

OPTIMIZATION OF CONSIGNMENT SYSTEM: A STUDY OF PT PROBO SEMESTA JAYA

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Abstract

This study examines the relationships among Consignment System, Customer-Based Learning, Marketing Performance, and the moderating role of Store Characteristics. Using statistical analysis, the findings reveal that the Consignment System significantly enhances Customer-Based Learning, which strongly improves Marketing Performance. Customer-Based Learning fully mediates the effect of the Consignment System on Marketing Performance, highlighting the importance of knowledge acquisition from customers. While the direct effect of the Consignment System on Marketing Performance is not significant, its indirect impact through learning is critical. Store Characteristics significantly moderate the relationship between Customer-Based Learning and Marketing Performance but do not influence the link between Consignment System and Customer-Based Learning. These results suggest that firms should focus on fostering customer learning from consignment processes and consider store-specific factors to optimize marketing outcomes. The study contributes to theory by linking operational and marketing domains and provides practical insights for retail management. Limitations include the study's scope and design, encouraging future research to explore additional moderators and longitudinal effects.

Keywords: Consignment System, Customer-Based Learning, Marketing Performance, Store Characteristics

INTRODUCTION

The third-tier cigarette industry in Indonesia faces various structural challenges that hinder sales volume growth. Constraints such as limited capital among retailers, uneven distribution, and low market absorption are the main obstacles to market expansion strategies (Adida & Ratisoontorn, 2011). In this context, companies need to adopt more innovative and adaptive distribution and marketing approaches to respond to market dynamics. One alternative that has begun to be implemented is a consignment system that offers financial flexibility to retailers. The implementation of the consignment system in this industry shows a gap between the potential of the distribution strategy and its performance in the field (Almeida et al., 2021). Although conceptually this system promises to improve product accessibility, the reality in the field shows varying results between stores. These differences indicate the presence of other moderating factors that have not been extensively explained in previous research. Therefore, it is important to further examine the contextual elements that influence the effectiveness of this system (Avlijas et al., 2018).

The research gap lies in the limited studies that integrate consignment strategies with a customer-based learning (CBL) approach in the context of the micro-scale tobacco industry (Chen et al., 2023). Most previous studies have focused on conventional distribution approaches without considering consumer behavior dynamics and store adaptive capabilities. However, the integration of distribution strategies and customer-based approaches is crucial for developing relevant and needs-based marketing strategies. This study uses the Resource-Based View (RBV) theory as a conceptual

framework to explain the relationship between the variables under investigation (Azmy, 2022). RBV emphasizes the importance of unique and difficult-to-imitate internal resources, such as customer data and efficient distribution systems, as keys to competitive advantage. In this context, the consignment system is positioned as a strategic logistics resource, while CBL is a dynamic capability that enables companies to adjust their marketing strategies based on continuously updated information from the market (Dutta & Bhat, 2016).

The novelty of this study lies in the testing of an integrative model that combines the consignment system, the Customer-Based Learning approach, and store characteristics as moderating variables. Few studies have examined the simultaneous interaction of these three elements, particularly in an industry with the scale and characteristics of third-tier cigarettes (Fang et al., 2021). This approach allows for a more comprehensive understanding of the factors that influence the effectiveness of distribution and marketing strategies at the micro level (Feld et al., 2016).

With this approach, this study aims to evaluate the influence of the consignment system on marketing performance and explore the mediating role of CBL in this relationship. Additionally, this study examines the moderating role of store characteristics in the relationship between the consignment system and CBL, as well as between CBL and marketing performance. The primary objective of this research is to develop a conceptual model capable of explaining the dynamics of interaction among variables within the context of data-driven distribution and marketing.

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

Consignment System and Its Impact on Marketing Performance

A consignment system is an approach in supply chain management that allows manufacturers or distributors to place goods at a retailer's location without transferring ownership until the product is sold (Ganz et al., 2022). This model is widely used to improve logistics efficiency, reduce retailers' capital burdens, and expand product distribution more flexibly (Gong et al., 2022). In this system, storage risks and fees are shared, which encourages more collaborative and responsive relationships between vendors and retailers (Gyllenhammar et al., 2023).

With advancements in information technology and increasing competitive pressure, the consignment system has evolved into a strategic tool in modern marketing. Vendors can use this approach to enter new markets, test product demand, and encourage product adoption among retailer segments that were previously reluctant to make large purchases due to capital constraints (Hakim & Amalia, 2023). From the retailer's perspective, this system reduces the risk of losses from unsold goods and enhances flexibility in managing product portfolios (Hu et al., 2014).

