2020 Gartner Supply Chain Top 25: Asia/Pacific

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This research recognizes and showcases the best practices of Asia/Pacific’s leading supply chains for 2020 as part of Gartner’s Supply Chain Top 25 program. CSCOs and supply chain leaders should leverage this research to gain insights into, and be inspired by, these leading supply chains.

Key Findings

- For the second year in a row, Alibaba, has topped the rankings of supply chain leaders from Asia/Pacific for 2020, followed by Lenovo, Samsung and Toyota. Alibaba and Lenovo were the only businesses from the Asia/Pacific region to make the Global Top 25 list this year, coming in at No. 7 and No. 15, respectively.

- The three key factors that differentiated leading supply chains this year were being purpose-driven organizations, business-model transformers and digital orchestrators.

- Major methodology changes were introduced in 2020, including a conversion to return on physical assets (ROPA) from return on assets (ROA), a reduction in the weighting of the inventory measure, and an increase in weighting to the environmental, social and governance (ESG) (previously, corporate social responsibility [CSR]) measure.

Recommendations

Chief supply chain officers (CSCOs) and supply chain leaders can learn from the strategy, leadership and innovative practices of the top Asia/Pacific supply chains by doing the following:

- Continue to focus on digital optimization and transformation as these key capabilities remain key points of difference for leading Asia/Pacific supply chains.

- In the wake of COVID-19, build resiliency into the supply chain by improving data visibility across the end-to-end ecosystem and collaborating with value chain partners to develop network adaptability.

- Take advantage of the increased focus from the C-suite in the organization’s supply chain capabilities brought on by the pandemic by building business cases for innovation, improved planning, visibility and overall technological development.
Analysis

These are highly precarious and difficult times for the global economy and the Asia/Pacific region is no exception. According to the International Monetary Fund (IMF), the impact of the coronavirus on the region will be severe, across the board and unprecedented.

Asia’s growth rate in 2020 is expected to be 0%. Lower than the growth rate during the last Global Financial Crisis and even during the Asian Financial Crisis. Actually, Asia has never experienced zero growth in the last 60 years. That said, Asia’s current growth still fares better than other regions.

As the world begins to shake off the shackles of COVID-19 and interpret the new normal, companies in the region will need to redefine their business models and develop more robust and agile supply chain capabilities to sustain revenue growth and adapt to constantly evolving market conditions.¹

Gartner’s Supply Chain Top 25 is an annual recognition of the achievement and advancement of supply chain capabilities. Recognizing the strong global diversity of participants within the global Top 25 process, this list focuses on the leading Asia/Pacific supply chains and serves the following three important purposes:

- Elevate the position and role of the supply chain within organizations headquartered in Asia/Pacific, relative to their peers.
- Provide other organizations with an opportunity to learn new lessons and insights from supply chain leaders within Asia/Pacific.
- Provide a platform for the cross-pollination of innovations and best practices across industries, advancing the idea of what’s possible in the world of supply chain.

In this research, we discuss key regional trends from the last 12 months, while highlighting the leading Asia/Pacific supply chains. In 2020, eight companies from last year’s list return to the ranking. They are joined by two new entrants from Japan, electronics conglomerate Sony at No. 5 and automotive giant Nissan Motor landing at No. 10. The list continues to be dominated by high-tech, automotive and retail companies (see Table 1).
### Table 1. 2020 Gartner Supply Chain Top 25: Asia/Pacific

