Vietnam Supply Chain at a glance

A KPMG Survey

September 2021
Foreword

Disruption has become a persistent condition of doing business. The supply chain practice of the past will no longer be sufficient to support the future marketplace in an optimal way. Organizations that succeed are those that adapt to continuous change and become the drivers of change. We have seen the impacts of COVID-19, which have highlighted the importance of a supply chain that can adapt to deal with uncertainty, complexity, and fast and dynamic changes.

This survey report will provide insights about the supply chains in Vietnam, in terms of 'Where we are' to 'Where to go next' and 'How to go'.

To write this report, we have reached out to supply chain leaders of multiple leading organizations from different industries, company sizes, and with different supply chain maturities and obtained insights through an online survey to get views on the current supply chain challenges, key focus areas, and future aspirations.

The report is intended to give the supply chain professional insights in what your peers in this domain are struggling with and what they are planning for the future. Knowing what other supply chain professionals are doing can instill confidence in charting your path forward in a dynamic environment we live in. Our KPMG consultants are here to help you navigate the challenges ahead. On a final note, we would like to express our appreciation to our survey respondents for actively supporting us in this endeavor.

Nguyen Tuan Hong Phuc
Head of Customer & Operations
Management Consulting
KPMG Vietnam
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**Key findings**

A. Supply chain in Vietnam: Current challenges

- **67%** Supply chain leaders rank **market risk** as one of their top concern.

- **56%** Indicate **lack of alignment** between supply chain operations and business direction is the most challenging area.

- **52%** Agree the **lack of real-time visibility** of cost, service level, inventory, etc. on the end-to-end supply chain as the second top pain-point.

B. Existing initiatives and roadblocks

- **56%** Organizations are pursuing **point solutions** to improve supply chain performance.

- **41%** Believe that the **hesitation** from management in making a **large-scale investment** is the biggest obstacle for the supply chain transformation.

C. Key emerging themes for supply chain of the future

- **41%** Organizations have built their supply chain with **customer at the center** on the agenda.

- **48%** Nominate **operations excellence**, together with **digitalization**, to be the top focus areas for supply chain future capability.

- **70%** Believe **leadership drive** is the key factor for a successful supply chain transformation.

- **56%** Envisage to continue developing their **ERP system** as the core in their journey of digital supply chain transformation.

D. Enterprise aspiration

Supply chain practitioners are quite **conservative** in their aspirations of benefits across the four stages of supply chain (Plan, Source, Make, Deliver). This could be explained due to the fact that actions planned by organizations are **point solutions** rather than integrated solutions and not transformational in nature.
A: Supply chains in Vietnam: Current challenges

Chart 1: Most concerned risks in Supply Chain

- Two-thirds of companies had selected demand volatility as one of the most concerned risk that impacting their supply chain’s performance.
- Large share of companies also face risks in dealing with their suppliers. Proactive steps will have to be taken to improve supplier quality.

Chart 2: Top 5 challenges of Vietnam supply chains

- The alignment between organizations’ business direction and supply chain operating model is low.
- There is lack of real-time visibility of cost, service level, inventory, etc. on the organizations’ end-to-end supply chain.
- Organizations are not up to date with latest technologies and are slow in response to digital transformation.
- Supply chain is an undervalued area from top management and is reacting to decisions made in sales rather than proactive involved in top management decision.
- The level of collaboration among departments within end-to-end supply chain is low

• Lack of alignment between supply chain operating model and business direction is voted as the biggest challenges within supply chain activities.
• The top 5 challenges with the relatively equivalent scoring at 40-60% across surveyed companies, tell us that leadership's engagement and sponsorship towards resilience and agile supply chain need to be prioritized.
A: Supply chains in Vietnam: Current challenges

Organizations highlighted some of the major challenges being faced across the four stages of supply chain – Plan, Source, Make and Deliver

1. PLAN

Lack of long-term planning, repetitive failures from supply planning, and forecasting accuracy are the top three challenges for planners.