In the context of the third-tier cigarette industry in Indonesia, the consignment system is a relevant solution to the capital constraints faced by many retailers, particularly in rural or remote areas (Hu et al., 2017). With this system, retailers can sell products without having to pay upfront, thereby reducing financial barriers to distribution. Additionally, this strategy contributes to faster market penetration as products become available more quickly at various sales points (Islam & Hoque, 2018).

Previous research confirms that the consignment system can improve distribution effectiveness and boost sales volume. (Iryono, 2019) indicate that the success of this strategy depends on the company's ability to manage relationships with retailers and respond quickly and accurately to changes in demand. When implemented appropriately, the consignment system can strengthen a company's marketing capabilities in creating a broader and more relevant market reach.

Based on the theoretical framework and empirical findings above, the following hypothesis can be formulated:

H1: The consignment system has a positive effect on marketing performance.

Consignment System and Its Effect on CBL

Customer-Based Learning (CBL) is a strategic approach in modern marketing management that relies on organizational learning processes from customer interactions, behaviors, and feedback to formulate data-driven and more accurate decisions (Mim & Logofatu, 2022). This approach supports the achievement of competitive advantage through improved understanding of customer preferences, evaluation of distribution effectiveness, and personalization of product and service offerings (Waqas et al., 2020; Ng et al., 2020). In practice, CBL also involves processing customer data through advanced analytics technologies such as machine learning to generate dynamic and predictive strategic insights (Chen et al., 2023).

In the context of distribution, consignment systems create more intensive and structured data collection mechanisms, as transactions are conducted without upfront payments, enabling companies to have greater control over the flow of sales information, inventory, and retailer behavior (Feld et al., 2016; Hu et al., 2015). With better data control, companies can implement CBL processes more effectively, as actual information from the point of sale becomes the primary basis for analysis (Martinelli & Tunisini, 2019).

In other words, the consignment system not only addresses financial and logistical constraints at the retailer level but also serves as an enabler for customer-based learning processes. Through more intensive interaction between producers and retailers, as well as real-time data flow, organizations can identify changing trends, consumer preferences, and measure the effectiveness of distribution campaigns across various regions (Zhao, 2022).

Based on these theoretical arguments, the second hypothesis in this study is formulated as follows:
H2: The consignment system has a positive effect on Customer-Based Learning (CBL).

The Effect of CBL on Marketing Performance

Customer-Based Learning (CBL) is an organizational learning strategy that places customers at the center of innovation and service quality improvement efforts. By leveraging customer experiences, behaviors, and feedback, companies can identify more relevant needs and develop targeted improvements. This approach facilitates a deeper understanding of consumer preferences, thereby enhancing the effectiveness of designing new products or services that align with market expectations (Gyllenhammar et al., 2022).

In the digital age, CBL is further strengthened by the use of advanced technologies such as artificial intelligence and machine learning, which enable companies to analyze customer data in real time. By processing text- and voice-based interaction data, companies can develop adaptive learning models that can predict consumer responses and formulate more personalized and dynamic Customer Relationship Management (CRM) strategies (Chen et al., 2023). Understanding the customer journey at various touchpoints also provides strategic insights to enhance consumer experience and build brand loyalty (Ng et al., 2020; Waqas et al., 2021).

Consistent application of CBL has proven to strengthen marketing performance, particularly in terms of targeting, segmentation, and positioning strategies. Previous research indicates that organizations adopting this approach are more responsive to market changes and capable of formulating more relevant promotional policies (Peng et al., 2024). In competitive industries such as the third-tier cigarette industry, the application of CBL is key to understanding retailer and consumer behavior more accurately, enabling companies to design more effective distribution and marketing communication strategies.

Based on these theoretical arguments, the second hypothesis in this study is formulated as follows:
H3: Customer-Based Learning (CBL) has a positive effect on marketing performance.

The Role of CBL

Customer-Based Learning (CBL) is a strategic approach that positions customers as the primary source of organizational learning. By leveraging customer experiences, behaviors, and feedback, companies can identify consumer needs and preferences more accurately. This approach fosters innovation, service quality improvement, and the development of products relevant to market

demands (Gyllenhammar, Eriksson, & Eriksson, 2022). By understanding consumers deeply, organizations have a greater opportunity to create sustainable value.

