.182	0.030

Source : Data Processing, 2023

Then the influence of indigenous product creativity on sustainable competitive advantage is seen with a t-value of 3.337; this value is more significant than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is accepted, meaning that Indigenous Product Creativity has a significant influence on Sustainable Competitive Advantage.

The Indigenous Product Creativity variable on Sustainable Competitive Advantage has an original sample of 0.700 with a positive direction meaning that the better the Indigenous Product Creativity, the Sustainable Competitive Advantage will also increase by 0.700.

While the influence of knowledge management on sustainable competitive advantage through indigenous product creativity is seen based on the provisions previously stated, where a t-count of 2.661 is obtained, this value is more significant than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is accepted, meaning there is a significant influence of knowledge management on Sustainable Competitive Advantage through Indigenous Product Creativity. The knowledge management variable on Sustainable Competitive Advantage through Indigenous Product Creativity has an original sample of 0.291 with a positive direction meaning that the better the knowledge management, the Sustainable Competitive Advantage through Indigenous Product Creativity will also increase by 0.291. Furthermore, looking at the effect of innovation on sustainable competitive advantage through indigenous product creativity, a t-count of 2.182 is obtained; this value is more significant than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is accepted, meaning that there is a significant influence of innovation on Sustainable Competitive Advantage through Indigenous Product Creativity. The innovation variable on Sustainable Competitive Advantage through Indigenous Product Creativity has an original sample of 0.363 with a positive direction meaning that the better the innovation, the Sustainable Competitive Advantage (KBB) through Indigenous Product Creativity will also increase by 0.363.

The R-square value can show the influence of the dependent variable. The following is the acquisition of the R-square value.

Table 6. R square

	R Square
IPC	0.572
SCA	0.552

Source: Data Processing, 2023

The value of the coefficient of determination (R-square) in the table above shows that in the first sub-structure, the R-square value for the Indigenous Product Creativity variable is 0.572. It shows that the Indigenous Product Creativity variable can be explained by 57.2% of knowledge management and innovation variables. In the second sub-structure, the R-square value for the Sustainable Competitive Advantage (KBB) variable is 0.552. It indicates that Sustainable Competitive Advantage (KBB) can be explained by 55.2% by the variable knowledge management, innovation, and Indigenous Product Creativity.

Q-square measures how well the model's observed values and the parameter estimates are produced. A Q-square value greater than 0 (zero) indicates that the model has a predictive relevance value. In contrast, a Q-square value less than 0 (zero) indicates that the model has no predictive relevance value. To calculate Q2, the following formula can be used:

$$Q2 = 1 - (1 - R12) (1 - R22)$$

$$Q2 = 1 - (1 - 0.572)(1 - 0.552)$$

$$Q2 = 0.808$$

The achieved Q2 value of 0.808 means that the Q2 value above zero provides evidence that the model has predictive relevance.

5. RESEARCH DISCUSSION

Researchers supporting the RBV argue that resources are critical for sustainable competitive advantage. These resources are referred to as strategic assets [31], core competencies, and Distinctive Competencies. Empirical findings in the field of sustainable competitive advantage for micro, small, and medium enterprises show that the ability to create competitiveness is determined by how far a company can manage its resources (stretched resources).

The capabilities of a company are unequal because it comes from the ownership of its resources in the form of tangible and intangible assets and the company's ability to use these assets. Companies experience commercial benefits from a proactive environment; their management invests additional resources in a more radical environment that will improve and exploit the environment as an opportunity.

Unfortunately, the experience of initiatives to support environments targeting small businesses may be willing to rely on resources but suggests that mutually beneficial savings can easily be achieved in a low-cost environment. Improvements only sometimes lead to reinvestment in environmental improvements or changes to organizational priorities. Companies sometimes make bigger, longer-term changes. Investing to achieve the higher benefits offered as wins requires a more radical transformation of business processes. Increasing environmental efficiency for sustainability is reflected in the principles of natural capitalism. Continuity and competitiveness about broader (or multiple rounds) learning are needed to bring about cultural change. Many believe that making a real difference toward more sustainable patterns is critical.

Building distinctive abilities and core competencies can be done through experience accumulation, clear articulation of knowledge, and a knowledge management process that starts from creating, acquiring, storing, and sharing that knowledge. Distinctive abilities that are difficult to imitate can be seen in how companies, business actors, and their employees can acquire, create, store, share, and disseminate. It is special knowledge to achieve sustainable competitive advantage when these capabilities are difficult to imitate [32, 33]. Knowledge can be the basis for sustainable competitive advantage if it is quickly disseminated within the company it owns but not easily spread to other companies. The purpose of this statement is that knowledge that spreads slowly within the company remains the property of several people who are not from the company and has limited the company's ability to create value. Therefore knowledge as a strategic resource is essential to be managed optimally. Knowledge management helps increase company profits with communication that will increase mastery of knowledge through knowledge transfer. Transferring knowledge or knowledge sharing can support companies in carrying out their business processes, being ready to face problems, sharing experiences regarding all

work-related matters, and developing company employees' knowledge and skills. The knowledge-sharing process helps identify, select, organize, disseminate, and transfer information and experiences that are part of the company [20].

Knowledge is considered a vital capital and asset for companies to manage because knowledge can improve business performance and create competitive advantage [34]. Knowledge is a sustainable source for companies to achieve competitive advantage. The main difference between information and knowledge is that knowledge lies in information, whereas knowledge is information that people use [35].

Sharing knowledge is essential to knowledge-based companies' competitiveness and competitive advantage [36]. It is a severe concern about company efforts to increase knowledge dissemination within Meso-level companies. Human resources have limitations in sharing knowledge even though they use the system. Knowledge sharing at the micro level is not only with other members of the company's employees but also with external parties such as customers. Many previous studies have assumed that employees are free to share knowledge to support the interests of an organization [37]. It relates from a shared perspective on knowledge implicitly embodied in Knowledge Base View (KBV), the assets available to firms, and their sustainable competitive advantages [32, 33]. Human resources play a significant role in enabling companies to produce and consume company assets. A company's contribution to knowledge-based resources is invaluable, rare, and only partially replicable.

Knowledge sharing is the accumulation of knowledge between different knowledge units within a company [38]. The critical factors for increasing knowledge-sharing activities are intrinsic and extrinsic incentives, social and organizational norms, organizational values, and leadership support [7, 39]. The use of knowledge is the application of shared knowledge through assimilation, part of organizational behavior and problem-solving processes is newly created knowledge [7]. Berry [40] concluded in his research that knowledge formation, knowledge transfer, use of knowledge, and knowledge productivity of employees are related to innovative behavior. Shujahat et al. [41] also concluded from their research results that the knowledge productivity of employees mediates the relationship between knowledge creation and innovation. The results also show that knowledge sharing has a significant impact on innovation. Kuncoro and Suriani [28] thought that innovation by companies only sometimes leads companies to achieve sustainable competitive advantage. It is because companies that have a sustainable competitive advantage if their potential competitors cannot imitate the product innovations produced, or competitors must carry out reconstructions that require a lot of capital and investment so that they cannot be implemented.

6. CONCLUSION

This study concludes that knowledge management and innovation increase sustainable competitive advantage with indigenous product creativity as a mediating variable in the woven handicraft industry from waste palm oil stalks in Riau, Indonesia. Furthermore, knowledge management and innovation are fundamental to achieving sustainable competitive advantage based on indigenous product creativity. This study is an important research finding because previous

research has failed to explain how company resources can provide added value differently than competitors. So this research contributes to the management literature on sustainable competitive advantage strategies, especially the resource-based view. The practical implication of this research is that business actors in the palm oil stem waste craft industry must pay more attention to their knowledge resources and the development of product innovation in indigenous product creativity. It is easy to achieve a sustainable competitive advantage to stand out.

It is necessary to improve their knowledge management and innovation capabilities by optimizing the availability of local resources based on indigenous product creativity. They can participate in more training and seminars and join a community of artisans with the same background to increase their knowledge and skills in product innovation. Apart from that, it is also essential for them to record better documentation of every business activity in the palm oil stick waste craft industry so that it can become information and knowledge documentation for others. Product heterogeneity is getting stronger with the characteristic value of authenticity based on the creativity of indigenous products seen from the motifs, symbols, and meanings produced. This new knowledge will result in more innovative product innovations that are unique, rare, not easily imitated, and not easily replaced to have an impact on sustainable competitiveness.

This study, still has limitations because it only uses two independent variables, namely knowledge management, and innovation, because many other independent variables can explain their influence on sustainable competitive advantage. In addition, this research was only conducted at one research location with a limited population so that in the future, it could be added to different research locations with the exact case to increase the population. Different characteristics may be found so that future research will be more likely to produce findings that can better explain the effect on sustainable competitive advantage.

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Sustainability of Business Strategy Based on Indigenous Product Creativity in the Weaving Industry of Palm Oil Waste in Riau, Indonesia

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ABSTRACT

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Keywords:

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This study analyzes knowledge management and innovation based on indigenous product creativity to achieve a sustainable competitive advantage. The unit of analysis in this study was the artisans of the woven handicraft industry from palm oil stem waste, totaling 50 respondents using a census sampling of the entire population. The analysis tool of this research uses SEM PLS. The results of this study indicate that knowledge management and innovation affect sustainable competitive advantage with indigenous product creativity as mediation in the woven handicraft industry from waste palm oil stems. The findings succeeded in filling the gap in previous research that the heterogeneity of company resources is getting higher to achieve sustainable competitive advantage due to the indigenous factor of creativity as a mediation that can provide added value different from competitors. This research implication contributes to developing strategic management science with a resource approach with empirical evidence that original product creativity is a substantial intermediary variable to achieve sustainable competitive advantage. The practical implication of this research is that business actors in the palm oil stem waste industry must pay more attention to their knowledge resources and product innovation on indigenous product creativity.

1. INTRODUCTION

The increasing business competition, companies are required to enhance their competitiveness in a sustainable manner. The rapid development of technology and information is a significant factor in this globalized era and cannot be ignored. Market trends also change due to dynamic customer needs and wants, presenting strategic challenges that must be addressed. A company's resources alone cannot determine its strength unless it can create unique value that sets it apart from competitors.

Previous studies have shown a preference for imported products over local ones, suggesting that local products are less desirable [1]. This challenges the local craft industry to add value through unique product appeal [2]. While past research on innovation has emphasized product creativity, there has been little focus on innovation based on indigenous culture. However, it has been suggested that products with an indigenous cultural background can generate higher emotional value for consumers [3-5].

The expansion of oil palm plantations and increased production volume in Indonesia have led to a surge in palm oil waste, including palm oil stick waste. This waste is not being utilized optimally despite its potential. In areas like Rokan Hulu, Riau Province, the waste is often burned or discarded, despite the potential for it to be transformed into valuable commodity products.

The primary hurdle lies in the limitations of knowledge management practices and the need for improved product

types to achieve sustainable competitive advantage. The limited capability for product innovation stems from a lack of knowledge management in design, coloring, and packaging techniques. As such, there is a need for strategies that focus on indigenous product creativity, considering the global market's high interest in unique local cultural products. These strategies could turn palm oil stick waste into innovative products with high economic value, thereby solving waste and competitiveness issues.

Knowledge management is crucial in enabling companies to detect new market opportunities quickly and drive innovation [6]. It also fosters market responsiveness, facilitating sustainable strategies [7]. However, formalization could hinder radical projects which should be managed informally to facilitate knowledge management across all company units [8, 9]. The knowledge management process consists of acquiring, applying, and sharing knowledge and designing knowledge transfer [10, 11]. This process incorporates tacit knowledge, explicit knowledge, and a technology base [12]. The resource-based theory (RBT) supports the notion that knowledge capability resources are essential for achieving sustainable competitive advantage and improving company performance [4]. However, what remains unclear is the specific types of knowledge that provide unique added value and are challenging to transfer.

Creating unique value from scarce resources that are not easily imitated and have no substitutes requires innovative skills. Unfortunately, many companies still view innovation as a domain for newcomers. The strategic management

approach suggests that companies that do not actively implement strategic management and remain passive will be overtaken by competition.

The concept of sustainable competitive advantage was introduced in an article [13], which posits that companies should possess resources that are rare, valuable, and not easily imitated or substituted. A company's human resources can provide a potential source of sustainable competitive advantage [14]. Despite being valuable, rare, and not easily replaced, resources that are easy to imitate bring challenges to achieving sustainability. Patenting could be a solution to this issue [15].

Moreover, heterogeneous resources, combined with imperfect mobility, will achieve a competitive advantage due to the differences in profitability among competitors. If resources are distributed homogeneously, all organizations in the industry will have the same strength and implement the same strategy [15-17].

Research on sustainable competitive advantage is evolving, with recent advancements in communication and information technology leading to new approaches. One such approach centers on knowledge-based system resources with a focus on local cultural elements. However, current literature predominantly uses only the keywords 'sustainable competitive advantage' and 'knowledge management', indicating a significant gap in studies that incorporate knowledge-based system resources into sustainable competitive advantage.

This disparity underlines the need for more exploration into the integration of knowledge management and innovation within the context of sustainable competitive advantage. Specifically, there is a need to study how indigenous product creativity can be leveraged as a strategic approach in the global market. This approach can offer a new perspective on achieving superiority in global competition through cultivating and utilizing knowledge-based system resources. Figure 1 shows research framework which describes research model.

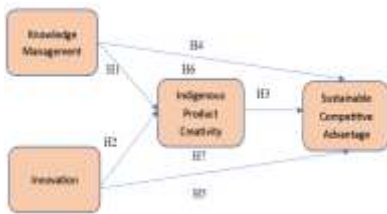


Figure 1. Research framework

2. LITERATURE REVIEW

Competitive advantage originates from a company's skills and resources, including technical, managerial, and operational capabilities. The uniqueness and differences among competitors revealed through competitive advantage analysis enable companies to maintain their advantage, significantly impacting performance [18]. Activities such as business design, production, marketing, and distribution can create a sustainable competitive advantage by facilitating a company's relative cost position and establishing a basis for differentiation. Lower costs allow a company to offer more

value to customers than its competitors can.

Micro and Small Enterprises can develop alternative strategies by leveraging both internal and external factors [19, 20]. Internal factors include marketing, production, human resources, and finance, while external ones encompass socioeconomic conditions, technology, buyers, and competitors. In the global business competition, companies need to focus on internal perspectives in addition to industrial structure, carefully examining and combining their resources to gain core competencies and competitive advantages.

Strategy plays a significant role in an organization's ability to stretch and fulfill its aspirations. It demands careful planning and commitment to continuously enhance its resources [21].

Knowledge management encompasses three primary functions: knowledge generation, storage, and sharing. Knowledge generation includes innovation and accumulation of new knowledge, which is then combined with existing knowledge. Knowledge sharing allows the dissemination of skills, experiences, and knowledge within an organization.

