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ỨNG DỤNG MÔ HÌNH VMI TẠI IKEA VÀ ĐỀ XUẤT CHO DOANH NGHIỆP VIỆT NAM

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Tóm tắt

Nghiên cứu này cung cấp một cái nhìn sâu hơn về mô hình Quản lý tồn kho do nhà cung cấp quản lý (VMI) tại IKEA, xác định các yếu tố quan trọng, lợi ích và thách thức góp phần vào thành công trong việc giảm chi phí, cải thiện khả năng sẵn có của hàng hóa và nâng cao sự hài lòng của khách hàng. Thông qua việc phân tích mô hình VMI hiệu quả của IKEA, nghiên cứu đưa ra các khuyến nghị phù hợp cho doanh nghiệp Việt Nam, nhấn mạnh cách VMI có thể củng cố quản lý tồn kho và nâng cao hiệu quả chuỗi cung ứng. Ngoài ra, nghiên cứu còn đề cập đến các điều chỉnh vận hành và chiến lược cần thiết để áp dụng VMI tại Việt Nam, như cơ sở hạ tầng, công nghệ và thực hành hợp tác, nhằm cung cấp hướng dẫn giúp các doanh nghiệp địa phương cải thiện năng lực cạnh tranh và hỗ trợ tăng trưởng bền vững trong thị trường toàn cầu hóa.

Từ khóa: Quản lý tồn kho do nhà cung cấp quản lý (VMI), IKEA

ANALYSIS ON VMI APPLICATION AT IKEA AND RECOMMENDATION FOR VIETNAM ENTERPRISES

Abstract

This study explores Vendor-Managed Inventory (VMI) at IKEA, identifying critical components, benefits, and challenges that contribute to its success in reducing costs, improving stock availability, and boosting customer satisfaction. By analyzing IKEA's effective VMI model, the research provides tailored recommendations for Vietnamese

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businesses, highlighting how VMI can strengthen inventory management and supply chain efficiency. Additionally, it addresses the operational and strategic adaptations required for VMI in Vietnam, such as infrastructure, technology, and collaboration practices, ultimately offering guidance to help local enterprises improve competitiveness and support sustainable growth in a globalized market.

Keywords: Vendor-managed inventory (VMI), IKEA

1. Introduction

In today's competitive global marketplace, effective supply chain management is critical for businesses striving to enhance operational efficiency, minimize costs, and maximize customer satisfaction. Vendor-Managed Inventory (VMI) has emerged as a powerful strategy to streamline inventory management, enabling suppliers to monitor and replenish stock levels for their customers autonomously. VMI not only reduces lead times and lowers holding costs but also strengthens the collaborative partnership between suppliers and retailers, allowing for greater responsiveness to market demand.

IKEA, a global leader in the furniture industry, has implemented VMI with remarkable success, revolutionizing its supply chain to ensure product availability and optimize costs. This paper aims to analyze IKEA's application of VMI, exploring how its implementation has supported the company's operational excellence. Additionally, it seeks to draw lessons from IKEA's practices and propose tailored recommendations for Vietnamese enterprises aiming to adopt VMI.

The analysis involves examining the theoretical underpinnings of VMI, evaluating IKEA's approach, and assessing the success of its implementation. The ultimate goal is to provide actionable insights that Vietnamese businesses can use to strengthen their supply chains and achieve sustainable growth in an increasingly competitive market.

2. Theoretical framework

2.1. Definition VMI model

VMI (Vendor Managed Inventory) is a system designed to manage and optimize the supply chain. In this system, suppliers monitor inventory data and business information from retailers to coordinate orders, manage distribution, and plan inventory levels for retailers, which ensure optimal efficiency in production and business operations.

The primary objective of implementing the VMI process is to leverage historical data from both retailers and suppliers to predict future customer demand, from this businesses can stabilize production, reduce excess inventory, and manage warehouses more effectively.