In the context of distribution, CBL serves not only as an approach to consumer behavior analysis, but also as an important bridge between distribution strategy and marketing performance. Consignment systems, which allow companies to obtain sales data directly from retailers and feedback from end customers, create a rich flow of information. This information serves as raw material in the customer-based learning process, which is then processed into more responsive and measurable marketing strategies (Saifudin et al., 2019). In other words, CBL acts as a mediating mechanism that transforms distribution data into strategic insights.

Previous research supports that strengthening distribution channels with a customer-based learning approach results in higher marketing effectiveness compared to conventional distribution strategies (Islam & Hoque, 2018).

Based on these theoretical arguments, the second hypothesis of this study is formulated as follows: H4: Customer-Based Learning (CBL) mediates the relationship between the consignment system and marketing performance.

Store Characteristics

Store characteristics play an important role in determining the effectiveness of marketing and distribution strategies. Factors such as store location, physical size, demographic profile of nearby customers, and managerial competence have been proven to be key indicators that influence store performance (Kumar & Reinartz, 2016). Stores located in areas with high customer traffic and strong customer loyalty typically have greater potential for implementing customer-based strategies such as Customer-Based Learning (CBL). In other words, the effectiveness of marketing strategies is not solely determined by the approach used but also by the context of the store's characteristics.

Research indicates that specific store characteristics can influence how distribution strategies like consignment systems produce varying impacts. (Hwang et al., 2018) emphasize that distribution strategies and customer learning cannot be applied uniformly across all stores due to differences in geographical, economic, and operational conditions. For example, stores located in areas with high population density and a stable customer base are better able to optimize the benefits of consignment systems, as they have higher product turnover volumes and greater opportunities to observe consumer behavior. In this context, store characteristics act as moderators that determine the extent to which consignment-based distribution systems can contribute to enhancing customer-based learning (CBL).

Furthermore, store characteristics also influence the effectiveness of implementing customer learning outcomes (CBL) in improving marketing performance. Stores with responsive management systems, trained staff, and supporting technologies such as sales information systems are better able to translate CBL outcomes into relevant strategies, such as adjusting promotions, re-segmenting the market, or optimizing product placement (Gong et al., 2021). Thus, store characteristics not only moderate the relationship between the consignment system and CBL, but also the relationship between CBL and overall marketing performance.

Based on the above description, the following two hypotheses are proposed:

H5: Store characteristics moderate the relationship between the consignment system and Customer-Based Learning (CBL).

H6: Store characteristics moderate the relationship between Customer-Based Learning (CBL) and marketing performance.