A knowledge management process that involves gathering experiences, clarifying knowledge, and creating, acquiring, storing, and sharing that knowledge can lead to the development of unique core skills and competencies. These unique skills, which businesses, employers, and employees acquire, create, store, share, and disseminate, are difficult to imitate. Consequently, a sustainable competitive advantage can be achieved when these skills are challenging to replicate [22].

Knowledge can be the basis of a sustainable competitive advantage if it can be quickly disseminated within the firm that owns it but not easily transferred to other firms. This declaration intends that knowledge that cannot be quickly disseminated within a company belongs to many people who do not belong to the company. As a result, the ability to create value for the company is limited. The Knowledge Base View (KBV) approach assumes that companies are business entities capable of creating, integrating, and distributing knowledge. The functionality created by the KBV approach is based on something other than tangible resources, such as physical or financial resources. KBV analysis includes human resources, social and organizational resources, and other organizational resources such as technical and economic resources [23].

The knowledge-Based View approach is closely related to the RBV in that knowledge is a strategic resource to achieve a sustainable competitive advantage [24]. Knowledge management is a management tool for rapid growth. Company employees can move to new companies and start using that knowledge. Only the constantly learning company will gain a competitive advantage compared to competitors in the market [25]. Different stakeholders need to know how best to serve consumers. The corporate culture needs to change and foster attribution and collaboration among employees. Technology and infrastructure are the driving force to beat the competition.

Companies use the knowledge and disseminate it everywhere, including the internet, databases, documents, e-mail, podcasts, and websites. Companies can also conduct video conferencing and social networking forums. This media is used to share knowledge. On the one hand, many things can be learned from the literature on success stories elsewhere. Further research is needed to determine its

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effectiveness. Organizations are a way to protect intellectual capital and strengthen and maintain a company's competitive advantage [25].

Many researchers have researched the importance of innovation in small industries. Innovation is a performance factor; innovation positively impacts the performance of high-tech and low-tech industries [26]. Survey results from small industries in Romania indicate that most of these businesses are considering adopting a learning-oriented organizational culture [26]. The innovation process in small industries relies on internal and external learning resources. Best practices for internal learning resources for small industry cases in Romania are represented by networking with companies and external partners as internal learning resources for small businesses.

Market changes, technology changes, and expert and consultant support are the reported external sources of learning. The survey results also show that most small industries tend to innovate. Especially in terms of business models and the main obstacles they face. Due to the lack of funds and the high costs they face. They are identifying the most common barriers to innovation presented by small industries in Romania as a starting point for setting future directions breaking through barriers one by one To support innovation activities and results. This survey's concrete results are linked to similar surveys of small industries in other countries. It can form the basis of recommendations and initiatives to consider aspects of a particular innovation.

However, it is essential to make this comparison based on the current small industry situation as a national development framework. More recommended based on survey results considering carefully the need for innovation for small industries, especially related to barriers to certain types of innovation. Another possible direction for future research would be to consider the primary factors that small industries consider when a company selects and implements a particular type of innovation that can be applied as a basis for developing an innovation model at the corporate level.

Previous research suggests that innovation influences sustainable competitive advantage [27]. However, this study's findings do not indicate a significant impact of innovation on sustainable competitive advantage. These results align with the viewpoint [28], suggesting that only sometimes do companies' innovations lead to a sustainable competitive advantage. It is because a company has a sustainable competitive advantage if its potential competitors cannot imitate the product innovations it produces or competitors have to carry out reconstruction that requires a lot of capital and investment so that competitors cannot do it.

3. RESEARCH METHODS

This study uses a quantitative descriptive method. The sample of this research is 50 business actors who are also craftsmen of the woven industry from palm oil stick waste in Rokan Hulu downstream district, Riau, Indonesia. They are members of a group of craftsmen woven from palm oil stick waste in Rokan Hulu Downstream district, Riau, Indonesia. This sample was taken as a whole from the entire existing population using census sampling. Census sampling was used in this study because the population was considered small or less than 100 [29]. The research location was determined in the palm oil stem waste craft business in Rokan Hulu, Riau, Indonesia, because the research location was a group of

craftsmen who first started this craft business and was the largest in Riau Province, Indonesia. Although the first and the largest in Riau Province, Indonesia, they still have problems that deserve scrutiny from knowledge management factors, innovation to achieve a sustainable competitive advantage with indigenous product creativity as a mediating variable.

The qualifications for the length of service for the research sample in the woven industry business are those who have been active in this industry for more than three years. Of their educational background, as much as 56% have a bachelor's degree, 40% have a high school certificate and the rest are below the bachelor's and high school level. The data collection technique in this study relied on questionnaires to collect primary data. Besides that, the researchers also made direct observations at the research location. There are 65 questions in the test on the questionnaire—questions in the questionnaire regarding knowledge management, innovation, indigenous knowledge product creativity, and sustainable competitive advantage. Secondary data was obtained through literature review and documentation. Each question was scored using a 5-point Likert scale.

The validity and reliability in this study refer to the opinion [30] namely using a minimum validity index of 0.5 and a minimum reliability index of 0.6. Data analysis in this study used the PLS-SEM. The analysis tools in this study used the Structural Equation Modeling (SEM) method with PLS. Partial Least Square (PLS) analysis is used because PLS can be used without a solid theoretical basis, ignoring non-parametric assumptions and the accuracy of the prediction model parameters based on the value of the determinant coefficient (R-square), so PLS is very appropriate for research to develop theory [30].

4. RESEARCH RESULT

Convergent validity relates to the principle that the manifest variables of a construct should be highly correlated. Convergent validity with PLS software can be seen from the loading factor for each construct indicator. While to assess Convergent validity, the loading factor value must be more than 0.7, as well as the average extracted (AVE), and the communality value must be greater than 0.5, and the results are as follows following.

Table 1 shows loading factor provides information about the loading factor values for each manifest variable. The loading factor values of all indicators for the latent variables show >0.7, so the indicators are declared valid.

Table 1. Loading factor

Variable	Indicator	Loading Factor
KNOWLEDGE MANAGEMENT	KNOWLEDGE	0.880
	KOGNITIF	0.853
	TECHNIQUE	0.726
INOVATION	INOV1	0.756
	INOV2	0.787
	INOV3	0.864
INDIGENOUS PRODUCT CREATIVITY	IPC1	0.930
	IPC2	0.938
	IPC3	0.865
SUSTAINABLE COMPETITIVE ADVANTAGE	SCA1	0.957
	SCA2	0.936
	SCA3	0.928

SCA4	0.951
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Source: Data Processing, 2023

In Table 1 provides loading factor, it can be seen that the four latent variables have an AVE value that is greater than the specified value of 0.5. So that all variables are declared valid in explaining the latent variables, which indicates that the use of these manifest variables fulfills the AVE requirements. Therefore all manifest variables are declared to have met the requirements of convergent validity. Convergent validity is proven if the scores obtained by instruments that measure concepts or concepts with different methods have a high correlation.

Table 2. AVE and communalitiy

	Average Variance Extracted (AVE)
INOVATION	0.646
IPC	0.831
SCA	0.889
KM	0.676

Source: Data Processing, 2023

Table 2 shows the discriminant validity from the cross-loading factor with the construct and the comparison of AVE with the correlation of latent variables. If the correlation between the construct and the primary measurement (each indicator) is more significant than the other construct measures, then the variable is said to have high discriminant validity. The cross-loading value is presented as follows:

Table 3. Cross loading factor

	KM	INOVATION	IPC	SCA
KNOWLEDGE	0.880	0.326	0.475	0.382
KOGNITIF	0.853	0.160	0.454	0.416
TECHNIQUE	0.726	0.263	0.481	0.351
INOV1	0.247	0.756	0.519	0.369
INOV2	0.189	0.787	0.433	0.407
INOV3	0.288	0.864	0.591	0.378
IPC1	0.575	0.661	0.930	0.792
IPC2	0.567	0.595	0.938	0.644
IPC3	0.399	0.484	0.865	0.560
SCA1	0.523	0.452	0.736	0.957
SCA2	0.378	0.508	0.668	0.936
SCA3	0.440	0.423	0.702	0.928
SCA4	0.414	0.420	0.686	0.951

Source: Data Processing, 2023

Based on the PLS software results Table 3 shows cross-loading factor correlation value for each latent construct for the corresponding indicator is higher than the other constructs. So the indicators used to measure the latent variable meet the requirements. The reliability test in Partial Least Square (PLS) can use two methods, namely Composite Reliability (CR) and Cronbach's Alpha, which are presented as follows:

Table 4. Composite Reliability (CR) and Cronbach's Alpha

	Cronbach's Alpha	Composite Reliability
INNOVATION	0.724	0.845

Table 5. Path analysis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
MP -> IPC	0.415	0.420	0.148	2.815	0.005
INNOVATION -> IPC	0.519	0.513	0.138	3.768	0.000

IPC	0.899	0.937
SCA	0.958	0.970
KM	0.756	0.862

Source: Data Processing, 2023

The test results above show that the Composite Reliability (CR) value is more significant than 0.7, and the Cronbach Alpha value is greater than 0.6. It can be concluded that the data is reliable, indicating that all indicators consistently measure each variable.The hypothesis in this study was tested using path coefficient values and t-values to see whether there was a significant effect. In addition, the results of the path significance test also show the parameter coefficient values (original sample).

In this study, researchers used a confidence level of 95%. The path coefficient score indicated by the T-statistic value must be above 1.96 for the two-tailed hypothesis. Based on the Path Coefficient and T-Statistics in the table above, it can be explained as follows: that to test the hypothesis above, a t-value is used to see the effect of knowledge management on Indigenous Product Creativity with a t-value of 2.815; this value is more significant than 1.96 with a = 0.05, so it can be concluded that H1 is accepted, meaning that there is a significant influence of knowledge management on Indigenous Product Creativity. The knowledge management variable on Indigenous Product Creativity has an original sample of 0.415 with a positive direction meaning that the better the knowledge management, the Indigenous Product Creativity will also increase by 0.415.

Furthermore, the effect of knowledge management on sustainable competitive advantage is used t-value to see the effect of knowledge management on Sustainable Competitive Advantage with a t-value of 0.424; this value is smaller than 1.96 with a = 0.05. It can be concluded that H1 is rejected, meaning that knowledge management has no significant effect on Sustainable Competitive Advantage (SCA). The knowledge management variable on Sustainable Competitive Advantage has an original sample of 0.064 with a positive direction meaning that the better the knowledge management, the Sustainable Competitive Advantage will also increase by 0.064.

The effect of innovation on indigenous product creativity with a t-value of 3.768 is more significant than 1.96 with a = 0.05; H1 is accepted, meaning that innovation has a significant influence on Indigenous Product Creativity. The innovation variable on Indigenous Product Creativity has an original sample of 0.519 with a positive direction meaning that the better the innovation, the Indigenous Product Creativity will also increase by 0.519. Then for the t-value to see the effect of innovation on Sustainable Competitive Advantage with a t-value of 0.040, this value is smaller than 1.96 with a = 0.05. So H1 is rejected, meaning that innovation has no significant influence toward Sustainable Competitive Advantage. The innovation variable on Sustainable Competitive Advantage has an original sample of 0.006 with a positive direction meaning that the better the innovation, the Sustainable Competitive Advantage will also increase by 0.006.

IPC -> SCA	0.700	0.666	0.210	3.337	0.001
MP -> SCA	0.064	0.093	0.152	0.424	0.671
INNOVATION -> SCA	0.006	0.005	0.159	0.040	0.968
KM -> IPC -> SCA	0.291	0.267	0.109	2.661	0.008
INNOVATION -> IPC -> SCA	0.363	0.356	0.166	2.182	0.030

Source : Data Processing, 2023

Then the influence of indigenous product creativity on sustainable competitive advantage is seen with a t-value of 3.337; this value is more significant than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is accepted, meaning that Indigenous Product Creativity has a significant influence on Sustainable Competitive Advantage.

The Indigenous Product Creativity variable on Sustainable Competitive Advantage has an original sample of 0.700 with a positive direction meaning that the better the Indigenous Product Creativity, the Sustainable Competitive Advantage will also increase by 0.700.

While the influence of knowledge management on sustainable competitive advantage through indigenous product creativity is seen based on the provisions previously stated, where a t-count of 2.661 is obtained, this value is more significant than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is accepted, meaning there is a significant influence of knowledge management on Sustainable Competitive Advantage through Indigenous Product Creativity. The knowledge management variable on Sustainable Competitive Advantage through Indigenous Product Creativity has an original sample of 0.291 with a positive direction meaning that the better the knowledge management, the Sustainable Competitive Advantage through Indigenous Product Creativity will also increase by 0.291. Furthermore, looking at the effect of innovation on sustainable competitive advantage through indigenous product creativity, a t-count of 2.182 is obtained; this value is more significant than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is accepted, meaning that there is a significant influence of innovation on Sustainable Competitive Advantage through Indigenous Product Creativity. The innovation variable on Sustainable Competitive Advantage through Indigenous Product Creativity has an original sample of 0.363 with a positive direction meaning that the better the innovation, the Sustainable Competitive Advantage (KBB) through Indigenous Product Creativity will also increase by 0.363.

The R-square value can show the influence of the dependent variable. The following is the acquisition of the R-square value.

Table 6. R square

	R Square
IPC	0.572
SCA	0.552

Source: Data Processing, 2023

The value of the coefficient of determination (R-square) in the table above shows that in the first sub-structure, the R-square value for the Indigenous Product Creativity variable is 0.572. It shows that the Indigenous Product Creativity variable can be explained by 57.2% of knowledge management and innovation variables. In the second sub-structure, the R-square value for the Sustainable Competitive Advantage (KBB) variable is 0.552. It indicates that Sustainable Competitive Advantage (KBB) can be explained by 55.2% by the variable knowledge management, innovation, and Indigenous Product Creativity.

Q-square measures how well the model's observed values and the parameter estimates are produced. a Q-square value greater than 0 (zero) indicates that the model has a predictive relevance value. In contrast, a Q-square value less than 0 (zero) indicates that the model has no predictive relevance value. To calculate Q2, the following formula can be used:

$$Q2 = 1 - (1 - R12) (1 - R22)$$

$$Q2 = 1 - (1 - 0.572)(1 - 0.552)$$

$$Q2 = 0.808$$

The achieved Q2 value of 0.808 means that the Q2 value above zero provides evidence that the model has predictive relevance.

5. RESEARCH DISCUSSION

Researchers supporting the RBV argue that resources are critical for sustainable competitive advantage. These resources are referred to as strategic assets [31], core competencies, and Distinctive Competencies. Empirical findings in the field of sustainable competitive advantage for micro, small, and medium enterprises show that the ability to create competitiveness is determined by how far a company can manage its resources (stretched resources).