2.2. Advantages and disadvantages of applying VMI model

2.2.1. Advantages

- ***For Retailers***

Vendor Managed Inventory (VMI) offers significant benefits to retailers by improving their inventory management processes. By transferring the responsibility of stock management to suppliers, retailers can maintain optimal inventory levels, reducing instances of stockouts and overstocking. This shift also lowers inventory holding costs, as retailers require less warehouse space and fewer resources for inventory monitoring. Furthermore, VMI enables retailers to focus more on their core activities, such as marketing, sales, and customer engagement, rather than inventory-related challenges.

- ***For Suppliers***

For suppliers, VMI provides the opportunity to strengthen their relationships with retailers through closer collaboration and trust-building. Access to real-time inventory and sales data allows suppliers to forecast demand more accurately, resulting in better production planning and logistical efficiency. By ensuring products are always available on shelves, suppliers can drive sales and improve market competitiveness. Additionally, the streamlined operations achieved through VMI reduce costs related to production overruns, storage, and transportation, further enhancing suppliers' profitability and operational performance.

- ***For Customers***

Customers also benefit significantly from the application of VMI. The system ensures consistent product availability, reducing the likelihood of disappointment caused by stockouts. With improved supply chain efficiency, cost savings achieved by retailers and suppliers can lead to more competitive pricing for customers.

- ***For the Entire Supply Chain***

On a broader scale, VMI enhances the efficiency and collaboration of the entire supply chain. By fostering closer relationships and improving communication between stakeholders, VMI creates a more synchronized and responsive system. The real-time data sharing inherent in VMI improves visibility across the supply chain, enabling better decision-making and quicker responses to market fluctuations. By optimizing inventory levels and reducing waste, VMI also minimizes costs throughout the supply chain.

2.2.2. Disadvantages

- ***Increased Dependency on Suppliers***

While VMI can streamline inventory processes, it may also create a high level of dependency on the supplier’s ability to manage and deliver stock effectively. When a company entrusts inventory control to an external supplier, its operations become vulnerable to any disruptions or challenges faced by that supplier. If the supplier experiences delays, production issues, or logistical setbacks, the buyer could face unexpected stock shortages, which could disrupt production schedules, impact customer satisfaction, and ultimately harm the company’s reputation. This dependency risk can be especially challenging if the supplier has limited capacity to manage spikes in demand or sudden changes in inventory needs.

- ***Higher Requirements for Data Sharing and Security Concerns***

Effective VMI relies on a transparent, real-time exchange of inventory and sales data between suppliers and buyers. This level of data sharing, while essential for accurate inventory management, raises significant concerns around data privacy and security. Sensitive business information, including sales trends, customer behavior, and inventory turnover rates, must be shared openly with the supplier, which increases the risk of data breaches or unauthorized access. Companies must invest in secure, robust data-sharing protocols to mitigate these risks, which can add complexity and cost to the VMI implementation. Additionally, concerns about protecting intellectual property and competitive advantage may cause reluctance in fully embracing VMI.

- ***Initial Setup Costs and Complexity of Implementation***

Implementing VMI is not a straightforward process and often requires a substantial initial investment in technology, infrastructure, and training. Companies may need to adopt new software systems for data integration, forecasting, and inventory tracking, which can be expensive and time-consuming. Additionally, staff training and changes to internal workflows are necessary to ensure the smooth operation of VMI, adding to the upfront costs. The initial complexity of setting up VMI, coupled with the need for ongoing maintenance and support, may deter some companies, particularly smaller businesses, from adopting this inventory model.

- ***Risk of Misalignment in Strategic Objectives***

In a VMI arrangement, suppliers and buyers may have different priorities or objectives, which can lead to conflicting approaches in inventory management. For example, a supplier may prioritize high inventory turnover to optimize production efficiency, while a buyer may prefer larger safety stock to ensure constant availability. Such misalignments can result in suboptimal inventory levels that either lead to excess stock, increasing carrying costs for the buyer, or insufficient stock, resulting in potential stockouts and customer dissatisfaction. Without clear communication and alignment on key metrics and objectives, VMI may not yield the desired outcomes for both parties.