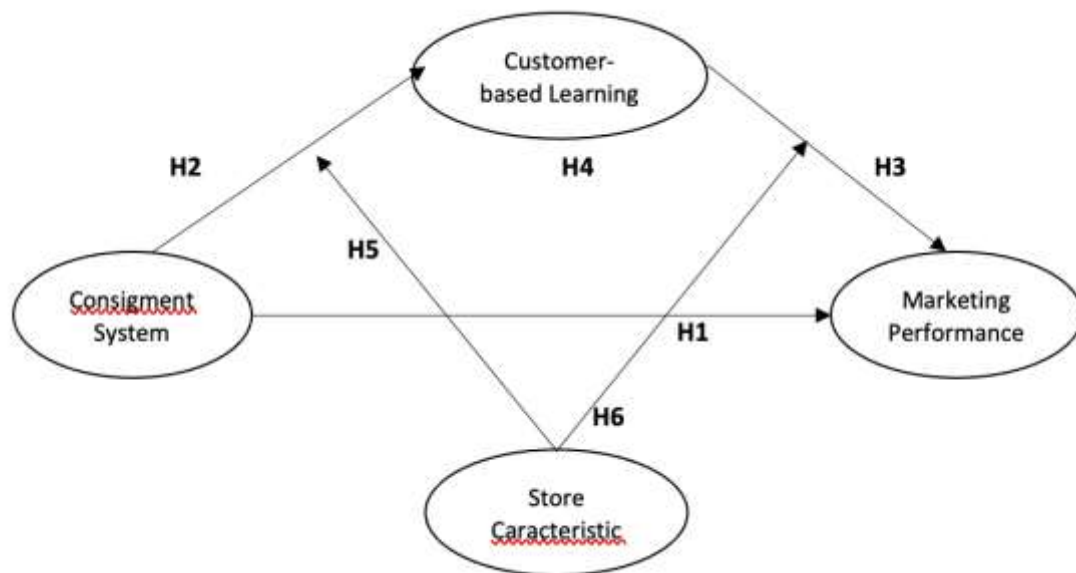


Figure 1. Research Model

RESEARCH METHODS

This study uses a quantitative approach with an explanatory research design (J. F. Hair et al., 2022). The main objective of this study is to examine the effect of the consignment system on marketing performance with the mediating role of Customer-Based Learning (CBL) and the moderating role of store characteristics. An explanatory research design was chosen because it is suitable for testing the relationships between variables that have been formulated in the hypotheses. The research design was developed to reveal the causal relationship patterns between independent variables, mediation, moderation, and dependent variables. With this approach, the research results are expected to provide an in-depth empirical understanding of the phenomenon of consignment-based distribution in the retail industry.

The population in this study consists of all third-class cigarette retail stores located in Malang Regency, which, according to data from the local Trade Office, numbered 1,225 active business units in 2024. The research sample was determined to be 100 stores selected proportionally from various subdistricts with significant retail distribution. The sampling technique used was purposive sampling, with the criteria being stores that had implemented the consignment system for at least the past six months. The selection of stores with consignment experience was important to ensure the validity of data on CBL and marketing performance. Additionally, the geographical distribution of the sample was considered to represent urban and rural characteristics in a balanced manner.

Data collection was conducted through a survey using a structured questionnaire. The questionnaire was developed based on validated indicators from previous literature and adapted to the local tobacco industry context. The instrument included a 5-point Likert scale to measure respondents' perceptions of variables related to the consignment system, CBL, marketing performance, and store characteristics. The questionnaires were distributed directly and also through digital media such as WhatsApp to increase response participation. Before being distributed widely, a pre-test was conducted on 15 respondents to ensure the clarity of the items and the reliability of the measurement tools.

The data analysis technique used in this study is Structural Equation Modeling–Partial Least Squares (SEM-PLS). This analytical tool was chosen because it can test complex models involving simultaneous mediation and moderation relationships. The analysis was conducted using the latest version of SmartPLS software, with a process that includes evaluation of the measurement model (outer model) and structural model (inner model). Outer model testing includes convergent validity,

discriminant validity, and construct reliability tests. Meanwhile, inner model testing focuses on the significance of relationships between variables through bootstrapping, as well as the assessment of R^2 , f^2 to evaluate the predictive power of the model.

RESULTS AND DISCUSSION

Validity testing in Structural Equation Modeling analysis based on Partial Least Squares (SEM-PLS) aims to measure the extent to which indicators are able to represent the construct being measured (J. Hair et al., 2014). One of the criteria used to assess convergent validity is the outer loading value of each indicator against its construct. In this context, an indicator is said to be valid if its loading factor value is greater than 0.7, which indicates that more than 50% of the indicator's variance is explained by the measured latent construct. Values above 0.7 reflect the indicator's strong and consistent contribution in explaining latent variables, as well as strengthening the reliability and validity of the model as a whole. Thus, when all indicators in the model have loading values above 0.7, it can be concluded that the construct in the model has good convergent validity.

Table 1. Loading Factor

Indicator	Consignment System	Customer-Based Learning	Marketing Performance	Store Characteristics
CBL1		0,871		
CBL2		0,827		
CBL3		0,871		
CBL4		0,870		
CS2	0,771			
CS3	0,881			
CS4	0,869			
CS5	0,798			
MP1			0,849	
MP2			0,827	
MP3			0,845	
MP4			0,856	
MP5			0,883	
SC1				0,733
SC2				0,878
SC3				0,901
SC4				0,896
SC5				0,881
CS1	0,847			

Source: Data processing results, 2025

The table presents factor loadings of various indicators across four constructs: Consignment System, Customer-Based Learning, Marketing Performance, and Store Characteristics. Indicators CBL1 to CBL4 show strong loadings above 0.82 on Customer-Based Learning, demonstrating good internal consistency. Similarly, CS1 to CS5 load significantly on the Consignment System, with values ranging from 0.77 to 0.88, confirming the construct's reliability. Marketing Performance is well represented by MP1 to MP5, with loadings between 0.83 and 0.88, indicating robust measurement. Lastly, Store Characteristics indicators SC1 to SC5 display high loadings from 0.73 to 0.90, supporting the validity of this factor. Overall, the loadings indicate well-defined constructs with strong indicator contributions to their respective factors. The Construct Reliability and Validity test in SEM-PLS aims

to assess the extent to which the constructs in the research model show internal consistency and convergent validity. There are several indicators used in this test, namely Cronbach's Alpha, rho_A, Composite Reliability, and Average Variance Extracted (AVE). Cronbach's Alpha and Composite Reliability are used to measure construct reliability, where the recommended value is at least 0.7. Meanwhile, the AVE value is used to measure convergent validity, with a minimum threshold of 0.5. If all indicator values meet the criteria, then the construct is considered reliable and valid, so it is suitable for use in the structural model.