2. SOURCE

Top 3 challenges in Source are the uncertainty in inbound flow, lack of qualified supply base, and day-to-day fire-fighting to manage operational procurement.

3. MAKE

Numerous organizations with manufacturing activities face constraints in shop floor operations (including process, people, etc.) and technology enablers.

4. DELIVER

Infrastructure, warehouse management and managing cost to serve are the top three challenges in Deliver phase.
A: Supply chains in Vietnam: Current challenges

Chart 3. Top challenges in Plan

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of long term planning activities</td>
<td>59%</td>
</tr>
<tr>
<td>Repetitive failures from supply planning</td>
<td>56%</td>
</tr>
<tr>
<td>Accuracy of forecasting process</td>
<td>48%</td>
</tr>
<tr>
<td>Gap in planning capabilities</td>
<td>44%</td>
</tr>
<tr>
<td>Silo mindset in planning</td>
<td>37%</td>
</tr>
<tr>
<td>Manual working dependence and technology enabler shortage</td>
<td>22%</td>
</tr>
</tbody>
</table>

Strategic and integrated planning is crucial to driving the effectiveness of supply chains because it will ensure the alignment between the organizational business goal with the supply chain’s objectives. However, most companies are spending efforts on short-term planning with limited visibility of whether those activities are helping them achieve the business goal. Another significant problem is that each department within supply chains tends to chase its own priorities instead of being navigated by a common direction. Consequently, we can see that although the organizational workforce seems to be occupied by planning activities, the companies are still facing issues of unbalanced demand and supply, slow-moving inventory, and lost sales.

Chart 4. Top challenges in Source

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of local supply base</td>
<td>37%</td>
</tr>
<tr>
<td>Limited supplier base</td>
<td>22%</td>
</tr>
<tr>
<td>Fluctuation in material price</td>
<td>19%</td>
</tr>
<tr>
<td>Procurement too much focus on price instead of service quality</td>
<td>30%</td>
</tr>
<tr>
<td>Less time allocation to strategic sourcing because of day to day firefighting</td>
<td>30%</td>
</tr>
<tr>
<td>Lack of procurement and category strategies</td>
<td>19%</td>
</tr>
<tr>
<td>Uncertainty on supplier delivery/ lack of capacity allocation and visibility at supplier end</td>
<td>56%</td>
</tr>
<tr>
<td>Ensuring supplier quality compliance</td>
<td>33%</td>
</tr>
</tbody>
</table>

Most companies are suffering from the uncertainty of supplier delivery, a lack of qualified supply base for alternative sources causing disruption in manufacturing and distribution. One of the significant root causes of those pain points is that companies are engaged in day-to-day firefighting to manage operational procurement but are not investing proper effort into strategic procurement. Category management, supplier relationship & risk management are among the top areas that can bring significant value-added in realizing cost-saving and improving supply stability but are still underestimated.
A: Supply chains in Vietnam: Current challenges

Chart 5. Top challenges in Make

<table>
<thead>
<tr>
<th>Enablers</th>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset breakdown and unpredictability associated with the same</td>
<td>37%</td>
</tr>
<tr>
<td>Cost for advanced technology/machinery upgrade</td>
<td>26%</td>
</tr>
<tr>
<td>Incorporating flexibility in production systems</td>
<td>22%</td>
</tr>
<tr>
<td>Poor integration between manufacturing and business plan</td>
<td>44%</td>
</tr>
<tr>
<td>Ensuring optimum usage of resources</td>
<td>41%</td>
</tr>
<tr>
<td>Talent management/availability of right resources with technical skills</td>
<td>33%</td>
</tr>
<tr>
<td>Production plan adherence</td>
<td>30%</td>
</tr>
<tr>
<td>Ensure product quality to meet various customer demand/expectation</td>
<td>11%</td>
</tr>
</tbody>
</table>

Notes: This question only applied for companies having manufacturing function within supply chain

Manufacturing is the core of the business, and the effectiveness of production can significantly impact the companies’ performance. Still, companies are struggling with how to improve their manufacturing capability. The low integration between supply planning and production scheduling is causing a high frequency of change over. The lack of leading practice in maintenance is leading to unpredictable asset breakdowns. The difficulty in onboarding the right resources with technical skills is dragging productivity. These significant issues require a holistic approach to strengthen shop floor practices and enhance the manufacturing performance.