The capabilities of a company are unequal because it comes from the ownership of its resources in the form of tangible and intangible assets and the company's ability to use these assets. Companies experience commercial benefits from a proactive environment; their management invests additional resources in a more radical environment that will improve and exploit the environment as an opportunity.

Unfortunately, the experience of initiatives to support environments targeting small businesses may be willing to rely on resources but suggests that mutually beneficial savings can easily be achieved in a low-cost environment. Improvements only sometimes lead to reinvestment in environmental improvements or changes to organizational priorities. Companies sometimes make bigger, longer-term changes. Investing to achieve the higher benefits offered as wins requires a more radical transformation of business processes. Increasing environmental efficiency for sustainability is reflected in the principles of natural capitalism. Continuity and competitiveness about broader (or multiple rounds) learning are needed to bring about cultural change. Many believe that making a real difference toward more sustainable patterns is critical.

Building distinctive abilities and core competencies can be done through experience accumulation, clear articulation of knowledge, and a knowledge management process that starts from creating, acquiring, storing, and sharing that knowledge. Distinctive abilities that are difficult to imitate can be seen in how companies, business actors, and their employees can acquire, create, store, share, and disseminate. It is special knowledge to achieve sustainable competitive advantage when these capabilities are difficult to imitate [32, 33]. Knowledge can be the basis for sustainable competitive advantage if it is quickly disseminated within the company it

owns but not easily spread to other companies. The purpose of this statement is that knowledge that spreads slowly within the company remains the property of several people who are not from the company and has limited the company's ability to create value. Therefore knowledge as a strategic resource is essential to be managed optimally. Knowledge management helps increase company profits with communication that will increase mastery of knowledge through knowledge transfer. Transferring knowledge or knowledge sharing can support companies in carrying out their business processes, being ready to face problems, sharing experiences regarding all work-related matters, and developing company employees' knowledge and skills. The knowledge-sharing process helps identify, select, organize, disseminate, and transfer information and experiences that are part of the company [20].

Knowledge is considered a vital capital and asset for companies to manage because knowledge can improve business performance and create competitive advantage [34]. Knowledge is a sustainable source for companies to achieve competitive advantage. The main difference between information and knowledge is that knowledge lies in information, whereas knowledge is information that people use [35].

Sharing knowledge is essential to knowledge-based companies' competitiveness and competitive advantage [36]. It is a severe concern about company efforts to increase knowledge dissemination within Meso-level companies. Human resources have limitations in sharing knowledge even though they use the system. Knowledge sharing at the micro level is not only with other members of the company's employees but also with external parties such as customers. Many previous studies have assumed that employees are free to share knowledge to support the interests of an organization [37]. It relates from a shared perspective on knowledge implicitly embodied in Knowledge Base View (KBV), the assets available to firms, and their sustainable competitive advantages [32, 33]. Human resources play a significant role in enabling companies to produce and consume company assets. A company's contribution to knowledge-based resources is invaluable, rare, and only partially replicable.

Knowledge sharing is the accumulation of knowledge between different knowledge units within a company [38]. The critical factors for increasing knowledge-sharing activities are intrinsic and extrinsic incentives, social and organizational norms, organizational values, and leadership support [7, 39]. The use of knowledge is the application of shared knowledge through assimilation, part of organizational behavior and problem-solving processes is newly created knowledge [7]. Berry [40] concluded in his research that knowledge formation, knowledge transfer, use of knowledge, and knowledge productivity of employees are related to innovative behavior. Shujahat et al. [41] also concluded from their research results that the knowledge productivity of employees mediates the relationship between knowledge creation and innovation. The results also show that knowledge sharing has a significant impact on innovation. Kuncoro and Suriani [28] thought that innovation by companies only sometimes leads companies to achieve sustainable competitive advantage. It is because companies that have a sustainable competitive advantage if their potential competitors cannot imitate the product innovations produced, or competitors must carry out reconstructions that require a lot of capital and investment so that they cannot be

implemented.

6. CONCLUSION

This study concludes that knowledge management and innovation increase sustainable competitive advantage with indigenous product creativity as a mediating variable in the woven handicraft industry from waste palm oil stalks in Riau, Indonesia. Furthermore, knowledge management and innovation are fundamental to achieving sustainable competitive advantage based on indigenous product creativity. This study is an important research finding because previous research has failed to explain how company resources can provide added value differently than competitors. So this research contributes to the management literature on sustainable competitive advantage strategies, especially the resource-based view. The practical implication of this research is that business actors in the palm oil stem waste craft industry must pay more attention to their knowledge resources and the development of product innovation in indigenous product creativity. It is easy to achieve a sustainable competitive advantage to stand out.

It is necessary to improve their knowledge management and innovation capabilities by optimizing the availability of local resources based on indigenous product creativity. They can participate in more training and seminars and join a community of artisans with the same background to increase their knowledge and skills in product innovation. Apart from that, it is also essential for them to record better documentation of every business activity in the palm oil stick waste craft industry so that it can become information and knowledge documentation for others. Product heterogeneity is getting stronger with the characteristic value of authenticity based on the creativity of indigenous products seen from the motifs, symbols, and meanings produced. This new knowledge will result in more innovative product innovations that are unique, rare, not easily imitated, and not easily replaced to have an impact on sustainable competitiveness.

This study, still has limitations because it only uses two independent variables, namely knowledge management, and innovation, because many other independent variables can explain their influence on sustainable competitive advantage. In addition, this research was only conducted at one research location with a limited population so that in the future, it could be added to different research locations with the exact case to increase the population. Different characteristics may be found so that future research will be more likely to produce findings that can better explain the effect on sustainable competitive advantage.

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Sustainability Of Business Strategy Based On Indigenous Product Creativity In The Weaving Industry Of Palm Oil Waste In Riau, Indonesia

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ABSTRACT

This study analyzes knowledge management and innovation based on indigenous product creativity to achieve a sustainable competitive advantage. The unit of analysis in this study was the artisans of the woven handicraft industry from palm oil stem waste, totaling 50 respondents using a census sampling of the entire population. The analysis tool of this research uses SEM PLS. The results of this study indicate that knowledge management and innovation affect sustainable competitive advantage with indigenous product creativity as mediation in the woven handicraft industry from waste palm oil stems. The findings succeeded in filling the gap in previous research that the heterogeneity of company resources is getting higher to achieve sustainable competitive advantage due to the indigenous factor of creativity as a mediation that can provide added value different from competitors. This research implication contributes to developing strategic management science with a resource approach with empirical evidence that original product creativity is a substantial intermediary variable to achieve sustainable competitive advantage. The practical implication of this research is that business actors in the palm oil stem waste industry must pay more attention to their knowledge resources and product innovation on indigenous product creativity.

1. INTRODUCTION

The higher business competition requires companies to increase their competitiveness, not only superior but sustainable. Furthermore, the development of technology and information is a necessity that cannot be avoided in all countries in the current era of globalization. In addition, changes in market trends resulting from expectations of dynamic market needs and wants are also significant issues that must be addressed strategically. The potential of the company's resources is not automatically a determining factor for the company's strength if the company cannot create a unique value that is different from competitors. Previous studies have assessed the attractiveness of local products as less desirable due to a higher preference for imported products [1]. The challenge for the local craft industry is to have added value through the unique attractiveness of the product [2]. Previous research on innovation emphasized product creativity and minimal research emphasized innovation based on

native culture. Previous researchers have stated that products with an indigenous cultural background will produce higher emotional value for consumers [3][4], [5].

The growth of oil palm plantations and the volume of production in Indonesia continues to increase with the potential for the development of the downstream palm oil industry. It impacts the high amount of palm oil waste, including palm oil stick waste, but has yet to be used optimally. Rokan Hulu, Riau Province, with its downstream industry development potential, is one area still not optimally utilizing palm oil waste to become a superior creative product commodity with high economic value. So far, the abundance of palm oil stick waste is only burned and piled up as trash due to the limited ability to process it into innovative products with high economic value.

The problem is the limitations of managing knowledge in knowledge sharing practices in producing innovative palm oil stick waste handicraft products and product types that still need to be improved in achieving sustainable competitive

advantage. The problem of limited product innovation capabilities is due to a need for knowledge management of design, coloring, and packaging techniques, which still need to be more innovative. Therefore, a competitive strategy based on indigenous product creativity is needed, given the potential for high global market interest in unique local cultural products.

One study that seeks to overcome innovation constraints is that knowledge management will enable companies to detect new market opportunities quickly by emphasizing the importance of innovation [6], responsiveness to market needs for sustainable strategies [7]. Formalization undermines radical projects that should be managed informally to facilitate knowledge management in all company units [8][9]. The knowledge management process agreed upon by previous researchers includes knowledge, knowledge capturing, knowledge applying, and knowledge sharing with the design of knowledge transfer [10][11]. Furthermore, according to [12], knowledge management consists of tacit knowledge, explicit knowledge, and a technology base of knowledge management. Previous research supporting the resource-based theory (RBT) approach agrees that RBT as an acceptable theory supports knowledge capability resources as an essential resource for achieving sustainable competitive advantage, which then influences higher company performance [4]. However, previous studies have yet to explore more specifically what types of knowledge provide unique added value, so the level of transfer is not easy.

The company's ability to create unique value from scarce resources, not easily imitated, and there are no substitutes, requires innovation skills. However, so far, many companies still view innovation only as a domain for newcomers. The strategic management approach shows that the competition will crush companies that do not actively implement strategic management and stay silent. Sustainable Competitive advantage was first presented in an article [13] which has the premise that resources are rare or of unique value, rare, not easily imitated, and there are no substitutes that the company must own. So that it will be easier to achieve sustainable competitive advantage and improve performance, the resources owned by the company will be highly heterogeneous. Previous research presents RBV as a perspective providing reasons for how a company's human resources can provide a potential source of sustainable competitive advantage [14]. Because of causal ambiguity, it is challenging to imitate, producing a value competitors cannot quickly obtain [13]. Resources owned have value, are rare, and are not easily replaced but are easy to imitate, so it will take much work for the company to achieve good sustainability. A solution that can be done is to grant patents on compatibility [15]. When combined with an imperfect level of mobility, Heterogeneous resources will achieve a competitive advantage because there are differences in profitability among other competitors. If resources are distributed homogeneously, then all organizations in the

industry have the same strength and implement the same strategy [15][16][17].

The development of research on sustainable competitive advantage is increasingly contextual, and the progress of communication and information currently has an impact on the emergence of a new variant in the study of sustainable competitive advantage. Namely, a strategic approach based on knowledge-based system resources based on a local cultural approach. Nevertheless, all the articles included using only the keywords sustainable competitive advantage and knowledge management. The study shows a vast quantity gap between publications of studies on sustainable competitive advantage in a general and sustainable competitive advantage based on knowledge-based system resources. It becomes the basis for the authors to explore the publication of sustainable competitive advantage with a variant of the knowledge-based system (knowledge management) resource approach and innovation as an industrial approach strategy to excel in competing in the global market through indigenous product creativity.

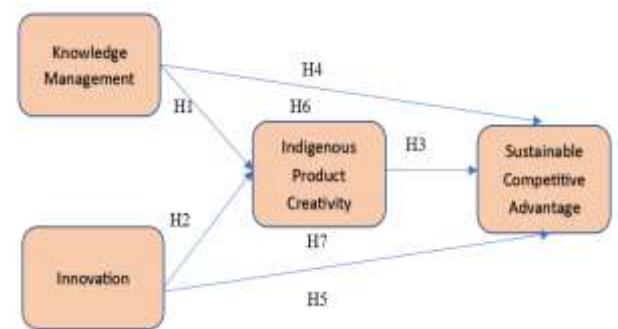


Figure 1. Research Framework

2. LITERATURE REVIEW

Sources of competitive advantage can be seen in skills and resources. The skills in question are technical, managerial, and operational capabilities. Competitive advantage analysis shows the differences and uniqueness among competitors. Unique companies will be able to maintain a competitive advantage and have a high impact on company performance [18]. Sustainable competitive advantage can come from different activities carried out by companies, such as making business designs, production, marketing, and distribution. This form of activity can make it easier for a company to derive its relative cost position and create a basis for establishing differentiation. Lower costs allow the company to provide customers with more value than competing companies.

Meanwhile, according to [19][20][20], to get an alternative strategy that can be applied to Micro and Small Enterprises is to use internal and external factors. Internal factors include marketing, production, human resources, and finance. External factors include socioeconomic conditions, technology, buyers, and competitors. Companies must look at

internal perspectives in global business competition apart from paying attention to industrial structure. It is done by carefully examining the resources owned and how to combine them to gain core competencies and competitive advantages. Driving growth. Strategy is a significant thing about an organization's ability to stretch to fulfill dreams. It requires planning and sincerity to run a business by continuing to increase its resources [21].

Knowledge management consists of three functions: knowledge generation, storage, and sharing. Knowledge generation consists of innovation, and knowledge accumulation consists of accumulating new knowledge and combining new knowledge with old knowledge. Knowledge sharing enables the dissemination of skills, experience and knowledge within an organization. Building transparent and unique core skills and competencies can occur through a knowledge management process that begins with gathering experience, clarifying the clarity of knowledge, and creating, acquiring, storing, and sharing that knowledge. Unique skills that are difficult to imitate are reflected in how businesses, employers, and employees can acquire, create, store, share and disseminate these skills. Hence, a sustainable competitive advantage can be achieved when it is challenging to imitate these skills [22].

Knowledge can be the basis of a sustainable competitive advantage if it can be quickly disseminated within the firm that owns it but not easily transferred to other firms. This declaration intends that knowledge that cannot be quickly disseminated within a company belongs to many people who do not belong to the company. As a result, the ability to create value for the company is limited. The Knowledge Base View (KBV) approach assumes that companies are business entities capable of creating, integrating, and distributing knowledge. The functionality created by the KBV approach is based on something other than tangible resources, such as physical or financial resources. KBV analysis includes human resources, social and organizational resources, and other organizational resources such as technical and economic resources [23].

The knowledge-Based View approach is closely related to the RBV in that knowledge is a strategic resource to achieve a sustainable competitive advantage [24]. Knowledge management is a management tool for rapid growth. Company employees can move to new companies and start using that knowledge. Only the constantly learning company will gain a competitive advantage compared to competitors in the market [25]. Different stakeholders need to know how best to serve consumers. The corporate culture needs to change and foster attribution and collaboration among employees. Technology and infrastructure are the driving force to beat the competition.

Companies use the knowledge and disseminate it everywhere, including the internet, databases, documents, e-mail, podcasts, and websites. Companies can also conduct video conferencing and social networking forums. This media is used to share knowledge. On the one hand, many things can be learned from the literature on success stories elsewhere.

Further research is needed to determine its effectiveness. Organizations are a way to protect intellectual capital and strengthen and maintain a company's competitive advantage [25].