Table 2. Construct Reliability and Validity

Variable	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Consignment System	0,890	0,894	0,920	0,696
Customer-Based Learning	0,882	0,884	0,919	0,740
Marketing Performance	0,906	0,906	0,930	0,726
Moderating Effect 1	1,000	1,000	1,000	1,000
Store Characteristics	0,910	0,910	0,934	0,740

Source: Data processing results, 2025

The reliability and validity analysis shows strong internal consistency and construct validity across the measured variables. Cronbach's Alpha values range from 0.882 to 0.910, indicating high reliability for all constructs, while rho_A and Composite Reliability values further support these findings with values exceeding 0.88 and 0.92, respectively. The Average Variance Extracted (AVE) scores are all above 0.69, demonstrating satisfactory convergent validity for each construct, including Consignment System, Customer-Based Learning, Marketing Performance, Moderating Effect 1, and Store Characteristics.

The Discriminant Validity test in SEM-PLS aims to ensure that each construct in the model actually measures different concepts from each other. One of the commonly used methods is the Fornell-Larcker Criterion, which compares the square root of the Average Variance Extracted (AVE) value of each construct with the correlation between other constructs. Discriminant validity is declared fulfilled if the square root value of AVE (shown on the diagonal of the table) is higher than the correlation between constructs (values outside the diagonal). This indicates that the construct is more highly correlated with its own indicators compared to other constructs, thus confirming that each construct is unique and does not overlap with other constructs in the model.

Table 3. Discriminant Validity

Variable	Consignment System	Customer-Based Learning	Marketing Performance	Moderating Effect 1	Store Characteristics
Consignment System	0,834				
Customer-Based Learning	0,832	0,860			
Marketing Performance	0,806	0,887	0,852		
Moderating Effect 1	-0,114	-0,068	-0,088	1,000	
Store Characteristics	0,785	0,879	0,874	-0,121	0,860

Source: Data processing results, 2025

The Fornell-Larcker Criterion confirms discriminant validity among the constructs, with the square roots of AVE (shown on the diagonal) being higher than the inter-construct correlations. For example, Consignment System's AVE square root is 0.834, which is greater than its correlations with other constructs. Notably, the moderating effect shows very low or negative correlations with other variables, indicating it is distinct and does not overlap significantly with the main constructs.

The F-Square test in the SEM-PLS approach is used to measure the magnitude of the exogenous influence on the endogenous by looking at how much a variable contributes to increasing the R-Square value of the endogenous construct. The F-Square value provides an indication of whether a construct has a small (≥ 0.02), medium (≥ 0.15), or large (≥ 0.35) effect on other constructs in the structural model. Thus, this test is important to evaluate the predictive power of the relationship between variables in the research model.

Table 4. F-Square

Variable	Consignment System	Customer-Based Learning	Marketing Performance	Moderating Effect 1	Store Characteristics
Consignment System		2,240	0,044		
Customer-Based Learning			0,187		
Marketing Performance					
Store Characteristics			0,186		

Source: Data processing results, 2025

Effect size (F-Square) analysis reveals that the Consignment System has a large effect (2.240) on Customer-Based Learning, while the influence of Customer-Based Learning and Store Characteristics on Marketing Performance shows small to moderate effects of 0.187 and 0.186, respectively. Other effects are minimal or not reported, suggesting that the Consignment System is a key driver within the model, with moderate impacts from learning and store characteristics on marketing outcomes.

The R-Square test in Structural Equation Modeling Partial Least Squares (SEM-PLS) is used to measure the magnitude of the ability of the independent variables to explain the dependent variable. A high R-Square value indicates that the model has good predictive power. In general, an R-Square value of 0.25 is considered weak, 0.50 moderate, and 0.75 strong. While R-Square Adjusted takes into account the number of indicators and variables in the model, thus providing a more conservative measure of the predictive power of the model.