- ***Potential for Stock Imbalance and Forecasting Errors***

Although VMI is designed to improve inventory management, it is not immune to forecasting errors or sudden shifts in demand. Inaccurate demand forecasting or unexpected changes in the market can result in a stock imbalance, with either excess inventory or insufficient stock to meet demand. In the case of overstocking, companies face increased carrying costs and risk of obsolescence, while stock outs can lead to lost sales, customer frustration, and damage to brand reputation. To mitigate these risks, both suppliers and buyers need to continually update demand forecasts and communicate frequently, but this can be challenging in rapidly changing markets.

- ***Reduced Flexibility for Buyers in Inventory Management***

One of the trade-offs in a VMI system is that the buyer relinquishes some level of control over inventory management to the supplier. This can limit the buyer's ability to make quick

adjustments to stock levels in response to sudden changes in demand, promotional activities, or shifts in business strategy. For instance, if the buyer identifies an unexpected sales opportunity, they may not have the flexibility to increase stock levels independently, as they are reliant on the supplier's schedule and stock replenishment process. This lack of control can be a disadvantage for companies that require high adaptability in their inventory management to stay competitive.

VMI can offer significant benefits when implemented well, especially in terms of cost savings, supply chain efficiency, and stronger supplier relationships. However, it requires close collaboration, transparency, and sometimes complex setup, so it might not be suitable for all business models or industries.

3. Overview of Ikea

3.1. Ikea establishment and development

IKEA was founded in 1943 in Sweden by Ingvar Kamprad. Headquartered in Sweden, this multinational conglomerate designs and sells easy-to-assemble and quality home furniture, appliances, and accessories at an affordable price.

From 1953 to 1958, IKEA opened its first furniture showroom in Almhult as well as introduced the flat-packed furniture designed for home assembly. IKEA became an international retailer when its first store in Norway opened in 1963. The company expanded beyond European countries and worldwide in the following years.

As of 2023, IKEA generated revenue of 47.6 billion USD, with 473 stores across 63 markets, and more than 219,000 employees globally (IKEA, 2023). Additionally, IKEA has expanded strongly in Asia, with stores in China, Taiwan, and Thailand, and has committed to using 100% sustainable wood sources, continuing to invest in green technology for future initiatives.

Currently, IKEA has approximately 1,600 suppliers across 55 countries. Two-thirds of them are in Europe, while the remaining one-third is in Asia. The five largest countries where IKEA sources its products are China, Poland, Italy, Germany, and Sweden (IKEA, 2023).

3.2. Mission and vision

IKEA, with its vision "To create a better everyday life for the many people.", is committed to providing high-quality, affordable, and sustainable furniture products. IKEA's mission is "to offer a wide range of well-designed, functional, and affordable home furnishing products so that as many people as possible can own them."

They achieve this through innovative product development, sustainable sourcing, and offering convenient shopping options both in-store and online. Their business model extends beyond profit, focusing also on positive social and environmental impact.

4. Analysis on VMI Application at Ikea

4.1. Implementation process of VMI Model at Ikea

IKEA first implemented its VMI model in 1996 because the company believes that the suppliers' positions are good positions to focus on products. Additionally, competitive commercial areas always offer the lowest possible prices to customers, therefore to minimize inventory costs, implementing the VMI model is a reasonable decision.