Many researchers have researched the importance of innovation in small industries. Innovation is a performance factor; innovation positively impacts the performance of high-tech and low-tech industries [26]. [26] shown survey results in Romanian small industries show that most small industries are considering learning-oriented organizational culture. The innovation process in small industries relies on internal and external learning resources. Best practices for internal learning resources for small industry cases in Romania are represented by networking with companies and external partners as internal learning resources for small businesses.

Market changes, technology changes, and expert and consultant support are the reported external sources of learning. The survey results also show that most small industries tend to innovate. Especially in terms of business models and the main obstacles they face. Due to the lack of funds and the high costs they face. They are identifying the most common barriers to innovation presented by small industries in Romania as a starting point for setting future directions breaking through barriers one by one. To support innovation activities and results. This survey's concrete results are linked to similar surveys of small industries in other countries. It can form the basis of recommendations and initiatives to consider aspects of a particular innovation.

However, it is essential to make this comparison based on the current small industry situation as a national development framework. More recommended based on survey results considering carefully the need for innovation for small industries, especially related to barriers to certain types of innovation. Another possible direction for future research would be to consider the primary factors that small industries consider when a company selects and implements a particular type of innovation that can be applied as a basis for developing an innovation model at the corporate level.

Previous research by [27] said innovation affects sustainable competitive advantage. However, the results of this study do not show that innovation has a significant effect on sustainable competitive advantage. The results of this study align with the thoughts of [28] that innovations carried out by companies only sometimes lead companies to achieve sustainable competitive advantage. It is because a company has a sustainable competitive advantage if its potential competitors cannot imitate the product innovations it produces or competitors have to carry out reconstruction that requires a lot of capital and investment so that competitors cannot do it.

3. RESEARCH METHODS

This study uses a quantitative descriptive method. The sample of this research is 50 business actors who are also craftsmen of the woven industry from palm oil stick waste in Rokan Hulu downstream district, Riau, Indonesia. They are

members of a group of craftsmen woven from palm oil stick waste in Rokan Hulu Downstream district, Riau, Indonesia. This sample was taken as a whole from the entire existing population using census sampling. Census sampling was used in this study because the population was considered small or less than 100 [29]. The research location was determined in the palm oil stem waste craft business in Rokan Hulu, Riau, Indonesia, because the research location was a group of craftsmen who first started this craft business and was the largest in Riau Province, Indonesia. Although the first and the largest in Riau Province, Indonesia, they still have problems that deserve scrutiny from knowledge management factors, innovation to achieve a sustainable competitive advantage with indigenous product creativity as a mediating variable.

The qualifications for the length of service for the research sample in the woven industry business are those who have been active in this industry for more than three years. Of their educational background, as much as 56% have a bachelor's degree, 40% have a high school certificate and the rest are below the bachelor's and high school level. The data collection technique in this study relied on questionnaires to collect primary data. Besides that, the researchers also made direct observations at the research location. There are 65 questions in the test on the questionnaire—questions in the questionnaire regarding knowledge management, innovation, indigenous knowledge product creativity, and sustainable competitive advantage. Secondary data was obtained through literature review and documentation. Each question was scored using a 5-point Likert scale.

The validity and reliability in this study refer to the opinion [30] namely using a minimum validity index of 0.5 and a minimum reliability index of 0.6. Data analysis in this study used the PLS-SEM. The analysis tools in this study used the Structural Equation Modeling (SEM) method with PLS. Partial Least Square (PLS) analysis is used because, according to [30] PLS can be used without a solid theoretical basis, ignoring non-parametric assumptions and the accuracy of the prediction model parameters based on the value of the determinant coefficient (R-square), so PLS is very appropriate for research to develop theory.

4. RESEARCH RESULT

Convergent validity relates to the principle that the manifest variables of a construct should be highly correlated. Convergent validity with PLS software can be seen from the loading factor for each construct indicator. While to assess Convergent validity, the loading factor value must be more than 0.7, as well as the average extracted (AVE), and the communality value must be greater than 0.5, and the results are as follows following.

Table 1. Loading Factor

Variable	Indicator	Loading Factor
KNOWLEDGE MANAGEMENT	KNOWLEDGE	0.880
	KOGNITIF	0.853
	TECHNIQUE	0.726
INOVATION	INOV1	0.756
	INOV2	0.787
	INOV3	0.864
INDIGENOUS PRODUCT CREATIVITY	IPC1	0.930
	IPC2	0.938
	IPC3	0.865
SUSTAINABLE COMPETITIVE ADVANTAGE	SCA1	0.957
	SCA2	0.936
	SCA3	0.928
	SCA4	0.951

Source : Data Processing, 2023

The table above provides information about the loading factor values for each manifest variable. The loading factor values of all indicators for the latent variables show >0.7, so the indicators are declared valid.

Table 2. AVE and Communality

	Average Variance Extracted (AVE)
INOVATION	0.646
IPC	0.831
SCA	0.889
KM	0.676

Source: Data Processing, 2023

In the table above, it can be seen that the four latent variables have an AVE value that is greater than the specified value of 0.5. So that all variables are declared valid in explaining the latent variables, which indicates that the use of these manifest variables fulfills the AVE requirements. Therefore all manifest variables are declared to have met the requirements of convergent validity. Convergent validity is proven if the scores obtained by instruments that measure concepts or concepts with different methods have a high correlation.

Discriminant Validity can be seen from the cross-loading factor with the construct and the comparison of AVE with the correlation of latent variables. If the correlation between the construct and the primary measurement (each indicator) is more significant than the other construct measures, then the

variable is said to have high discriminant validity. The cross-loading value is presented as follows:

Table 3. Cross Loading Factor

	KM	INOVATION	IPC	SCA
KNOWLEDGE	0.880	0.326	0.475	0.382
KOGNITIF	0.853	0.160	0.454	0.416
TECHNIQUE	0.726	0.263	0.481	0.351
INOV1	0.247	0.756	0.519	0.369
INOV2	0.189	0.787	0.433	0.407
INOV3	0.288	0.864	0.591	0.378
IPC1	0.575	0.661	0.930	0.792
IPC2	0.567	0.595	0.938	0.644
IPC3	0.399	0.484	0.865	0.560
SCA1	0.523	0.452	0.736	0.957
SCA2	0.378	0.508	0.668	0.936
SCA3	0.440	0.423	0.702	0.928
SCA4	0.414	0.420	0.686	0.951

Source: Data Processing, 2023

Based on the PLS software results table above, it can be seen that the cross-loading factor correlation value for each latent construct for the corresponding indicator is higher than the other constructs. So the indicators used to measure the latent variable meet the requirements. The reliability test in Partial Least Square (PLS) can use two methods, namely Composite Reliability (CR) and Cronbach's Alpha, which are presented as follows:

Table 4. Composite Reliability (CR) and Cronbach's Alpha

	Cronbach's Alpha	Composite Reliability
INNOVATION	0.724	0.845
IPC	0.899	0.937
SCA	0.958	0.970
KM	0.756	0.862

Source: Data Processing, 2023

The test results above show that the Composite Reliability (CR) value is more significant than 0.7, and the Cronbach Alpha value is greater than 0.6. It can be concluded that the data is reliable, indicating that all indicators consistently measure each variable. The hypothesis in this study was tested using path coefficient values and t-values to see whether there was a significant effect. In addition, the results of the path significance test also show the parameter coefficient values (original sample).

In this study, researchers used a confidence level of 95%. The path coefficient score indicated by the T-statistic value must be above 1.96 for the two-tailed hypothesis. Based on the Path Coefficient and T-Statistics in the table above, it can be explained as follows: that to test the hypothesis above, a t-value is used to see the effect of knowledge management on Indigenous Product Creativity with a t-value of 2.815; this value is more significant than 1.96 with a = 0.05, so it can be concluded that H1 is accepted, meaning that there is a significant influence of knowledge management on Indigenous Product Creativity. The knowledge management variable on Indigenous Product Creativity has an original sample of 0.415 with a positive direction meaning that the better the knowledge management, the Indigenous Product Creativity will also increase by 0.415.

Table 5. Path Analysis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
MP -> IPC	0.415	0.420	0.148	2.815	0.005
INNOVATION -> IPC	0.519	0.513	0.138	3.768	0.000
IPC -> SCA	0.700	0.666	0.210	3.337	0.001
MP -> SCA	0.064	0.093	0.152	0.424	0.671
INNOVATION -> SCA	0.006	0.005	0.159	0.040	0.968
KM -> IPC -> SCA	0.291	0.267	0.109	2.661	0.008
INNOVATION -> IPC -> SCA	0.363	0.356	0.166	2.182	0.030

Processing, 2023

Furthermore, the effect of knowledge management on sustainable competitive advantage is used t-value to see the effect of knowledge management on Sustainable Competitive Advantage with a t-value of 0.424; this value is smaller than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is rejected, meaning that knowledge management has no significant effect on Sustainable Competitive Advantage (SCA). The knowledge management variable on Sustainable Competitive Advantage has an original sample of 0.064 with a positive direction meaning that the better the knowledge management, the Sustainable Competitive Advantage will also increase by 0.064.

The effect of innovation on indigenous product creativity with a t-value of 3.768 is more significant than 1.96 with $\alpha = 0.05$; H1 is accepted, meaning that innovation has a significant influence on Indigenous Product Creativity. The innovation variable on Indigenous Product Creativity has an original sample of 0.519 with a positive direction meaning that the better the innovation, the Indigenous Product Creativity will also increase by 0.519. Then for the t-value to see the effect of

innovation on Sustainable Competitive Advantage with a t-value of 0.040, this value is smaller than 1.96 with $\alpha = 0.05$. So H1 is rejected, meaning that innovation has no significant influence toward Sustainable Competitive Advantage. The innovation variable on Sustainable Competitive Advantage has an original sample of 0.006 with a positive direction meaning that the better the innovation, the Sustainable Competitive Advantage will also increase by 0.006.

Then the influence of indigenous product creativity on sustainable competitive advantage is seen with a t-value of 3.337; this value is more significant than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is accepted, meaning that Indigenous Product Creativity has a

significant influence on Sustainable Competitive Advantage.

The Indigenous Product Creativity variable on Sustainable Competitive Advantage has an original sample of 0.700 with a positive direction meaning that the better the Indigenous Product Creativity, the Sustainable Competitive Advantage will also increase by 0.700.

While the influence of knowledge management on sustainable competitive advantage through indigenous product creativity is seen based on the provisions previously stated, where a t-count of 2.661 is obtained, this value is more significant than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is accepted, meaning there is a significant influence of knowledge management on Sustainable Competitive Advantage through Indigenous Product Creativity. The knowledge management variable on Sustainable Competitive Advantage through Indigenous Product Creativity has an original sample of 0.291 with a positive direction meaning that the better the knowledge management, the Sustainable Competitive Advantage through Indigenous Product Creativity will also increase by 0.291. Furthermore, looking at the effect of innovation on sustainable competitive advantage through indigenous product creativity, a t-count of 2.182 is obtained; this value is more significant than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is accepted, meaning that there is a significant influence of innovation on Sustainable Competitive Advantage through Indigenous Product Creativity. The innovation variable on Sustainable Competitive Advantage through Indigenous Product Creativity has an original sample of 0.363 with a positive direction meaning that the better the innovation, the Sustainable Competitive Advantage (KBB) through Indigenous Product Creativity will also increase by 0.363.

The R-square value can show the influence of the dependent variable. The following is the acquisition of the R-square value.

Table 6. R Square	
	R Square
IPC	0.572
SCA	0.552

Source: Data Processing, 2023

The value of the coefficient of determination (R-square) in the table above shows that in the first sub-structure, the R-square value for the Indigenous Product Creativity variable is

0.572. It shows that the Indigenous Product Creativity variable can be explained by 57.2% of knowledge management and innovation variables. In the second sub-structure, the R-square value for the Sustainable Competitive Advantage (KBB) variable is 0.552. It indicates that Sustainable Competitive Advantage (KBB) can be explained by 55.2% by the variable knowledge management, innovation, and Indigenous Product Creativity.

Q-square measures how well the model's observed values and the parameter estimates are produced. a Q-square value greater than 0 (zero) indicates that the model has a predictive relevance value. In contrast, a Q-square value less than 0 (zero) indicates that the model has no predictive relevance value. To calculate Q2, the following formula can be used:

$$Q2 = 1 - (1 - R^2_1) (1 - R^2_2)$$

$$Q2 = 1 - (1 - 0.572)(1 - 0.552)$$

$$Q2 = 0.808$$

The achieved Q2 value of 0.808 means that the Q2 value above zero provides evidence that the model has predictive relevance.

5. RESEARCH DISCUSSION

Researchers supporting the RBV argue that resources are critical for sustainable competitive advantage. These resources are referred to as strategic assets[31], core competencies, and Distinctive Competencies. Empirical findings in the field of sustainable competitive advantage for micro, small, and medium enterprises show that the ability to create competitiveness is determined by how far a company can manage its resources (stretched resources).

The capabilities of a company are unequal because it comes from the ownership of its resources in the form of tangible and intangible assets and the company's ability to use these assets. Companies experience commercial benefits from a proactive environment; their management invests additional resources in a more radical environment that will improve and exploit the environment as an opportunity.

Unfortunately, the experience of initiatives to support environments targeting small businesses may be willing to rely on resources but suggests that mutually beneficial savings can easily be achieved in a low-cost environment. Improvements only sometimes lead to reinvestment in environmental improvements or changes to organizational priorities. Companies sometimes make bigger, longer-term changes. Investing to achieve the higher benefits offered as wins requires a more radical transformation of business processes. Increasing environmental efficiency for sustainability is reflected in the principles of natural capitalism. Continuity and competitiveness about broader (or multiple rounds) learning are needed to bring about cultural change. Many believe that making a real difference toward more sustainable patterns is critical.

Building distinctive abilities and core competencies can be done through experience accumulation, clear articulation of knowledge, and a knowledge management process that starts from creating, acquiring, storing, and sharing that knowledge.

Distinctive abilities that are difficult to imitate can be seen in how companies, business actors, and their employees can acquire, create, store, share, and disseminate. It is special knowledge to achieve sustainable competitive advantage when these capabilities are difficult to imitate [32][33]. Knowledge can be the basis for sustainable competitive advantage if it is quickly disseminated within the company it owns but not easily spread to other companies. The purpose of this statement is that knowledge that spreads slowly within the company remains the property of several people who are not from the company and has limited the company's ability to create value. Therefore knowledge as a strategic resource is essential to be managed optimally. Knowledge management helps increase company profits with communication that will increase mastery of knowledge through knowledge transfer. Transferring knowledge or knowledge sharing can support companies in carrying out their business processes, being ready to face problems, sharing experiences regarding all work-related matters, and developing company employees' knowledge and skills. The knowledge-sharing process helps identify, select, organize, disseminate, and transfer information and experiences that are part of the company [20].