Table 5. R-Square

Variable	R Square	R Square Adjusted
Customer-Based Learning	0,691	0,688
Marketing Performance	0,833	0,826

Source: Data processing results, 2025

The model's explanatory power is strong, as indicated by the R Square values: Customer-Based Learning explains 69.1% of its variance (adjusted $R^2 = 0.688$), and Marketing Performance explains 83.3% of its variance (adjusted $R^2 = 0.826$). These high values suggest the model reliably predicts the dependent variables and has good predictive relevance for understanding the relationships within the study.

Hypothesis testing in Structural Equation Modeling Partial Least Squares (SEM-PLS) is carried out to test the influence between latent variables in the research model. This process involves analyzing the path coefficient, t-statistic, and p-value values to determine whether the relationship between variables is statistically significant. A t-statistic value above 1.96 (at a significance level of 5%) indicates that the hypothesis is accepted, meaning that there is a significant influence between the independent variables on the dependent variable. In addition, the direction of the coefficient (positive or negative) indicates the type of relationship that occurs. This hypothesis test is crucial in empirically proving the causal relationship that has been formulated in the conceptual framework of the study. The validity of the results of this test provides a strong basis for drawing conclusions about the influences tested in the SEM-PLS model.

Table 6. Hypothesis Test

Hypothesis	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Consignment System to Marketing Performance	0,097	1,619	0,106
Consignment System to Customer-Based Learning	0,036	23,184	0,000
Customer-Based Learning to Marketing Performance	0,139	3,052	0,002
Customer-Based Learning Mediat Consignment System to Marketing Performance	0,106	3,576	0,000
Store characteristics moderate consignment system and Customer-Based Learning	0,028	0,115	0,908
Store characteristics moderate Customer-Based Learning (CBL) and marketing performance	0,047	22,762	0,000

Source: Data processing results, 2025

DISCUCCION

Consignment System to Marketing Performance

The statistical results show that the path from Consignment System to Marketing Performance has a T-statistic of 1.619 and a p-value of 0.106, indicating that the direct effect is not statistically significant at the 0.05 level. This suggests that the Consignment System alone does not have a strong direct impact on Marketing Performance in this study. However, in real-world business contexts, the Consignment System still plays a vital role in operational efficiency by reducing inventory risks and improving cash flow. Many retailers rely on consignment arrangements to optimize stock levels, which indirectly can support marketing efforts even if the direct statistical effect is weak here.

The lack of a significant direct effect might be due to the complex nature of marketing outcomes, which often depend on multiple interrelated factors beyond inventory management alone. For example, marketing success also hinges on understanding customer needs, promotional strategies, and competitive positioning. Therefore, the Consignment System's impact might be more nuanced, influencing Marketing Performance through other mechanisms or mediators. Business managers should consider integrating consignment practices with other strategies for enhanced overall results. Furthermore, the changing retail landscape, including digital transformation and customer behavior shifts, might dilute the direct impact of consignment on marketing outcomes. Firms need to focus on customer-centric approaches and innovation alongside efficient inventory systems to boost

marketing effectiveness. Thus, while the direct path is not significant, the Consignment System remains a foundational element in a broader strategic framework.

Consignment System to Customer-Based Learning

The path from Consignment System to Customer-Based Learning is highly significant, with a T-statistic of 23.184 and a p-value of 0.000, indicating a strong positive relationship. This suggests that the Consignment System facilitates better customer knowledge acquisition and learning within the organization. This phenomenon can be explained by the fact that consignment arrangements often require closer collaboration between suppliers and retailers, fostering information exchange about customer preferences and behaviors.

In practice, when suppliers monitor consigned goods, they gain direct feedback on which products are more popular or slow-moving, enabling continuous learning and adaptation. This learning is crucial in today's competitive market, as it allows companies to better anticipate customer needs and tailor their offerings accordingly. The Consignment System acts as a valuable source of real-time market intelligence, improving decision-making processes.

Moreover, this relationship highlights the importance of leveraging supply chain interactions for customer insight development. Organizations that actively use consignment strategies tend to develop stronger customer-based learning capabilities, which in turn can drive innovation and improve overall performance. It underscores how operational systems and customer learning are interconnected.