Hoang Thi Hong Ha
Associate Director, Customer & Operations Management Consulting

Chart 6. Top challenges in Deliver

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of right infrastructure</td>
<td>41%</td>
</tr>
<tr>
<td>Lack of technology enablement in management and execution of the logistics function</td>
<td>22%</td>
</tr>
<tr>
<td>Warehouse management/associated services</td>
<td>48%</td>
</tr>
<tr>
<td>Managing cost to serve</td>
<td>48%</td>
</tr>
<tr>
<td>Adherence to delivery schedules/service level agreements on OTIF</td>
<td>30%</td>
</tr>
<tr>
<td>Traceability/Accountability of products till last mile</td>
<td>26%</td>
</tr>
<tr>
<td>Special product shipping method</td>
<td>26%</td>
</tr>
<tr>
<td>Logistics service provider management</td>
<td>22%</td>
</tr>
<tr>
<td>Reverse logistics management</td>
<td>15%</td>
</tr>
</tbody>
</table>

Besides mobilizing the proper infrastructure, the two other significant challenges for the delivery stage are cost-to-serve management and warehouse management. Although companies understand the importance of cost-to-serve visibility, they face difficulties in consolidating and analyzing data to identify focused areas for improvement. On the other hand, warehouse operation optimization is also a potential opportunity for enhancement that most companies need to take serious effort investment.

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Manager, Customer & Operations Management Consulting

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B: Existing initiatives and roadblocks

The relatively high cost of large-scale transformation is the most common roadblock. In addition, the extension of the payback period makes significant investments unattractive for management. This can be reflected on the high proportion of point initiatives being implemented across supply chain.

Most companies are keen on quick wins and point solutions; one of the critical success factors is to evaluate the interdependence of those initiatives and apply appropriate measurements to monitor and track the performance of the end-to-end supply chain to ensure the overall positive impact. That will also require clear visibility across all supply chain nodes with business analysis and data analysis capability.

On the other hand, many supply chain leaders are now considering deploying a large-scale supply chain transformation with a structure and holistic approach rather than continuing with point initiatives. KPMG believes companies leaders should first clarify their strategic ambitions and develop an improvement roadmap with an appropriate approach considering the organization’s readiness.

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**Chart 7: Initiatives being taken by companies to improve supply chain performance**

- Point solutions across supply chain: 56%
- Improving visibility across supply chain: 52%
- Digitalization and data enhancement across supply chain: 33%
- Sustainability: 22%
- Collaboration with supply chain partners: 19%
- Large scale supply chain transformation: 19%

**Chart 8: Mindsets creating roadblock for large scale transformation**

- Management’s lag approach: 41%
- Follower mindset: 11%
- Unwilling to acquire too sophisticated knowledge: 15%
- Lack of commitment: 19%
- Limited bandwidth of management for supply chain transformation: 33%
- Organization focus on other priority areas: 30%

**Chart 9: Level of technology adoption in supply chain**

- Low technology adoption: 19%
- High technology adoption: 30%

- Minimal or None usage of ERP/ technology platform. Primarily excel based, zero digitization
- 50-50% usage of standalone platforms/ analysis based on excel files
- Minimal usage of excel files and majority of the work done through connected technology/ digitization
- 100% usage of technology platform which is connected end-to-end

Only 11% of surveyed companies solely make use of end-to-end connected technology platforms. Other firms will have to adapt quickly and unite all platforms in order to prevent themselves from falling behind.
C: Key emerging themes for supply chain of the future