Knowledge is considered a vital capital and asset for companies to manage because knowledge can improve business performance and create competitive advantage [34]. Knowledge is a sustainable source for companies to achieve competitive advantage. The main difference between information and knowledge is that knowledge lies in information, whereas knowledge is information that people use [35].

Sharing knowledge is essential to knowledge-based companies' competitiveness and competitive advantage [36]. It is a severe concern about company efforts to increase knowledge dissemination within Meso-level companies. Human resources have limitations in sharing knowledge even though they use the system. Knowledge sharing at the micro level is not only with other members of the company's employees but also with external parties such as customers. Many previous studies have assumed that employees are free to share knowledge to support the interests of an organization [37]. It relates from a shared perspective on knowledge implicitly embodied in Knowledge Base View (KBV), the assets available to firms, and their sustainable competitive advantages [32][33]. Human resources play a significant role in enabling companies to produce and consume company assets. A company's contribution to knowledge-based resources is invaluable, rare, and only partially replicable.

Knowledge sharing is the accumulation of knowledge between different knowledge units within a company [38]. The critical factors for increasing knowledge-sharing activities are intrinsic and extrinsic incentives, social and organizational norms, organizational values, and leadership support [7][39]. The use of knowledge is the application of shared knowledge through assimilation, part of organizational behavior and problem-solving processes is newly created

knowledge [7]. [40] concluded in his research that knowledge formation, knowledge transfer, use of knowledge, and knowledge productivity of employees are related to innovative behavior. [41] also concluded from their research results that the knowledge productivity of employees mediates the relationship between knowledge creation and innovation. The results also show that knowledge sharing has a significant impact on innovation. [28] thought that innovation by companies only sometimes leads companies to achieve sustainable competitive advantage. It is because companies that have a sustainable competitive advantage if their potential competitors cannot imitate the product innovations produced, or competitors must carry out reconstructions that require a lot of capital and investment so that they cannot be implemented.

6. CONCLUSION

This study concludes that knowledge management and innovation increase sustainable competitive advantage with indigenous product creativity as a mediating variable in the woven handicraft industry from waste palm oil stalks in Riau, Indonesia. Furthermore, knowledge management and innovation are fundamental to achieving sustainable competitive advantage based on indigenous product creativity. This study is an important research finding because previous research has failed to explain how company resources can provide added value differently than competitors. So this research contributes to the management literature on sustainable competitive advantage strategies, especially the resource-based view. The practical implication of this research is that business actors in the palm oil stem waste craft industry must pay more attention to their knowledge resources and the development of product innovation in indigenous product creativity. It is easy to achieve a sustainable competitive advantage to stand out.

It is necessary to improve their knowledge management and innovation capabilities by optimizing the availability of local resources based on indigenous product creativity. They can participate in more training and seminars and join a community of artisans with the same background to increase their knowledge and skills in product innovation. Apart from that, it is also essential for them to record better documentation of every business activity in the palm oil stick waste craft industry so that it can become information and knowledge documentation for others. Product heterogeneity is getting stronger with the characteristic value of authenticity based on the creativity of indigenous products seen from the motifs, symbols, and meanings produced. This new knowledge will result in more innovative product innovations that are unique, rare, not easily imitated, and not easily replaced to have an impact on sustainable competitiveness.

This study, still has limitations because it only uses two independent variables, namely knowledge management, and innovation, because many other independent variables can explain their influence on sustainable competitive advantage. In addition, this research was only conducted at one research

location with a limited population so that in the future, it could be added to different research locations with the exact case to increase the population. Different characteristics may be found so that future research will be more likely to produce findings that can better explain the effect on sustainable competitive advantage.

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Sustainability of Business Strategy Based on Indigenous Product Creativity in the Weaving Industry of Palm Oil Waste in Riau, Indonesia

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ABSTRACT

Available online:

Keywords:

*knowledge management, innovation,
indigenous, sustainability*

This study analyzes knowledge management and innovation based on indigenous product creativity to achieve a sustainable competitive advantage. The unit of analysis in this study was the artisans of the woven handicraft industry from palm oil stem waste, totaling 50 respondents using a census sampling of the entire population. The analysis tool of this research uses SEM PLS. The results of this study indicate that knowledge management and innovation affect sustainable competitive advantage with indigenous product creativity as mediation in the woven handicraft industry from waste palm oil stems. The findings succeeded in filling the gap in previous research that the heterogeneity of company resources is getting higher to achieve sustainable competitive advantage due to the indigenous factor of creativity as a mediation that can provide added value different from competitors. This research implication contributes to developing strategic management science with a resource approach with empirical evidence that original product creativity is a substantial intermediary variable to achieve sustainable competitive advantage. The practical implication of this research is that business actors in the palm oil stem waste industry must pay more attention to their knowledge resources and product innovation on indigenous product creativity.

1. INTRODUCTION

The increasing business competition, companies are required to enhance their competitiveness in a sustainable manner. The rapid development of technology and information is a significant factor in this globalized era and cannot be ignored. Market trends also change due to dynamic customer needs and wants, presenting strategic challenges that must be addressed. A company's resources alone cannot determine its strength unless it can create unique value that sets it apart from competitors.

Previous studies have shown a preference for imported products over local ones, suggesting that local products are less desirable [1]. This challenges the local craft industry to add value through unique product appeal [2]. While past research on innovation has emphasized product creativity, there has been little focus on innovation based on indigenous culture. However, it has been suggested that products with an indigenous cultural background can generate higher emotional value for consumers [3-5].

The expansion of oil palm plantations and increased production volume in Indonesia have led to a surge in palm oil waste, including palm oil stick waste. This waste is not being utilized optimally despite its potential. In areas like Rokan Hulu, Riau Province, the waste is often burned or discarded, despite the potential for it to be transformed into valuable commodity products.

The primary hurdle lies in the limitations of knowledge management practices and the need for improved product

types to achieve sustainable competitive advantage. The limited capability for product innovation stems from a lack of knowledge management in design, coloring, and packaging techniques. As such, there is a need for strategies that focus on indigenous product creativity, considering the global market's high interest in unique local cultural products. These strategies could turn palm oil stick waste into innovative products with high economic value, thereby solving waste and competitiveness issues.

Knowledge management is crucial in enabling companies to detect new market opportunities quickly and drive innovation [6]. It also fosters market responsiveness, facilitating sustainable strategies [7]. However, formalization could hinder radical projects which should be managed informally to facilitate knowledge management across all company units [8, 9]. The knowledge management process consists of acquiring, applying, and sharing knowledge and designing knowledge transfer [10, 11]. This process incorporates tacit knowledge, explicit knowledge, and a technology base [12]. The resource-based theory (RBT) supports the notion that knowledge capability resources are essential for achieving sustainable competitive advantage and improving company performance [4]. However, what remains unclear is the specific types of knowledge that provide unique added value and are challenging to transfer.

Creating unique value from scarce resources that are not easily imitated and have no substitutes requires innovative skills. Unfortunately, many companies still view innovation as a domain for newcomers. The strategic management

approach suggests that companies that do not actively implement strategic management and remain passive will be overtaken by competition.

The concept of sustainable competitive advantage was introduced in an article [13], which posits that companies should possess resources that are rare, valuable, and not easily imitated or substituted. A company's human resources can provide a potential source of sustainable competitive advantage [14]. Despite being valuable, rare, and not easily replaced, resources that are easy to imitate bring challenges to achieving sustainability. Patenting could be a solution to this issue [15].

Moreover, heterogeneous resources, combined with imperfect mobility, will achieve a competitive advantage due to the differences in profitability among competitors. If resources are distributed homogeneously, all organizations in the industry will have the same strength and implement the same strategy [15-17].

Research on sustainable competitive advantage is evolving, with recent advancements in communication and information technology leading to new approaches. One such approach centers on knowledge-based system resources with a focus on local cultural elements. However, current literature predominantly uses only the keywords 'sustainable competitive advantage' and 'knowledge management', indicating a significant gap in studies that incorporate knowledge-based system resources into sustainable competitive advantage.

This disparity underlines the need for more exploration into the integration of knowledge management and innovation within the context of sustainable competitive advantage. Specifically, there is a need to study how indigenous product creativity can be leveraged as a strategic approach in the global market. This approach can offer a new perspective on achieving superiority in global competition through cultivating and utilizing knowledge-based system resources. Figure 1 shows research framework which describes research model.

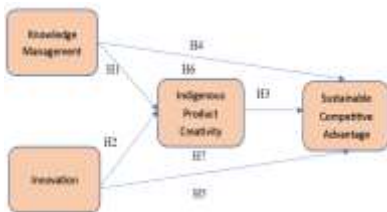


Figure 1. Research framework

2. LITERATURE REVIEW

Competitive advantage originates from a company's skills and resources, including technical, managerial, and operational capabilities. The uniqueness and differences among competitors revealed through competitive advantage analysis enable companies to maintain their advantage, significantly impacting performance [18]. Activities such as business design, production, marketing, and distribution can create a sustainable competitive advantage by facilitating a company's relative cost position and establishing a basis for differentiation. Lower costs allow a company to offer more

value to customers than its competitors can.

Micro and Small Enterprises can develop alternative strategies by leveraging both internal and external factors [19, 20]. Internal factors include marketing, production, human resources, and finance, while external ones encompass socioeconomic conditions, technology, buyers, and competitors. In the global business competition, companies need to focus on internal perspectives in addition to industrial structure, carefully examining and combining their resources to gain core competencies and competitive advantages.

Strategy plays a significant role in an organization's ability to stretch and fulfill its aspirations. It demands careful planning and commitment to continuously enhance its resources [21].

Knowledge management encompasses three primary functions: knowledge generation, storage, and sharing. Knowledge generation includes innovation and accumulation of new knowledge, which is then combined with existing knowledge. Knowledge sharing allows the dissemination of skills, experiences, and knowledge within an organization.

A knowledge management process that involves gathering experiences, clarifying knowledge, and creating, acquiring, storing, and sharing that knowledge can lead to the development of unique core skills and competencies. These unique skills, which businesses, employers, and employees acquire, create, store, share, and disseminate, are difficult to imitate. Consequently, a sustainable competitive advantage can be achieved when these skills are challenging to replicate [22].

Knowledge can be the basis of a sustainable competitive advantage if it can be quickly disseminated within the firm that owns it but not easily transferred to other firms. This declaration intends that knowledge that cannot be quickly disseminated within a company belongs to many people who do not belong to the company. As a result, the ability to create value for the company is limited. The Knowledge Base View (KBV) approach assumes that companies are business entities capable of creating, integrating, and distributing knowledge. The functionality created by the KBV approach is based on something other than tangible resources, such as physical or financial resources. KBV analysis includes human resources, social and organizational resources, and other organizational resources such as technical and economic resources [23].

The knowledge-Based View approach is closely related to the RBV in that knowledge is a strategic resource to achieve a sustainable competitive advantage [24]. Knowledge management is a management tool for rapid growth. Company employees can move to new companies and start using that knowledge. Only the constantly learning company will gain a competitive advantage compared to competitors in the market [25]. Different stakeholders need to know how best to serve consumers. The corporate culture needs to change and foster attribution and collaboration among employees. Technology and infrastructure are the driving force to beat the competition.

Companies use the knowledge and disseminate it everywhere, including the internet, databases, documents, e-mail, podcasts, and websites. Companies can also conduct video conferencing and social networking forums. This media is used to share knowledge. On the one hand, many things can be learned from the literature on success stories elsewhere. Further research is needed to determine its

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effectiveness. Organizations are a way to protect intellectual capital and strengthen and maintain a company's competitive advantage [25].

Many researchers have researched the importance of innovation in small industries. Innovation is a performance factor; innovation positively impacts the performance of high-tech and low-tech industries [26]. Survey results from small industries in Romania indicate that most of these businesses are considering adopting a learning-oriented organizational culture [26]. The innovation process in small industries relies on internal and external learning resources. Best practices for internal learning resources for small industry cases in Romania are represented by networking with companies and external partners as internal learning resources for small businesses.

Market changes, technology changes, and expert and consultant support are the reported external sources of learning. The survey results also show that most small industries tend to innovate. Especially in terms of business models and the main obstacles they face. Due to the lack of funds and the high costs they face. They are identifying the most common barriers to innovation presented by small industries in Romania as a starting point for setting future directions breaking through barriers one by one To support innovation activities and results. This survey's concrete results are linked to similar surveys of small industries in other countries. It can form the basis of recommendations and initiatives to consider aspects of a particular innovation.

However, it is essential to make this comparison based on the current small industry situation as a national development framework. More recommended based on survey results considering carefully the need for innovation for small industries, especially related to barriers to certain types of innovation. Another possible direction for future research would be to consider the primary factors that small industries consider when a company selects and implements a particular type of innovation that can be applied as a basis for developing an innovation model at the corporate level.

Previous research suggests that innovation influences sustainable competitive advantage [27]. However, this study's findings do not indicate a significant impact of innovation on sustainable competitive advantage. These results align with the viewpoint [28], suggesting that only sometimes do companies' innovations lead to a sustainable competitive advantage. It is because a company has a sustainable competitive advantage if its potential competitors cannot imitate the product innovations it produces or competitors have to carry out reconstruction that requires a lot of capital and investment so that competitors cannot do it.

3. RESEARCH METHODS

This study uses a quantitative descriptive method. The sample of this research is 50 business actors who are also craftsmen of the woven industry from palm oil stick waste in Rokan Hulu downstream district, Riau, Indonesia. They are members of a group of craftsmen woven from palm oil stick waste in Rokan Hulu Downstream district, Riau, Indonesia. This sample was taken as a whole from the entire existing population using census sampling. Census sampling was used in this study because the population was considered small or less than 100 [29]. The research location was determined in the palm oil stem waste craft business in Rokan Hulu, Riau, Indonesia, because the research location was a group of

craftsmen who first started this craft business and was the largest in Riau Province, Indonesia. Although the first and the largest in Riau Province, Indonesia, they still have problems that deserve scrutiny from knowledge management factors, innovation to achieve a sustainable competitive advantage with indigenous product creativity as a mediating variable.

The qualifications for the length of service for the research sample in the woven industry business are those who have been active in this industry for more than three years. Of their educational background, as much as 56% have a bachelor's degree, 40% have a high school certificate and the rest are below the bachelor's and high school level. The data collection technique in this study relied on questionnaires to collect primary data. Besides that, the researchers also made direct observations at the research location. There are 65 questions in the test on the questionnaire—questions in the questionnaire regarding knowledge management, innovation, indigenous knowledge product creativity, and sustainable competitive advantage. Secondary data was obtained through literature review and documentation. Each question was scored using a 5-point Likert scale.

The validity and reliability in this study refer to the opinion [30] namely using a minimum validity index of 0.5 and a minimum reliability index of 0.6. Data analysis in this study used the PLS-SEM. The analysis tools in this study used the Structural Equation Modeling (SEM) method with PLS. Partial Least Square (PLS) analysis is used because PLS can be used without a solid theoretical basis, ignoring non-parametric assumptions and the accuracy of the prediction model parameters based on the value of the determinant coefficient (R-square), so PLS is very appropriate for research to develop theory [30].