Customer-Based Learning to Marketing Performance

The statistical findings indicate that Customer-Based Learning has a significant positive effect on Marketing Performance, with a T-statistic of 3.052 and a p-value of 0.002. This confirms that organizations that effectively learn from their customers can significantly enhance their marketing outcomes. Customer-based learning enables firms to design more targeted campaigns, improve product offerings, and deliver higher customer satisfaction.

From a practical perspective, businesses that invest in gathering and analyzing customer data often outperform competitors by responding swiftly to market trends and preferences. This capability supports personalized marketing strategies and strengthens brand loyalty. The ability to adapt marketing efforts based on learned customer insights is essential in an era of rapid market changes. Additionally, this relationship emphasizes the value of feedback loops in marketing management. Continuous learning from customers leads to better alignment of marketing initiatives with customer expectations, ultimately boosting sales and profitability. Firms should prioritize mechanisms that facilitate ongoing customer learning.

Customer-Based Learning Mediates Consignment System and Marketing Performance

The mediation effect of Customer-Based Learning between Consignment System and Marketing Performance is statistically significant, with a T-statistic of 3.576 and a p-value of 0.000. This means that the Consignment System influences Marketing Performance indirectly through Customer-Based Learning. The direct path was not significant, but this mediating relationship reveals an important mechanism in how consignment impacts marketing success.

This phenomenon illustrates that the value of the Consignment System lies not in its direct impact but in its ability to promote customer insights that drive marketing effectiveness. By facilitating closer supplier-retailer interactions, consignment fosters learning that helps tailor marketing strategies more effectively. This mediation highlights the crucial role of knowledge and learning processes.

In practical terms, companies should focus on strengthening the learning processes derived from consignment practices to maximize marketing benefits. Simply implementing consignment is insufficient; organizations must leverage the resulting customer insights to improve marketing performance.

Store Characteristics Moderate Consignment System and Customer-Based Learning

The moderating effect of Store Characteristics on the relationship between Consignment System and Customer-Based Learning is not significant, with a T-statistic of 0.115 and a p-value of 0.908. This indicates that Store Characteristics do not significantly influence how Consignment System affects Customer-Based Learning. It suggests that the impact of the consignment system on customer learning is consistent regardless of store-related factors such as size or location.

This result might imply that operational and learning processes related to consignment are universal and less dependent on individual store attributes. Organizations can expect similar benefits from consignment-based learning across diverse retail environments. The consistency provides simplicity in managing consignment systems without needing heavy customization per store type.

In practice, this means firms may focus on optimizing consignment strategies broadly rather than tailoring them extensively based on store characteristics. This can reduce complexity and support scalable learning and operational improvements.

Store Characteristics Moderate Customer-Based Learning and Marketing Performance

The moderation analysis reveals a highly significant effect of Store Characteristics on the relationship between Customer-Based Learning and Marketing Performance, with a T-statistic of 22.762 and a p-value of 0.000. This means that Store Characteristics strengthen the positive impact of Customer-Based Learning on Marketing Performance. Store factors such as location, layout, or target market segment likely enhance the effectiveness of customer-driven marketing strategies.

This phenomenon reflects that certain store environments may provide better platforms for leveraging customer insights into tangible marketing results. For example, stores in premium locations or with better facilities may convert customer knowledge into sales more effectively. Store Characteristics thus act as important contextual factors that amplify learning benefits.

Practically, businesses should consider store-specific factors when implementing customer-based learning initiatives to maximize marketing performance. Investing in store improvements can enhance the value derived from customer insights and contribute to competitive advantage.

CONCLUSION

This study confirms that the Consignment System significantly influences Customer-Based Learning, which in turn enhances Marketing Performance, with learning fully mediating the relationship between consignment and marketing outcomes. While the Consignment System does not have a direct significant effect on marketing performance, its indirect effect through customer learning is crucial. Store Characteristics do not moderate the relationship between consignment and learning but do significantly moderate the link between customer learning and marketing performance, emphasizing their contextual importance.

The research contributes to theory by integrating supply chain management with customer knowledge processes and marketing outcomes, highlighting the mediation role of learning. Practically, it advises firms to focus on strengthening customer learning mechanisms derived from consignment systems and to consider store factors in marketing strategies. However, limitations include the study's cross-sectional design and potential contextual constraints limiting generalizability.

Future research could explore longitudinal data to capture changes over time, investigate additional moderating variables, and test the model across diverse industries and cultural contexts to validate and extend findings. Further studies should also examine how digital transformation influences these relationships in retail.

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