Chart 10. Supply chain focus area

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer centricity</td>
<td>41%</td>
</tr>
<tr>
<td>Sustainable supply chain</td>
<td>33%</td>
</tr>
<tr>
<td>Vendors/Partners management</td>
<td>26%</td>
</tr>
<tr>
<td>Risk mitigation in supply chain</td>
<td>19%</td>
</tr>
<tr>
<td>Digital supply chain</td>
<td>48%</td>
</tr>
<tr>
<td>Operations Excellence</td>
<td>48%</td>
</tr>
<tr>
<td>Leadership and company culture</td>
<td>37%</td>
</tr>
<tr>
<td>Talent acquisition capability</td>
<td>26%</td>
</tr>
</tbody>
</table>

The most commonly pursued initiative for companies in Vietnam is still Operations Excellence and Digital supply chain; meanwhile, 41% survey responded with Customer centricity, and 33% say focus on Sustainable supply chain.

Chart 11. Success factors that are likely to enable supply chain transformation

Key stakeholders collaboration & Core technologies/ new platforms investment
Change management
Leadership drive
Cross-functional team deployment & Reward and recognition

The majority of companies agreed that Change management and Leadership drive are the key essential factors for a successful supply chain transformation.

Chart 12. Technology options being explored for supply chain transformation

- ERP system: 56%
- Own customized tools/technologies: 52%
- Big data/advanced analysis: 48%
- Mobility/Communication infrastructure: 44%
- Standalone planning system: 44%

Unsurprisingly, ERP and building customized tools are the top technology-related choices of supply chain practitioners.

Chart 13. Technology options to be implemented/developed for supply chain transformation

- ERP system: 56%
- Big data and advanced analytics: 33%
- Standalone planning platforms: 22%
- IOT/MES/Sensor technologies: 22%
- Artificial Intelligence: 19%
- Robotic process automation: 11%

More than half (56%) surveyed participants responded that they plan to continue developing their current ERP systems and adopt advanced analytics in their supply chains. A significant share is also looking to adopt standalone planning platforms to combat previously mentioned planning issues.
D: What are supply chain aspirations of organizations in our survey?

Key take-away:

- According to the study, the most aspirations appear to be in the Plan and Deliver stage. We can see that at Range 5 (>50%), the most aggressive range, has the highest response rate regarding the three important KPIs in supply chain.

- In the midst of multiple efforts, the majority of organizations are aiming for only a 10-20% improvement in KPIs. This indicates that the actions that are being planned by organizations probably scattered solutions and not transformational in nature.

Chart 14: Spread of benefit aspirations by organizations in supply chain KPIs

<table>
<thead>
<tr>
<th>Supply chain stage</th>
<th>Key Performance Indicators (KPIs)</th>
<th>Benefit aspiration ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Range 1 (0-10%)</td>
</tr>
<tr>
<td>Plan</td>
<td>Forecasting Accuracy improvement by</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>Inventory Turnover improvement by</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>Loss of sale/ distributor stock out reduction by</td>
<td>19%</td>
</tr>
<tr>
<td>Source</td>
<td>Supplier OTIF improvement by</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>RM/PM cost over net sales reduction</td>
<td>15%</td>
</tr>
<tr>
<td>Make</td>
<td>Scrap factor reduction by</td>
<td>22%</td>
</tr>
<tr>
<td></td>
<td>Manpower Productivity improvement by</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>OEE improvement by</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>Manufacturing cost reduction by</td>
<td>17%</td>
</tr>
<tr>
<td>Deliver</td>
<td>DIFOT improvement by</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>Avg. distribution cost/ unit reduction by</td>
<td>19%</td>
</tr>
</tbody>
</table>

Notes on reading the chart:

- The number presented in each cell is proportional to the percentage of respondents selecting that range of improvement aspiration for a particular KPI, the sum of each row will add up to 100 percent.