4. RESEARCH RESULT

Convergent validity relates to the principle that the manifest variables of a construct should be highly correlated. Convergent validity with PLS software can be seen from the loading factor for each construct indicator. While to assess Convergent validity, the loading factor value must be more than 0.7, as well as the average extracted (AVE), and the communality value must be greater than 0.5, and the results are as follows following.

Table 1 shows loading factor provides information about the loading factor values for each manifest variable. The loading factor values of all indicators for the latent variables show >0.7, so the indicators are declared valid.

Table 1. Loading factor

Variable	Indicator	Loading Factor
KNOWLEDGE MANAGEMENT	KNOWLEDGE	0.880
	KOGNITIF	0.853
	TECHNIQUE	0.726
INOVATION	INOV1	0.756
	INOV2	0.787
	INOV3	0.864
INDIGENOUS PRODUCT CREATIVITY	IPC1	0.930
	IPC2	0.938
	IPC3	0.865
SUSTAINABLE COMPETITIVE ADVANTAGE	SCA1	0.957
	SCA2	0.936
	SCA3	0.928

SCA4	0.951
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Source: Data Processing, 2023

In Table 1 provides loading factor, it can be seen that the four latent variables have an AVE value that is greater than the specified value of 0.5. So that all variables are declared valid in explaining the latent variables, which indicates that the use of these manifest variables fulfills the AVE requirements. Therefore all manifest variables are declared to have met the requirements of convergent validity. Convergent validity is proven if the scores obtained by instruments that measure concepts or concepts with different methods have a high correlation.

Table 2. AVE and communality

	Average Variance Extracted (AVE)
INOVATION	0.646
IPC	0.831
SCA	0.889
KM	0.676

Source: Data Processing, 2023

Table 2 shows the discriminant validity from the cross-loading factor with the construct and the comparison of AVE with the correlation of latent variables. If the correlation between the construct and the primary measurement (each indicator) is more significant than the other construct measures, then the variable is said to have high discriminant validity. The cross-loading value is presented as follows:

Table 3. Cross loading factor

	KM	INOVATION	IPC	SCA
KNOWLEDGE	0.880	0.326	0.475	0.382
KOGNITIF	0.853	0.160	0.454	0.416
TECHNIQUE	0.726	0.263	0.481	0.351
INOV1	0.247	0.756	0.519	0.369
INOV2	0.189	0.787	0.433	0.407
INOV3	0.288	0.864	0.591	0.378
IPC1	0.575	0.661	0.930	0.792
IPC2	0.567	0.595	0.938	0.644
IPC3	0.399	0.484	0.865	0.560
SCA1	0.523	0.452	0.736	0.957
SCA2	0.378	0.508	0.668	0.936
SCA3	0.440	0.423	0.702	0.928
SCA4	0.414	0.420	0.686	0.951

Source: Data Processing, 2023

Based on the PLS software results Table 3 shows cross-loading factor correlation value for each latent construct for the corresponding indicator is higher than the other constructs. So the indicators used to measure the latent variable meet the requirements. The reliability test in Partial Least Square (PLS) can use two methods, namely Composite Reliability (CR) and Cronbach's Alpha, which are presented as follows:

Table 4. Composite Reliability (CR) and Cronbach's Alpha

	Cronbach's Alpha	Composite Reliability
INNOVATION	0.724	0.845

Table 5. Path analysis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
MP -> IPC	0.415	0.420	0.148	2.815	0.005
INNOVATION -> IPC	0.519	0.513	0.138	3.768	0.000

IPC	0.899	0.937
SCA	0.958	0.970
KM	0.756	0.862

Source: Data Processing, 2023

The test results above show that the Composite Reliability (CR) value is more significant than 0.7, and the Cronbach Alpha value is greater than 0.6. It can be concluded that the data is reliable, indicating that all indicators consistently measure each variable. The hypothesis in this study was tested using path coefficient values and t-values to see whether there was a significant effect. In addition, the results of the path significance test also show the parameter coefficient values (original sample).

In this study, researchers used a confidence level of 95%. The path coefficient score indicated by the T-statistic value must be above 1.96 for the two-tailed hypothesis. Based on the Path Coefficient and T-Statistics in the table above, it can be explained as follows: that to test the hypothesis above, a t-value is used to see the effect of knowledge management on Indigenous Product Creativity with a t-value of 2.815; this value is more significant than 1.96 with a = 0.05, so it can be concluded that H1 is accepted, meaning that there is a significant influence of knowledge management on Indigenous Product Creativity. The knowledge management variable on Indigenous Product Creativity has an original sample of 0.415 with a positive direction meaning that the better the knowledge management, the Indigenous Product Creativity will also increase by 0.415.

Furthermore, the effect of knowledge management on sustainable competitive advantage is used t-value to see the effect of knowledge management on Sustainable Competitive Advantage with a t-value of 0.424; this value is smaller than 1.96 with a = 0.05. It can be concluded that H1 is rejected, meaning that knowledge management has no significant effect on Sustainable Competitive Advantage (SCA). The knowledge management variable on Sustainable Competitive Advantage has an original sample of 0.064 with a positive direction meaning that the better the knowledge management, the Sustainable Competitive Advantage will also increase by 0.064.

The effect of innovation on indigenous product creativity with a t-value of 3.768 is more significant than 1.96 with a = 0.05; H1 is accepted, meaning that innovation has a significant influence on Indigenous Product Creativity. The innovation variable on Indigenous Product Creativity has an original sample of 0.519 with a positive direction meaning that the better the innovation, the Indigenous Product Creativity will also increase by 0.519. Then for the t-value to see the effect of innovation on Sustainable Competitive Advantage with a t-value of 0.040, this value is smaller than 1.96 with a = 0.05. So H1 is rejected, meaning that innovation has no significant influence toward Sustainable Competitive Advantage. The innovation variable on Sustainable Competitive Advantage has an original sample of 0.006 with a positive direction meaning that the better the innovation, the Sustainable Competitive Advantage will also increase by 0.006.

IPC -> SCA	0.700	0.666	0.210	3.337	0.001
MP -> SCA	0.064	0.093	0.152	0.424	0.671
INNOVATION -> SCA	0.006	0.005	0.159	0.040	0.968
KM -> IPC -> SCA	0.291	0.267	0.109	2.661	0.008
INNOVATION -> IPC -> SCA	0.363	0.356	0.166	2.182	0.030

Source : Data Processing, 2023

Then the influence of indigenous product creativity on sustainable competitive advantage is seen with a t-value of 3.337; this value is more significant than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is accepted, meaning that Indigenous Product Creativity has a significant influence on Sustainable Competitive Advantage.

The Indigenous Product Creativity variable on Sustainable Competitive Advantage has an original sample of 0.700 with a positive direction meaning that the better the Indigenous Product Creativity, the Sustainable Competitive Advantage will also increase by 0.700.

While the influence of knowledge management on sustainable competitive advantage through indigenous product creativity is seen based on the provisions previously stated, where a t-count of 2.661 is obtained, this value is more significant than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is accepted, meaning there is a significant influence of knowledge management on Sustainable Competitive Advantage through Indigenous Product Creativity. The knowledge management variable on Sustainable Competitive Advantage through Indigenous Product Creativity has an original sample of 0.291 with a positive direction meaning that the better the knowledge management, the Sustainable Competitive Advantage through Indigenous Product Creativity will also increase by 0.291. Furthermore, looking at the effect of innovation on sustainable competitive advantage through indigenous product creativity, a t-count of 2.182 is obtained; this value is more significant than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is accepted, meaning that there is a significant influence of innovation on Sustainable Competitive Advantage through Indigenous Product Creativity. The innovation variable on Sustainable Competitive Advantage through Indigenous Product Creativity has an original sample of 0.363 with a positive direction meaning that the better the innovation, the Sustainable Competitive Advantage (KBB) through Indigenous Product Creativity will also increase by 0.363.

The R-square value can show the influence of the dependent variable. The following is the acquisition of the R-square value.

Table 6. R square

	R Square
IPC	0.572
SCA	0.552

Source: Data Processing, 2023

The value of the coefficient of determination (R-square) in the table above shows that in the first sub-structure, the R-square value for the Indigenous Product Creativity variable is 0.572. It shows that the Indigenous Product Creativity variable can be explained by 57.2% of knowledge management and innovation variables. In the second sub-structure, the R-square value for the Sustainable Competitive Advantage (KBB) variable is 0.552. It indicates that Sustainable Competitive Advantage (KBB) can be explained by 55.2% by the variable knowledge management, innovation, and Indigenous Product Creativity.

Q-square measures how well the model's observed values and the parameter estimates are produced. a Q-square value greater than 0 (zero) indicates that the model has a predictive relevance value. In contrast, a Q-square value less than 0 (zero) indicates that the model has no predictive relevance value. To calculate Q2, the following formula can be used:

$$Q2 = 1 - (1 - R12) (1 - R22)$$

$$Q2 = 1 - (1 - 0.572)(1 - 0.552)$$

$$Q2 = 0.808$$

The achieved Q2 value of 0.808 means that the Q2 value above zero provides evidence that the model has predictive relevance.

5. RESEARCH DISCUSSION

Researchers supporting the RBV argue that resources are critical for sustainable competitive advantage. These resources are referred to as strategic assets [31], core competencies, and Distinctive Competencies. Empirical findings in the field of sustainable competitive advantage for micro, small, and medium enterprises show that the ability to create competitiveness is determined by how far a company can manage its resources (stretched resources).

The capabilities of a company are unequal because it comes from the ownership of its resources in the form of tangible and intangible assets and the company's ability to use these assets. Companies experience commercial benefits from a proactive environment; their management invests additional resources in a more radical environment that will improve and exploit the environment as an opportunity.

Unfortunately, the experience of initiatives to support environments targeting small businesses may be willing to rely on resources but suggests that mutually beneficial savings can easily be achieved in a low-cost environment. Improvements only sometimes lead to reinvestment in environmental improvements or changes to organizational priorities. Companies sometimes make bigger, longer-term changes. Investing to achieve the higher benefits offered as wins requires a more radical transformation of business processes. Increasing environmental efficiency for sustainability is reflected in the principles of natural capitalism. Continuity and competitiveness about broader (or multiple rounds) learning are needed to bring about cultural change. Many believe that making a real difference toward more sustainable patterns is critical.

Building distinctive abilities and core competencies can be done through experience accumulation, clear articulation of knowledge, and a knowledge management process that starts from creating, acquiring, storing, and sharing that knowledge. Distinctive abilities that are difficult to imitate can be seen in how companies, business actors, and their employees can acquire, create, store, share, and disseminate. It is special knowledge to achieve sustainable competitive advantage when these capabilities are difficult to imitate [32, 33]. Knowledge can be the basis for sustainable competitive advantage if it is quickly disseminated within the company it

owns but not easily spread to other companies. The purpose of this statement is that knowledge that spreads slowly within the company remains the property of several people who are not from the company and has limited the company's ability to create value. Therefore knowledge as a strategic resource is essential to be managed optimally. Knowledge management helps increase company profits with communication that will increase mastery of knowledge through knowledge transfer. Transferring knowledge or knowledge sharing can support companies in carrying out their business processes, being ready to face problems, sharing experiences regarding all work-related matters, and developing company employees' knowledge and skills. The knowledge-sharing process helps identify, select, organize, disseminate, and transfer information and experiences that are part of the company [20].

Knowledge is considered a vital capital and asset for companies to manage because knowledge can improve business performance and create competitive advantage [34]. Knowledge is a sustainable source for companies to achieve competitive advantage. The main difference between information and knowledge is that knowledge lies in information, whereas knowledge is information that people use [35].

Sharing knowledge is essential to knowledge-based companies' competitiveness and competitive advantage [36]. It is a severe concern about company efforts to increase knowledge dissemination within Meso-level companies. Human resources have limitations in sharing knowledge even though they use the system. Knowledge sharing at the micro level is not only with other members of the company's employees but also with external parties such as customers. Many previous studies have assumed that employees are free to share knowledge to support the interests of an organization [37]. It relates from a shared perspective on knowledge implicitly embodied in Knowledge Base View (KBV), the assets available to firms, and their sustainable competitive advantages [32, 33]. Human resources play a significant role in enabling companies to produce and consume company assets. A company's contribution to knowledge-based resources is invaluable, rare, and only partially replicable.

Knowledge sharing is the accumulation of knowledge between different knowledge units within a company [38]. The critical factors for increasing knowledge-sharing activities are intrinsic and extrinsic incentives, social and organizational norms, organizational values, and leadership support [7, 39]. The use of knowledge is the application of shared knowledge through assimilation, part of organizational behavior and problem-solving processes is newly created knowledge [7]. Berry [40] concluded in his research that knowledge formation, knowledge transfer, use of knowledge, and knowledge productivity of employees are related to innovative behavior. Shujahat et al. [41] also concluded from their research results that the knowledge productivity of employees mediates the relationship between knowledge creation and innovation. The results also show that knowledge sharing has a significant impact on innovation. Kuncoro and Suriani [28] thought that innovation by companies only sometimes leads companies to achieve sustainable competitive advantage. It is because companies that have a sustainable competitive advantage if their potential competitors cannot imitate the product innovations produced, or competitors must carry out reconstructions that require a lot of capital and investment so that they cannot be

implemented.

6. CONCLUSION

This study concludes that knowledge management and innovation increase sustainable competitive advantage with indigenous product creativity as a mediating variable in the woven handicraft industry from waste palm oil stalks in Riau, Indonesia. Furthermore, knowledge management and innovation are fundamental to achieving sustainable competitive advantage based on indigenous product creativity. This study is an important research finding because previous research has failed to explain how company resources can provide added value differently than competitors. So this research contributes to the management literature on sustainable competitive advantage strategies, especially the resource-based view. The practical implication of this research is that business actors in the palm oil stem waste craft industry must pay more attention to their knowledge resources and the development of product innovation in indigenous product creativity. It is easy to achieve a sustainable competitive advantage to stand out.

It is necessary to improve their knowledge management and innovation capabilities by optimizing the availability of local resources based on indigenous product creativity. They can participate in more training and seminars and join a community of artisans with the same background to increase their knowledge and skills in product innovation. Apart from that, it is also essential for them to record better documentation of every business activity in the palm oil stick waste craft industry so that it can become information and knowledge documentation for others. Product heterogeneity is getting stronger with the characteristic value of authenticity based on the creativity of indigenous products seen from the motifs, symbols, and meanings produced. This new knowledge will result in more innovative product innovations that are unique, rare, not easily imitated, and not easily replaced to have an impact on sustainable competitiveness.