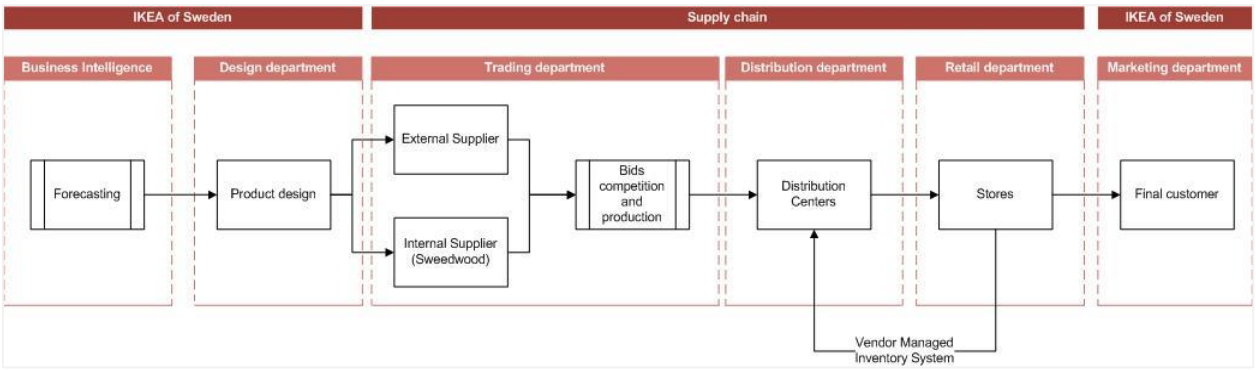

Figure: IKEA's Supply Chain

Source: Logistics - Master on Business, Products and Services Administration

In IKEA's Vendor-Managed Inventory (VMI) system, retail stores send daily updates on inventory levels and product sales to a centralized database. Demand forecasting is managed by IKEA Sweden, which determines minimum and maximum inventory thresholds at distribution centers based on projected demand. These distribution centers act as storage hubs and are responsible for supplying products to IKEA retail outlets. The distribution team tracks stock levels at these centers and routinely updates the central database with current inventory data.

Suppliers use this data to generate replenishment proposals, which IKEA's system automatically converts into confirmed orders, simplifying the restocking process. Suppliers receive daily updates via a VMI file, enabling them to plan inventory needs effectively. They are also tasked with organizing transportation of goods to distribution centers, though IKEA's distribution team at the centers manages carrier schedules.

Additionally, IKEA Trading AB ensures that suppliers meet their contractual responsibilities. If any issues arise, suppliers can reach out to IKEA's Business Support team for assistance, collaborating to address and resolve problems efficiently.

The implementation process of VMI at IKEA will be illustrated as below:

Step 1: Data Integration and Sharing

IKEA shares real-time inventory levels, warehouse stock, and sales data with suppliers via EDI systems. This enables suppliers to monitor demand patterns and stock movements. Integration with IKEA's ERP system ensures seamless data exchange.

Step 2: Forecasting and planning

Suppliers analyze IKEA's sales history and inventory data to create demand forecasts. IKEA collaborates with suppliers to establish safety stock thresholds and reorder points specific to each product category and location, considering the global reach of its warehouses and stores.

Step 3: Stock Replenishment Planning

Suppliers take over the responsibility of monitoring stock levels and initiating replenishment orders. IKEA and its suppliers set clear service-level agreements (SLAs) defining stock thresholds. IKEA's logistics and warehouse systems can be programmed to automatically notify suppliers about replenishment needs or allow suppliers to act autonomously.

Step 4: Order Processing

When a replenishment order is required, suppliers create a purchase order (PO) using EDI 850, which IKEA acknowledges using EDI 855. Suppliers send an Advance Ship Notice via EDI 856, providing details of the shipment. IKEA's warehouses use this information to prepare for incoming shipments and update inventory records in advance.

Step 5: Inventory Replenishment

Suppliers pick, pack, and ship products to IKEA's regional distribution centers or directly to stores. For IKEA, the replenishment system must align with its flat-pack delivery model, ensuring efficient utilization of space during transportation and storage. Vendors work closely with IKEA's logistics partners to meet the delivery timelines specified in the SLAs. Products are then distributed from regional DCs to IKEA's stores or used to fulfill online orders.