- The green box is highlighting the highest respondents rate within the selected range and KPI.
Our Perspective

This study offers us valuable insights into the current state of the supply chain in Vietnam.

The present supply chain is not optimally designed, posing challenges and risks to organizations. The lack of alignment between operating model and business directions, lack of end-to-end visibility, and silo mindsets across Plan, Source, Make, and Deliver stages of the supply chain, emerges as the critical gap areas.

It's intriguing to learn that companies are keen to make the supply chain more customer-centric, resilient, and digitally-enabled while also thriving for operational excellence. Supply chain practitioners also believe that leadership drive and effective change management are essential to propel large-scale supply chain transformations.

While in more mature markets, emerging supply chain technology trends like AI, Big Data, Internet of Things (IoT), digital twins and blockchain are considered, in Vietnam supply chain leaders seem to focus more on getting the basics right.

Top management's priority is to reinforce and enhance their supply chain management's stability and effectiveness. The primary focuses are applying operational excellence, digitalization, and integrated supply chain planning to improve asset productivity and improve the workforce's capability.

In a business environment of volatility and uncertainty, enterprises across sectors in Vietnam are shifting their concerns to the supply chain's flexibility and rapid response while maintaining optimized cost and high customer service level. This makes a strong case for organizations to:

- Connect to their customers with compelling value propositions, opportunities and interactions
- Stay connected to market dynamics and digital signals
- Connect the channel and business partners to jointly deliver on commitments to customers
- Connect to the front, middle and back offices to execute the customer growth agenda
- Connect and empower their employees to deliver on the customer promise

The aim is to achieve a modular, flexible supply chain that responds to rapidly changing customer needs, driven by real-time data insights on forecasting, cost, market penetration, efficiency gains, and customer experience.

KPMG Vietnam recognizes that today's business leaders don’t only need solutions, they need reliable advisors. With global experience and local insights across integrated business planning, procurement, manufacturing, supply chain management, KPMG professionals can add value to your supply chain transformation journey.
What can we do to assist your Supply Chain transformation journey?

**1. PLAN**
- Sales & Operations Planning (S&OP)
- Demand Planning/ Supply Planning
- Customer delivery compliance enhancement
- Inventory optimization

**2. SOURCE**
- Procurement organization restructuring/ procurement centralization
- Strategic procurement
- Process optimization and enhancement
- Direct material cost reduction
- Indirect spend reduction

**3. MAKE**
- Equipment productivity enhancement
- Cost reduction and energy management
- Process standardization and standard operating procedures development
- Drive manufacturing/ service excellence culture using Lean Six Sigma and TPM

**4. DELIVER**
- Distribution network design
- Logistics cost reduction
- Warehouse design and process optimization

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**Chart a path**
KPMG’s specialists know where to start the journey. We prioritize initiatives to help you build customer-centric supply chains for a digital world that can adapt swiftly to changing customer needs. With a strong focus on efficiency and cost, we seek to integrate customer-facing and operations functions, so that every part of the organization is dedicated to improving the overall customer services.

**Sort through the noise**
With a wide range of methodologies, we help you find effective choices to match your specific needs and accelerate the returns on investment. We tailor supply chains to the requirements of different customer segments, and enhance the integration of new product launches, planning, procurement, fulfillment and customer service process.

**Get it done**
We do not just draft a plan; when working with your team, we innovate and implement throughout the transformation phase.

**Make it stick**
Our tested and well-established methods provide sustainable benefits, allowing your supply chain to continually evolve to meet your business needs.
The data published in this report is based on the responses to a survey carried out by KPMG Vietnam titled “Vietnam Supply Chain at a glance” and future prospects by 30 leaders across key sectors.

The profile of respondents covered Managing Directors, Chief Executive Officers, Chief Operating Officers, Supply Chain Heads, Procurement Heads, Manufacturing Heads amongst others. The survey was conducted in the months of May and June 2021.

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