This study, still has limitations because it only uses two independent variables, namely knowledge management, and innovation, because many other independent variables can explain their influence on sustainable competitive advantage. In addition, this research was only conducted at one research location with a limited population so that in the future, it could be added to different research locations with the exact case to increase the population. Different characteristics may be found so that future research will be more likely to produce findings that can better explain the effect on sustainable competitive advantage.

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PENERIMA (wajib diisi)
beneficiary

Status kependudukan
resident status

Nama
name

Nomor rekening
account number

Bank
bank

Alamat & telp penerima
beneficiary address & phone no

Jenis & Nomor Identitas
ID Type & Number

TUJUAN TRANSAKSI
purpose of transaction
(wajib diisi)

BERITA TRANSAKSI
transaction remarks

diisi oleh Bank filled out by the bank

Jumlah transfer amount of transfer

Komisi commission

Biaya Pengiriman transfer fee (SWIFT/RTGS/SKNBI)

Biaya Koresponden correspondent charge

Sub Total

Kurs rate

Total

Pemohon dengan ini menyetujui sepenuhnya syarat-syarat dan ketentuan yang tercantum dibalik formulir transaksi ini applicant unconditionally accept all terms and condition on the reverse of this transaction form

Pengesahan Bank bank's authorization

Tanda tangan pemohon applicant's signature

PENGIRIM
applicant

NIK/Passport/PNPWP (Perusahaan)
ID number

Informasi Pengirim
applicant information

Status kependudukan
resident status

Nama
name

Alamat & nomor telepon
address & telephone number

METODE TRANSAKSI (wajib diisi)

method of transaction

☐ Tunai
cash

☒ Debet rekening:
debit account: 10801034077357

☐ Cek/bilyet giro
cheque

Bank Tertarik drawee bank	No. cek / BG cheque number	Valuta currency	Nominal amount

Jumlah setoran/transfer/kliring/inkaso
deposit/transfer/clearing/collection amount USD 500.00 -

Terbilang
in words LCD Five Hundred

SUMBER DANA TRANSAKSI (wajib diisi)

Source of found

☐ Gaji/Penghasilan
salary/gifts

☐ Hibah/Hadiah
Grants/gifts

☐ Tabungan/hasil investasi
saving/investment

☐ Penjualan aset
sale of assets

☐ Warisan
inheritance

☐ Hasil usaha
business proceed

☐ Dana pemerintah
Government Funds

☐ Sumbangan
contribution

BIAYA TRANSAKSI

transaction fee

☐ Tunai
cash

☐ Debet rekening:
debit account:

Biaya bank koresponden correspondent charge

☐ Pengirim
applicant

☐ Penerima
beneficiary

☐ Lainnya
others

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Nama
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Alamat & nomor telepon
address & telephone number

NIK/ Paspor (WNA)
ID number



Sustainability of Business Strategy Based on Indigenous Product Creativity in the Weaving Industry of Palm Oil Waste in Riau, Indonesia

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ABSTRACT

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knowledge management, innovation, indigenous, sustainability

This study analyzes knowledge management and innovation based on indigenous product creativity to achieve a sustainable competitive advantage. The unit of analysis in this study was the artisans of the woven handicraft industry from palm oil stem waste, totaling 50 respondents using a census sampling of the entire population. The analysis tool of this research uses SEM PLS. The results of this study indicate that knowledge management and innovation affect sustainable competitive advantage with indigenous product creativity as mediation in the woven handicraft industry from waste palm oil stems. The findings succeeded in filling the gap in previous research that the heterogeneity of company resources is getting higher to achieve sustainable competitive advantage due to the indigenous factor of creativity as a mediation that can provide added value different from competitors. This research implication contributes to developing strategic management science with a resource approach with empirical evidence that original product creativity is a substantial intermediary variable to achieve sustainable competitive advantage. The practical implication of this research is that business actors in the palm oil stem waste industry must pay more attention to their knowledge resources and product innovation on indigenous product creativity.

1. INTRODUCTION

The higher increasing business competition, companies are required to enhance their competitiveness in a sustainable manner. The rapid development of technology and information is a significant factor in this globalized era and cannot be ignored. Market trends also change due to dynamic customer needs and wants, presenting strategic challenges that must be addressed. A company's resources alone cannot determine its strength unless it can create unique value that sets it apart from competitors.

Previous studies have shown a preference for imported products over local ones, suggesting that local products are less desirable [1]. This challenges the local craft industry to add value through unique product appeal [2]. While past research on innovation has emphasized product creativity, there has been little focus on innovation based on indigenous culture. However, it has been suggested that products with an indigenous cultural background can generate higher emotional value for consumers [3-5].

The expansion of oil palm plantations and increased production volume in Indonesia have led to a surge in palm oil waste, including palm oil stick waste. This waste is not being utilized optimally despite its potential. In areas like Rokan Hulu, Riau Province, the waste is often burned or discarded, despite the potential for it to be transformed into valuable commodity products.

The primary hurdle lies in the limitations of knowledge management practices and the need for improved product types to achieve sustainable competitive advantage. The

limited capability for product innovation stems from a lack of knowledge management in design, coloring, and packaging techniques. As such, there is a need for strategies that focus on indigenous product creativity, considering the global market's high interest in unique local cultural products. These strategies could turn palm oil stick waste into innovative products with high economic value, thereby solving waste and competitiveness issues.

Knowledge management is crucial in enabling companies to detect new market opportunities quickly and drive innovation [6]. It also fosters market responsiveness, facilitating sustainable strategies [7]. However, formalization could hinder radical projects which should be managed informally to facilitate knowledge management across all company units [8, 9]. The knowledge management process consists of acquiring, applying, and sharing knowledge and designing knowledge transfer [10, 11]. This process incorporates tacit knowledge, explicit knowledge, and a technology base [12]. The resource-based theory (RBT) supports the notion that knowledge capability resources are essential for achieving sustainable competitive advantage and improving company performance [4]. However, what remains unclear is the specific types of knowledge that provide unique added value and are challenging to transfer.

Creating unique value from scarce resources that are not easily imitated and have no substitutes requires innovative skills. Unfortunately, many companies still view innovation as a domain for newcomers. The strategic management approach suggests that companies that do not actively implement strategic management and remain passive will be overtaken by

competition.

The concept of sustainable competitive advantage was introduced in an article [13], which posits that companies should possess resources that are rare, valuable, and not easily imitated or substituted. A company's human resources can provide a potential source of sustainable competitive advantage [14]. Despite being valuable, rare, and not easily replaced, resources that are easy to imitate bring challenges to achieving sustainability. Patenting could be a solution to this issue [15].

Moreover, heterogeneous resources, combined with imperfect mobility, will achieve a competitive advantage due to the differences in profitability among competitors. If resources are distributed homogeneously, all organizations in the industry will have the same strength and implement the same strategy [15-17].

Research on sustainable competitive advantage is evolving, with recent advancements in communication and information technology leading to new approaches. One such approach centers on knowledge-based system resources with a focus on local cultural elements. However, current literature predominantly uses only the keywords 'sustainable competitive advantage' and 'knowledge management', indicating a significant gap in studies that incorporate knowledge-based system resources into sustainable competitive advantage.

This disparity underlines the need for more exploration into the integration of knowledge management and innovation within the context of sustainable competitive advantage. Specifically, there is a need to study how indigenous product creativity can be leveraged as a strategic approach in the global market. This approach can offer a new perspective on achieving superiority in global competition through cultivating and utilizing knowledge-based system resources. Figure 1 shows research framework which describes research model.

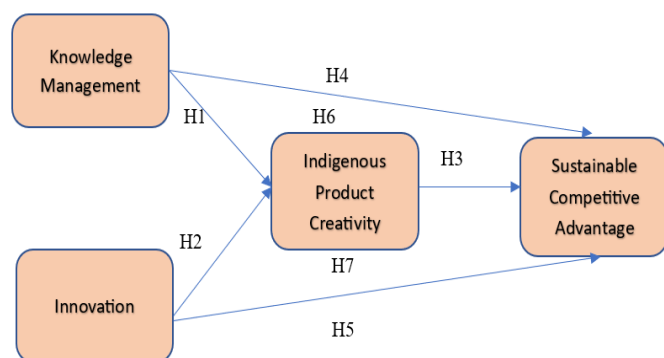


Figure 1. Research framework

2. LITERATURE REVIEW

Competitive advantage originates from a company's skills and resources, including technical, managerial, and operational capabilities. The uniqueness and differences among competitors revealed through competitive advantage analysis enable companies to maintain their advantage, significantly impacting performance [18]. Activities such as business design, production, marketing, and distribution can create a sustainable competitive advantage by facilitating a company's relative cost position and establishing a basis for

differentiation. Lower costs allow a company to offer more value to customers than its competitors can.

Micro and Small Enterprises can develop alternative strategies by leveraging both internal and external factors [19, 20]. Internal factors include marketing, production, human resources, and finance, while external ones encompass socioeconomic conditions, technology, buyers, and competitors. In the global business competition, companies need to focus on internal perspectives in addition to industrial structure, carefully examining and combining their resources to gain core competencies and competitive advantages.

Strategy plays a significant role in an organization's ability to stretch and fulfill its aspirations. It demands careful planning and commitment to continuously enhance its resources [21].

Knowledge management encompasses three primary functions: knowledge generation, storage, and sharing. Knowledge generation includes innovation and accumulation of new knowledge, which is then combined with existing knowledge. Knowledge sharing allows the dissemination of skills, experiences, and knowledge within an organization.

A knowledge management process that involves gathering experiences, clarifying knowledge, and creating, acquiring, storing, and sharing that knowledge can lead to the development of unique core skills and competencies. These unique skills, which businesses, employers, and employees acquire, create, store, share, and disseminate, are difficult to imitate. Consequently, a sustainable competitive advantage can be achieved when these skills are challenging to replicate [22].

Knowledge can be the basis of a sustainable competitive advantage if it can be quickly disseminated within the firm that owns it but not easily transferred to other firms. This declaration intends that knowledge that cannot be quickly disseminated within a company belongs to many people who do not belong to the company. As a result, the ability to create value for the company is limited. The Knowledge Base View (KBV) approach assumes that companies are business entities capable of creating, integrating, and distributing knowledge. The functionality created by the KBV approach is based on something other than tangible resources, such as physical or financial resources. KBV analysis includes human resources, social and organizational resources, and other organizational resources such as technical and economic resources [23].

The knowledge-Based View approach is closely related to the RBV in that knowledge is a strategic resource to achieve a sustainable competitive advantage [24]. Knowledge management is a management tool for rapid growth. Company employees can move to new companies and start using that knowledge. Only the constantly learning company will gain a competitive advantage compared to competitors in the market [25]. Different stakeholders need to know how best to serve consumers. The corporate culture needs to change and foster attribution and collaboration among employees. Technology and infrastructure are the driving force to beat the competition.

Companies use the knowledge and disseminate it everywhere, including the internet, databases, documents, e-mail, podcasts, and websites. Companies can also conduct video conferencing and social networking forums. This media is used to share knowledge. On the one hand, many things can be learned from the literature on success stories elsewhere. Further research is needed to determine its effectiveness. Organizations are a way to protect intellectual capital and strengthen and maintain a company's competitive advantage

[25].

Many researchers have researched the importance of innovation in small industries. Innovation is a performance factor; innovation positively impacts the performance of high-tech and low-tech industries [26]. Survey results from small industries in Romania indicate that most of these businesses are considering adopting a learning-oriented organizational culture [26]. The innovation process in small industries relies on internal and external learning resources. Best practices for internal learning resources for small industry cases in Romania are represented by networking with companies and external partners as internal learning resources for small businesses.

Market changes, technology changes, and expert and consultant support are the reported external sources of learning. The survey results also show that most small industries tend to innovate. Especially in terms of business models and the main obstacles they face. Due to the lack of funds and the high costs they face. They are identifying the most common barriers to innovation presented by small industries in Romania as a starting point for setting future directions breaking through barriers one by one to support innovation activities and results. This survey's concrete results are linked to similar surveys of small industries in other countries. It can form the basis of recommendations and initiatives to consider aspects of a particular innovation.

However, it is essential to make this comparison based on the current small industry situation as a national development framework. More recommended based on survey results considering carefully the need for innovation for small industries, especially related to barriers to certain types of innovation. Another possible direction for future research would be to consider the primary factors that small industries consider when a company selects and implements a particular type of innovation that can be applied as a basis for developing an innovation model at the corporate level.

Previous research suggests that innovation influences sustainable competitive advantage [27]. However, this study's findings do not indicate a significant impact of innovation on sustainable competitive advantage. These results align with the viewpoint [28], suggesting that only sometimes do companies' innovations lead to a sustainable competitive advantage. It is because a company has a sustainable competitive advantage if its potential competitors cannot imitate the product innovations it produces or competitors have to carry out reconstruction that requires a lot of capital and investment so that competitors cannot do it.

3. RESEARCH METHODS

This study uses a quantitative descriptive method. The sample of this research is 50 business actors who are also craftsmen of the woven industry from palm oil stick waste in Rokan Hulu downstream district, Riau, Indonesia. They are members of a group of craftsmen woven from palm oil stick waste in Rokan Hulu Downstream district, Riau, Indonesia. This sample was taken as a whole from the entire existing population using census sampling. Census sampling was used in this study because the population was considered small or less than 100 [29]. The research location was determined in the palm oil stem waste craft business in Rokan Hulu, Riau, Indonesia, because the research location was a group of craftsmen who first started this craft business and was the largest in Riau Province, Indonesia. Although the first and the

largest in Riau Province, Indonesia, they still have problems that deserve scrutiny from knowledge management factors, innovation to achieve a sustainable competitive advantage with indigenous product creativity as a mediating variable.

The qualifications for the length of service for the research sample in the woven industry business are those who have been active in this industry for more than three years. Of their educational background, as much as 56% have a bachelor's degree, 40% have a high school certificate and the rest are below the bachelor's and high school level. The data collection technique in this study relied on questionnaires to collect primary data. Besides that, the researchers also made direct observations at the research location. There are 65 questions in the test on the questionnaire—questions in the questionnaire regarding knowledge management, innovation, indigenous knowledge product creativity, and sustainable competitive advantage. Secondary data was obtained through literature review and documentation. Each question was scored using a 5-point Likert scale.

The validity and reliability in this study refer to the opinion [30] namely using a minimum validity index of 0.5 and a minimum reliability index of 0.6. Data analysis in this study used the PLS-SEM. The analysis tools in this study used the Structural Equation Modeling (SEM) method with PLS. Partial Least Square (PLS) analysis is used because PLS can be used without a solid theoretical basis, ignoring non-parametric assumptions and the accuracy of the prediction model parameters based on the value of the determinant coefficient (R-square), so PLS is very appropriate for research to develop theory [30].

4. RESEARCH RESULT

Convergent validity relates to the principle that the manifest variables of a construct should be highly correlated. Convergent validity with PLS software can be seen from the loading factor for each construct indicator. While to assess Convergent validity, the loading factor value must be more than 0.7, as well as the average extracted (AVE), and the communality value must be greater than 0.5, and the results are as follows.