Step 6: Returns and Excess Management

In cases of excess stock or product returns, IKEA and its suppliers establish a reverse logistics process. Excess inventory can be redistributed to other locations or offered at IKEA's "As-Is" sections, where customers can purchase discounted items. Suppliers and IKEA collaborate to reduce waste by recycling or repurposing unsellable products, aligning with IKEA's sustainability goals.

IKEA and its suppliers also frequently review and evaluate key performance indicators (KPIs) related to the VMI system, such as inventory turnover, stock availability, and forecast accuracy. This collaborative approach allows both parties to identify areas for improvement and adapt to changing demand patterns. IKEA also provides constructive feedback to suppliers, helping them refine their processes and align with IKEA's operational goals. Regular communication and periodic updates to the VMI agreements ensure that the system remains efficient and flexible, supporting continuous improvement and accommodating IKEA's growth and evolving business needs.

4.2. Evaluate the effectiveness of applying VMI at Ikea

4.2.1. Customer satisfaction indicators

- ***Customer Satisfaction Scores***

Following the implementation of VMI, IKEA's customer satisfaction scores increased significantly. Internal surveys indicated that satisfaction levels rose from 75% to 85%. Customers reported greater satisfaction with product availability, noting that popular items are consistently in stock. This reliability has strengthened customer loyalty, as shoppers feel assured they can find what they need.

- ***Net Promoter Score (NPS)***

The Net Promoter Score (NPS) is a vital metric for measuring customer loyalty at IKEA, recently rising from +30 to +45. This improvement reflects enhanced customer experiences resulting from the implementation of VMI, which ensures consistent product availability and reduces delivery times from 7 days to approximately 4 days. Customers have reported positive interactions with staff and effective support, contributing to higher satisfaction levels. As a result, more customers are willing to recommend IKEA, which not only boosts brand advocacy and customer retention but also provides valuable insights for strategic improvements. This strong NPS enhances IKEA's market position, distinguishing it from competitors and fostering a loyal customer base.

- ***Repeat purchase rate***

The repeat purchase rate at IKEA has shown a positive trend post-VMI implementation. IKEA data indicate that more then half of customers return for additional purchases within six months of their initial buy. This increase is linked to improved satisfaction with product availability and the overall shopping experience, encouraging customers to choose IKEA for future needs.

4.2.2. Performance Metrics

- ***Stockout Rate***

The stockout rate measures the frequency of unavailable products in inventory. Since the implementation of VMI, IKEA has successfully reduced its stockout rate, improved products availability. This improvement is particularly significant for high-demand items. The drastic reduction in stockouts indicates that real-time inventory management allows suppliers to respond swiftly to demand fluctuations, ensuring that popular products are consistently available. This reliability enhances customer satisfaction, as shoppers are less likely to encounter frustrations related to unavailable items, ultimately leading to increased sales.

- ***Order Fulfillment Rate***

The order fulfillment rate is a critical metric that reflects IKEA's ability to complete customer orders accurately and on time. After adopting VMI, IKEA improved its order fulfillment rate to nearly 90%. This enhancement means that the majority of customer orders, whether placed online or in-store, are now filled correctly and delivered promptly. For instance, the efficiency of the VMI system enables IKEA to ensure that when a customer orders multiple items, the likelihood of receiving the complete order as scheduled has

significantly increased. This reliability not only boosts customer trust but also enhances the overall shopping experience.

- ***Inventory Turnover Rate***

The inventory turnover rate measures how quickly IKEA sells and replaces its inventory over a specific period. Post-VMI implementation, the inventory turnover rate has improved. This increase signifies that IKEA is managing its inventory more effectively, reducing holding costs, and minimizing the risk of obsolescence. Higher turnover rates are particularly important for seasonal products and new arrivals, as they allow IKEA to refresh its inventory more frequently and respond to changing customer preferences. This efficiency contributes to better financial performance and aligns inventory levels more closely with customer demand.

- ***Average Delivery Time***

The average delivery time for online orders is a crucial performance metric that affects customer satisfaction. Since the introduction of VMI, IKEA has successfully reduced its average delivery time from 7 days to approximately 4 days. This reduction is essential in meeting the growing customer expectation for fast and reliable shipping. Feedback from customers indicates that faster delivery times have significantly enhanced their shopping experience, leading to increased online sales and repeat purchases. This improvement not only strengthens IKEA's competitive position in the e-commerce market but also fosters customer loyalty.

5. Evaluation of Ikea's success in implementing VMI model

5.1. Before applying VMI

Before implementing VMI, IKEA encountered significant challenges in managing its global supply chain which could hinder the enterprise's ability to meet its target.

Firstly, by the early 1990s, IKEA had established a vast global presence, offering more than 20,000 products across its stores. The company operated over 120 retail outlets in 24 countries and distributed more than 45 million catalogs in over 12 languages (Andrea Larson, 2008). Its supply chain was supported by a network of more than 2,300 suppliers across 70 countries, which delivered finished goods to 14 large regional warehouses. This complexity increased the risk of stockouts and overstocking, both of which could lead to operational disruptions and substantial negative outcomes. Stockouts could result in customer dissatisfaction, lost sales, and revenue, as well as customers turning to competitors, ultimately damaging IKEA's reputation. On the other hand, overstocking could tie up capital, increase storage costs, and lead to waste, particularly for items with limited shelf life or changing design trends. These risks underscored the critical need for efficient inventory management in such a globally interconnected supply chain.

Secondly, before IKEA implemented its first VMI relationship in 1996, logistics accounted for a large amount of IKEA's operating expenses. In order to maintain the high level of customers' satisfaction, IKEA needed to maintain a high level of stocks which led

to additional warehousing needs, increasing costs related to storage, handling, and transportation. Expanding inventory storage space alone would require a 50% increase in IKEA's warehousing infrastructure, costing millions of euros in logistics investments.

Thirdly, suppliers have relied solely on customer orders as their primary source of demand information. This reliance often triggers the bullwhip effect, making demand appear more variable and unpredictable than it truly is. Over time, this can result in inefficient use of capacity, reduced product availability, and excessively high inventory costs due to the need for large safety stocks.

Fourly, IKEA's aim is to reduce prices to compete with low-cost markets. With key suppliers located in countries like China (19%), Poland (12%), Sweden (8%), Italy (7%) and Germany (6%), an inefficient inventory management model which can increase the overall cost would limit IKEA's ability to compete with other companies in the same field with low-cost strategy.

5.2. After applying VMI

In 1996, IKEA started to implement VMI as a strategic response to these challenges. Under the VMI model, suppliers were able to access IKEA's inventory and sales data which enabled them to actively manage stock based on real-time demand. The shift to VMI brought significant benefits to IKEA:

With VMI, stockouts decreased within the period of implementation. High-demand products were consistently available in stores. Inventory turnover rates also improved, which means products spent less time in storage and more time on the sales floor, which contributed to an overall reduction in warehousing costs. Therefore, this reduction contributed to cut overall logistics expenses, ultimately helping them to meet the price reduction target.

By 2006, supplier productivity improved as suppliers became more efficient in planning production based on real-time demand data from IKEA. This strengthened IKEA's relationship with suppliers, allowing the company to operate more effectively. For example, suppliers could optimize delivery schedules and transportation methods to reduce lead times, improving IKEA's overall supply chain.

With the enhanced supply chain efficiency, IKEA's retail revenue reached €17.7 billion by 2006, as well as remaining consistently product availability and improved customer satisfaction due to reduced stockouts. VMI has supported IKEA's global expansion efforts by helping the company to meet increased demand efficiently, further strengthening its position as a market leader in affordable home furnishings.