Table 1. Loading factor

Variable	Indicator	Loading Factor
KNOWLEDGE MANAGEMENT	KNOWLEDGE	0.880
	KOGNITIF	0.853
	TECHNIQUE	0.726
INOVATION	INOV1	0.756
	INOV2	0.787
	INOV3	0.864
INDIGENOUS PRODUCT CREATIVITY	IPC1	0.930
	IPC2	0.938
	IPC3	0.865
SUSTAINABLE COMPETITIVE ADVANTAGE	SCA1	0.957
	SCA2	0.936
	SCA3	0.928
	SCA4	0.951

Source: Data processing, 2023

Table 1 shows loading factor provides information about the loading factor values for each manifest variable. The loading factor values of all indicators for the latent variables show >0.7,

so the indicators are declared valid.

Table 1 provides loading factor, it can be seen that the four latent variables have an AVE value that is greater than the specified value of 0.5. So that all variables are declared valid in explaining the latent variables, which indicates that the use of these manifest variables fulfills the AVE requirements. Therefore, all manifest variables are declared to have met the requirements of convergent validity. Convergent validity is proven if the scores obtained by instruments that measure concepts or concepts with different methods have a high correlation.

Table 2. AVE and communality

	Average Variance Extracted (AVE)
INOVATION	0.646
IPC	0.831
SCA	0.889
KM	0.676

Source: Data processing, 2023

Table 2 shows the discriminant validity from the cross-loading factor with the construct and the comparison of AVE with the correlation of latent variables. If the correlation between the construct and the primary measurement (each indicator) is more significant than the other construct measures, then the variable is said to have high discriminant validity. The cross-loading value is presented as follows:

Table 3. Cross loading factor

	KM	INOVATION	IPC	SCA
KNOWLEDGE	0.880	0.326	0.475	0.382
KOGNITIF	0.853	0.160	0.454	0.416
TECHNIQUE	0.726	0.263	0.481	0.351
INOV1	0.247	0.756	0.519	0.369
INOV2	0.189	0.787	0.433	0.407
INOV3	0.288	0.864	0.591	0.378
IPC1	0.575	0.661	0.930	0.792
IPC2	0.567	0.595	0.938	0.644
IPC3	0.399	0.484	0.865	0.560
SCA1	0.523	0.452	0.736	0.957
SCA2	0.378	0.508	0.668	0.936
SCA3	0.440	0.423	0.702	0.928
SCA4	0.414	0.420	0.686	0.951

Source: Data processing, 2023

Table 4. Composite Reliability (CR) and Cronbach's Alpha

	Cronbach's Alpha	Composite Reliability
INNOVATION	0.724	0.845
IPC	0.899	0.937
SCA	0.958	0.970
KM	0.756	0.862

Source: Data processing, 2023

Based on the PLS software results Table 3 shows cross-loading factor correlation value for each latent construct for the corresponding indicator is higher than the other constructs. So the indicators used to measure the latent variable meet the requirements. The reliability test in Partial Least Square (PLS) can use two methods, namely Composite Reliability (CR) and Cronbach's Alpha, which are presented in Table 4.

The test results above show that the Composite Reliability

(CR) value is more significant than 0.7, and the Cronbach Alpha value is greater than 0.6. It can be concluded that the data is reliable, indicating that all indicators consistently measure each variable. The hypothesis in this study was tested using path coefficient values and t-values to see whether there was a significant effect. In addition, the results of the path significance test also show the parameter coefficient values (original sample). Table 5 shows path analysis result.

In this study, researchers used a confidence level of 95%. The path coefficient score indicated by the T-statistic value must be above 1.96 for the two-tailed hypothesis. Based on the Path Coefficient and T-Statistics in the table above, it can be explained as follows: that to test the hypothesis above, a t-value is used to see the effect of knowledge management on Indigenous Product Creativity with a t-value of 2.815; this value is more significant than 1.96 with $\alpha = 0.05$, so it can be concluded that H1 is accepted, meaning that there is a significant influence of knowledge management on Indigenous Product Creativity. The knowledge management variable on Indigenous Product Creativity has an original sample of 0.415 with a positive direction meaning that the better the knowledge management, the Indigenous Product Creativity will also increase by 0.415.

Furthermore, the effect of knowledge management on sustainable competitive advantage is used t-value to see the effect of knowledge management on Sustainable Competitive Advantage with a t-value of 0.424; this value is smaller than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is rejected, meaning that knowledge management has no significant effect on Sustainable Competitive Advantage (SCA). The knowledge management variable on Sustainable Competitive Advantage has an original sample of 0.064 with a positive direction meaning that the better the knowledge management, the Sustainable Competitive Advantage will also increase by 0.064.

The effect of innovation on indigenous product creativity with a t-value of 3.768 is more significant than 1.96 with $\alpha = 0.05$; H1 is accepted, meaning that innovation has a significant influence on Indigenous Product Creativity. The innovation variable on Indigenous Product Creativity has an original sample of 0.519 with a positive direction meaning that the better the innovation, the Indigenous Product Creativity will also increase by 0.519. Then for the t-value to see the effect of innovation on Sustainable Competitive Advantage with a t-value of 0.040, this value is smaller than 1.96 with $\alpha = 0.05$. So H1 is rejected, meaning that innovation has no significant influence toward Sustainable Competitive Advantage. The innovation variable on Sustainable Competitive Advantage has an original sample of 0.006 with a positive direction meaning that the better the innovation, the Sustainable Competitive Advantage will also increase by 0.006.

Then the influence of indigenous product creativity on sustainable competitive advantage is seen with a t-value of 3.337; this value is more significant than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is accepted, meaning that Indigenous Product Creativity has a significant influence on Sustainable Competitive Advantage.

The Indigenous Product Creativity variable on Sustainable Competitive Advantage has an original sample of 0.700 with a positive direction meaning that the better the Indigenous Product Creativity, the Sustainable Competitive Advantage will also increase by 0.700.

Table 5. Path analysis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
MP -> IPC	0.415	0.420	0.148	2.815	0.005
INNOVATION -> IPC	0.519	0.513	0.138	3.768	0.000
IPC -> SCA	0.700	0.666	0.210	3.337	0.001
MP -> SCA	0.064	0.093	0.152	0.424	0.671
INNOVATION -> SCA	0.006	0.005	0.159	0.040	0.968
KM -> IPC -> SCA	0.291	0.267	0.109	2.661	0.008
INNOVATION -> IPC -> SCA	0.363	0.356	0.166	2.182	0.030

Source: Data processing, 2023

While the influence of knowledge management on sustainable competitive advantage through indigenous product creativity is seen based on the provisions previously stated, where a t-count of 2.661 is obtained, this value is more significant than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is accepted, meaning there is a significant influence of knowledge management on Sustainable Competitive Advantage through Indigenous Product Creativity. The knowledge management variable on Sustainable Competitive Advantage through Indigenous Product Creativity has an original sample of 0.291 with a positive direction meaning that the better the knowledge management, the Sustainable Competitive Advantage through Indigenous Product Creativity will also increase by 0.291. Furthermore, looking at the effect of innovation on sustainable competitive advantage through indigenous product creativity, a t-count of 2.182 is obtained; this value is more significant than 1.96 with $\alpha = 0.05$. It can be concluded that H1 is accepted, meaning that there is a significant influence of innovation on Sustainable Competitive Advantage through Indigenous Product Creativity. The innovation variable on Sustainable Competitive Advantage through Indigenous Product Creativity has an original sample of 0.363 with a positive direction meaning that the better the innovation, the Sustainable Competitive Advantage (KBB) through Indigenous Product Creativity will also increase by 0.363.

The R-square value can show the influence of the dependent variable. The following Table 6 shows the acquisition of the R-square value.

Table 6. R square

	R Square
IPC	0.572
SCA	0.552

Source: Data processing, 2023

The value of the coefficient of determination (R-square) in the table above shows that in the first sub-structure, the R-square value for the Indigenous Product Creativity variable is 0.572. It shows that the Indigenous Product Creativity variable can be explained by 57.2% of knowledge management and innovation variables. In the second sub-structure, the R-square value for the Sustainable Competitive Advantage (KBB) variable is 0.552. It indicates that Sustainable Competitive Advantage (KBB) can be explained by 55.2% by the variable knowledge management, innovation, and Indigenous Product Creativity.

Q-square measures how well the model's observed values and the parameter estimates are produced. A Q-square value greater than 0 (zero) indicates that the model has a predictive relevance value. In contrast, a Q-square value less than 0 (zero)

indicates that the model has no predictive relevance value. To calculate Q2, the following formula can be used:

$$Q2 = 1 - (1 - R^2_{12}) (1 - R^2_{22})$$

$$Q2 = 1 - (1 - 0.572)(1 - 0.552)$$

$$Q2 = 0.808$$

The achieved Q2 value of 0.808 means that the Q2 value above zero provides evidence that the model has predictive relevance.

5. RESEARCH DISCUSSION

Researchers supporting the RBV argue that resources are critical for sustainable competitive advantage. These resources are referred to as strategic assets [31], core competencies, and Distinctive Competencies. Empirical findings in the field of sustainable competitive advantage for micro, small, and medium enterprises show that the ability to create competitiveness is determined by how far a company can manage its resources (stretched resources).

The capabilities of a company are unequal because it comes from the ownership of its resources in the form of tangible and intangible assets and the company's ability to use these assets. Companies experience commercial benefits from a proactive environment; their management invests additional resources in a more radical environment that will improve and exploit the environment as an opportunity.

Unfortunately, the experience of initiatives to support environments targeting small businesses may be willing to rely on resources but suggests that mutually beneficial savings can easily be achieved in a low-cost environment. Improvements only sometimes lead to reinvestment in environmental improvements or changes to organizational priorities. Companies sometimes make bigger, longer-term changes. Investing to achieve the higher benefits offered as wins requires a more radical transformation of business processes. Increasing environmental efficiency for sustainability is reflected in the principles of natural capitalism. Continuity and competitiveness about broader (or multiple rounds) learning are needed to bring about cultural change. Many believe that making a real difference toward more sustainable patterns is critical.

Building distinctive abilities and core competencies can be done through experience accumulation, clear articulation of knowledge, and a knowledge management process that starts from creating, acquiring, storing, and sharing that knowledge. Distinctive abilities that are difficult to imitate can be seen in how companies, business actors, and their employees can acquire, create, store, share, and disseminate. It is special knowledge to achieve sustainable competitive advantage when

these capabilities are difficult to imitate [32, 33]. Knowledge can be the basis for sustainable competitive advantage if it is quickly disseminated within the company it owns but not easily spread to other companies. The purpose of this statement is that knowledge that spreads slowly within the company remains the property of several people who are not from the company and has limited the company's ability to create value. Therefore, knowledge as a strategic resource is essential to be managed optimally. Knowledge management helps increase company profits with communication that will increase mastery of knowledge through knowledge transfer. Transferring knowledge or knowledge sharing can support companies in carrying out their business processes, being ready to face problems, sharing experiences regarding all work-related matters, and developing company employees' knowledge and skills. The knowledge-sharing process helps identify, select, organize, disseminate, and transfer information and experiences that are part of the company [20].

Knowledge is considered a vital capital and asset for companies to manage because knowledge can improve business performance and create competitive advantage [34]. Knowledge is a sustainable source for companies to achieve competitive advantage. The main difference between information and knowledge is that knowledge lies in information, whereas knowledge is information that people use [35].

Sharing knowledge is essential to knowledge-based companies' competitiveness and competitive advantage [36]. It is a severe concern about company efforts to increase knowledge dissemination within Meso-level companies. Human resources have limitations in sharing knowledge even though they use the system. Knowledge sharing at the micro level is not only with other members of the company's employees but also with external parties such as customers. Many previous studies have assumed that employees are free to share knowledge to support the interests of an organization [37]. It relates from a shared perspective on knowledge implicitly embodied in Knowledge Base View (KBV), the assets available to firms, and their sustainable competitive advantages [32, 33]. Human resources play a significant role in enabling companies to produce and consume company assets. A company's contribution to knowledge-based resources is invaluable, rare, and only partially replicable.

Knowledge sharing is the accumulation of knowledge between different knowledge units within a company [38]. The critical factors for increasing knowledge-sharing activities are intrinsic and extrinsic incentives, social and organizational norms, organizational values, and leadership support [7, 39]. The use of knowledge is the application of shared knowledge through assimilation, part of organizational behavior and problem-solving processes is newly created knowledge [7]. Berry [40] concluded in his research that knowledge formation, knowledge transfer, use of knowledge, and knowledge productivity of employees are related to innovative behavior. Shujahat et al. [41] also concluded from their research results that the knowledge productivity of employees mediates the relationship between knowledge creation and innovation. The results also show that knowledge sharing has a significant impact on innovation. Kuncoro and Suriani [28] thought that innovation by companies only sometimes leads companies to achieve sustainable competitive advantage. It is because companies that have a sustainable competitive advantage if

their potential competitors cannot imitate the product innovations produced, or competitors must carry out reconstructions that require a lot of capital and investment so that they cannot be implemented.

6. CONCLUSION

This study concludes that knowledge management and innovation increase sustainable competitive advantage with indigenous product creativity as a mediating variable in the woven handicraft industry from waste palm oil stalks in Riau, Indonesia. Furthermore, knowledge management and innovation are fundamental to achieving sustainable competitive advantage based on indigenous product creativity. This study is an important research finding because previous research has failed to explain how company resources can provide added value differently than competitors. So this research contributes to the management literature on sustainable competitive advantage strategies, especially the resource-based view. The practical implication of this research is that business actors in the palm oil stem waste craft industry must pay more attention to their knowledge resources and the development of product innovation in indigenous product creativity. It is easy to achieve a sustainable competitive advantage to stand out.

It is necessary to improve their knowledge management and innovation capabilities by optimizing the availability of local resources based on indigenous product creativity. They can participate in more training and seminars and join a community of artisans with the same background to increase their knowledge and skills in product innovation. Apart from that, it is also essential for them to record better documentation of every business activity in the palm oil stick waste craft industry so that it can become information and knowledge documentation for others. Product heterogeneity is getting stronger with the characteristic value of authenticity based on the creativity of indigenous products seen from the motifs, symbols, and meanings produced. This new knowledge will result in more innovative product innovations that are unique, rare, not easily imitated, and not easily replaced to have an impact on sustainable competitiveness.

This study, still has limitations because it only uses two independent variables, namely knowledge management, and innovation, because many other independent variables can explain their influence on sustainable competitive advantage. In addition, this research was only conducted at one research location with a limited population so that in the future, it could be added to different research locations with the exact case to increase the population. Different characteristics may be found so that future research will be more likely to produce findings that can better explain the effect on sustainable competitive advantage.

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