6. Recommendations for Vietnamese Enterprises in VMI implementation

6.1. Overview of Vietnamese Enterprises in applying VMI

In the world's supply chain today, the idea of vendor-managed inventory (VMI) is not a new concept anymore. Its usage of improving supply chain performance especially enhancing warehouse efficiency and meeting customer demand has always been apparent. This strategic approach has been widely adopted by enterprises globally such as Walmart

and Home Depot, e-commerce firms like Amazon, and fast-moving consumer goods companies like Procter & Gamble.

In Vietnam, the adoption of VMI among Vietnamese enterprises has been growing gradually, particularly in sectors such as retail, manufacturing, and distribution, where companies can significantly benefit from optimized inventory management and streamlined supply chains. However, it is still limited compared to other countries in the region. While some large corporations and multinational companies operating in Vietnam, for example ITL, Unilever, Vietnam Post or Metro have begun implementing VMI to streamline their supply chain operations, improve their efficiency and responsiveness in the market, the practice is not yet widespread among local Vietnamese enterprises, particularly small- to medium-sized businesses.

There are several challenges that limited the adoption of VMI in Vietnam. Firstly, many Vietnamese enterprises, particularly small and medium-sized enterprises (SMEs), lack the necessary technological infrastructure for the implementation of VMI. The integration of this advanced inventory management system as well as the real-time data sharing platforms requires significant investment, which may be beyond the budget of smaller companies. Secondly, there is a general lack of awareness and understanding of VMI among Vietnamese businesses. Many companies are still unfamiliar with the concept and its potential benefits. Moreover, there is not any pioneer company which applied VMI and had significant success. Therefore, it leads to the reluctance in adopting this practice in Vietnam. Additionally, significant barriers in the process of applying this are the concerns over data sharing and trust between suppliers and customers. Companies may be hesitant to share sensitive inventory and sales data with suppliers due to fears of data misuse or competitive disadvantage.

Despite these challenges, there are more and more enterprises in Vietnam which attempt to apply VMI into their supply chain process. As Vietnam is trying to integrate into the global economy, Vietnamese enterprises have more opportunities to be exposed to more advanced supply chain practices and technologies which are currently used by big corporations in the world. Moreover, the supply chain is more and more complicated, leading to an increasing demand for effective warehouse management, which act as incentives for more companies in Vietnam to explore VMI as a means to enhance their competitiveness and operational efficiency. Furthermore, the Vietnamese government is promoting digital transformation and the adoption of Industry 4.0 technologies, which could create good conditions for Vietnamese corporations to implement VMI. As technological infrastructure improves and businesses become more aware of the benefits of VMI, it is expected that more Vietnamese enterprises will adopt this strategy in the future.

6.2. Recommendation for Vietnamese enterprises

These are some key recommendations for Vietnamese enterprises to successfully implement VMI:

- ***Enhance partner's relationship and communication***

IKEA selects suppliers based on their ability to provide quality products at competitive prices, while adhering to IKEA's sustainability and social responsibility standards. According to IKEA, to create a stronger positive impact and continuously develop, there are two essential enablers, besides auditing. One is to empower and have regular conversations with suppliers, and the other is to trust them in leading change. Still, audits remain a very important conducts regular audits and assessments to ensure compliance with these standards. Therefore, IKEA always works closely with suppliers, providing accurate information required to ensure timely and cost-effective delivery.

Vietnamese enterprises should also learn from IKEA in this aspect of maintaining a close relationship with their partners. At the beginning, parties should outline explicitly their roles, responsibilities, and expectations. Both parties must agree on the operational details, such as delivery schedules, inventory levels, return policies, and min/max replenishment levels to avoid misunderstandings in the future.

Furthermore, due to the characteristics of VMI which require the sharing data between the suppliers and buyers, collaboration and trust is essential for effective VMI. As IKEA, Vietnamese enterprises must commit to sharing precise information and the suppliers must ensure reliable transmission, receipt, and use of information. All of the information relating to inventory levels, expected demand should be made available to the suppliers by the buyers so as to reduce lead times or delivery on time. They can also think of applying some data security measures to control the data as well as be transparent with suppliers about how data will be used, and encourage them to follow similar security practices to foster trust.

- ***Adapt VMI to local business practices***

Over the years of penetrating different markets worldwide, although the more global the expansion, the more complex it becomes, IKEA has achieved great success in conquering some of the most demanding markets, such as China and India. That success came from careful market research, appropriate development strategies, and any modifications in the operational strategy to be more suitable for each business environment.

Therefore, along with learning from the lesson of IKEA in applying VMI successfully, Vietnamese companies should adjust the VMI model to fit the specific logistical and infrastructural situation in Vietnam. Unlike in markets where infrastructure is robust and logistics are streamlined like Sweden where the headquarters of IKEA is located, Vietnamese enterprises may face some specific challenges, such as the risk of late delivery times due to traffic congestion, weather conditions, and limitations of regional transportation. It's essential to consider these factors when setting delivery and replenishment schedules. For instance, instead of rigid schedules, companies could establish more flexible delivery schedules to fit with variable conditions. Additionally, during national holidays like Tet or other celebrations and holidays, demand often spikes and transport becomes slower or limited, requiring adjustments to avoid stockouts or delays. By tailoring VMI practices to these local realities, enterprises can ensure smoother replenishment activities and maintain optimal inventory levels.

- ***Seek government and industry support programs***

Unlike IKEA - a transnational company who has been a giant in the industry of household furniture which has a strong financial status, most of Vietnamese enterprises are small and medium companies. VMI is famous for its benefit of controlling inventory effectively based on the coordinate between suppliers and the enterprises. However, applying this model is a challenge for Vietnamese enterprises due to its high cost of investment and operation.

Based on the Party's policies, on June 12, 2017, the National Assembly passed the Law on Support for Small and Medium Enterprises, which mentioned forms of support and financial policies such as: taxes, fees, charges, credit, direct or indirect budget support, subsidies, price compensation, credit guarantee funds... to support and develop enterprises. Enterprises should grasp these policies to create opportunities for themselves to develop further, for example, borrowing at low interest rates to have capital for investment which can help offset initial VMI setup costs.

In addition, government-sponsored training and workshops are often available to educate businesses on the latest digital tools and supply chain best practices. These programs not only make VMI implementation more affordable but also ensure that Vietnamese companies stay up-to-date with international standards in inventory management and logistics.

Moreover, we should build some local trade associations and supply chain networks to provide a platform for companies to connect, exchange insights, and learn from peers who have experience in implementing VMI. By participating in these associations, Vietnamese enterprises can access the best practices and industry knowledge that can help the process of VMI adoption easier.

7. Conclusion

The analysis of Vendor Managed Inventory (VMI) at IKEA underscores its transformative impact on operational efficiency, lead time reduction, and inventory management in large-scale retail environments. IKEA’s successful integration of VMI with its supply chain partners has minimized inventory holding costs and strengthened supplier relationships, streamlined the supply chain, and enhanced customer satisfaction by ensuring consistent product availability. These outcomes highlight the strategic value of VMI, offering valuable lessons for Vietnamese enterprises aiming to improve their supply chain performance. In Vietnam’s expanding manufacturing and retail sectors, VMI represents a promising opportunity to increase inventory accuracy, optimize storage capacity, and respond more effectively to changing market demands. However, implementing VMI successfully in the Vietnamese context requires strong trust and transparency between suppliers and retailers, along with robust data-sharing capabilities. Additionally, businesses must be prepared to invest in compatible technology and infrastructure and provide staff training to manage new processes effectively. Despite these challenges, VMI's potential benefits in terms of cost savings, operational efficiency, and enhanced customer satisfaction

make it a compelling model for Vietnamese enterprises. With careful planning, collaboration, and a commitment to adopting best practices, Vietnamese companies can adapt IKEA's VMI approach to local market conditions, building a more resilient, competitive, and customer-focused supply chain.

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