<table>
<thead>
<tr>
<th>2020 Asia/Pacific Rank</th>
<th>2020 Overall Rank</th>
<th>Company</th>
<th>3-Year Weighted ROPA⁽¹⁾</th>
<th>Inventory Turns⁽²⁾</th>
<th>3-Year Weighted Revenue Growth⁽³⁾</th>
<th>ESG Component Score⁽⁴⁾</th>
<th>Composite Score⁽⁵⁾</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>Alibaba</td>
<td>106.7%</td>
<td>23.9</td>
<td>54.0%</td>
<td>0.00</td>
<td>4.39</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>Lenovo</td>
<td>16.9%</td>
<td>11.2</td>
<td>7.0%</td>
<td>10.00</td>
<td>3.44</td>
</tr>
<tr>
<td>3</td>
<td>34</td>
<td>Samsung Electronics</td>
<td>33.8%</td>
<td>8.5</td>
<td>1.2%</td>
<td>7.00</td>
<td>2.48</td>
</tr>
<tr>
<td>4</td>
<td>42</td>
<td>Toyota Motor</td>
<td>18.0%</td>
<td>9.1</td>
<td>2.8%</td>
<td>7.00</td>
<td>2.31</td>
</tr>
<tr>
<td>5</td>
<td>54</td>
<td>Sony</td>
<td>51.5%</td>
<td>7.3</td>
<td>3.2%</td>
<td>9.00</td>
<td>2.13</td>
</tr>
<tr>
<td>6</td>
<td>62</td>
<td>Huawei Technologies</td>
<td>34.9%</td>
<td>3.2</td>
<td>18.5%</td>
<td>4.00</td>
<td>1.98</td>
</tr>
<tr>
<td>7</td>
<td>79</td>
<td>Honda Motor</td>
<td>17.8%</td>
<td>7.9</td>
<td>3.8%</td>
<td>7.00</td>
<td>1.66</td>
</tr>
<tr>
<td>8</td>
<td>80</td>
<td>Haier</td>
<td>33.0%</td>
<td>5.9</td>
<td>15.0%</td>
<td>3.00</td>
<td>1.62</td>
</tr>
<tr>
<td>9</td>
<td>84</td>
<td>JD.com</td>
<td>1.4%</td>
<td>11.1</td>
<td>28.7%</td>
<td>0.00</td>
<td>1.53</td>
</tr>
<tr>
<td>10</td>
<td>88</td>
<td>Nissan Motor</td>
<td>7.3%</td>
<td>6.2</td>
<td>-1.8%</td>
<td>8.00</td>
<td>1.44</td>
</tr>
</tbody>
</table>

⁽¹⁾ ROPA: \((2019 \text{ operating income} / (2019 \text{ net property, plant, equipment + year-end inventory})) \times 50\% + (2018 \text{ operating income} / (2018 \text{ net property, plant, equipment + year-end inventory})) \times 30\% + (2017 \text{ operating income} / (2017 \text{ net property, plant, equipment + year-end inventory})) \times 20\%\).

⁽²⁾ Inventory Turns: 2019 cost of goods sold / 2019 quarterly average inventory.

⁽³⁾ Revenue Growth: (Change in revenue 2019-2018) \times 50\% + (change in revenue 2018-2017) \times 30\% + (change in revenue 2017-2016) \times 20\%.

⁽⁴⁾ ESG Component Score: Index of third-party corporate social responsibility measures of commitment, transparency and performance.

⁽⁵⁾ Composite Score: \((\text{Peer Opinion} \times 25\%) + (\text{Gartner Research Opinion} \times 25\%) + (\text{ROPA} \times 20\%) + (\text{Inventory Turns} \times 5\%) + (\text{Revenue Growth} \times 10\%) + (\text{ESG Component Score} \times 15\%)\).

2019 data used where available. Where unavailable, latest available full-year data used. All raw data normalized to a 10-point scale prior to composite calculation.

“Ranks” for tied composite scores are determined using next decimal point comparison.

Source: Gartner (July 2020)

### Notable Supply Chain Trends in 2020

Each year, our analysts research the supply chains of hundreds of companies. Through this work, we note categories of activity such as: What leaders are focusing on, where they are investing time and effort, and what can be applied broadly? Three key trends stand out this year for these leaders that are accelerating their capabilities and further separating themselves from the rest of the pack (see Figure 1).
Purpose-Driven Organizations. It has been a marvel to witness the strength and creativity of the supply chain community rallying around a purpose (pandemic response), and demonstrating this aspiration by keeping our society fed, supplied and healthy. We’ve seen apparel companies manufacturing personal protective equipment (PPE), adult beverage companies making hand sanitizer, industrial companies shifting to producing ventilators and airlines converting dormant warehouses into food bank processing centers. Just as impressive are the short time frames in which these shifts have occurred — in weeks, for what normally takes months or quarters to plan and execute. A great example of this in the region was Toyota collaborating with Nihon Kohden to help it increase ventilator production for the Japanese market.

Even before the pandemic occurred, supply chain teams at leading companies defined their work using the language of purpose. These companies recognize that solving the world’s largest problems only works through partnership with others in the broader community, as well as through their own radical transparency. They are pursuing this greater purpose while running efficient and effective supply chains. However, the pandemic also exposed organizations that prioritized cost over agility and resiliency.

The concept of circular economy (CE) models has also gained traction as part of a larger trend toward running ethical and sustainable supply chains. Gartner’s “Future of Supply Chain: Reshaping the Profession” shows that 70% of companies are making some level of investment in CE models. This is an area that this research shows that Asia/Pacific companies still have some work to do in, when compared to U.S. and European counterparts. The average for the rest of the world in our ESG component was 8.2 compared to Asia/Pacific which was lower at 5.5.

Business-Model Transformers. One of the largest external forces impacting corporate supply chains is a dynamic competitive landscape that is driven by a combination of expanded customer expectations, new market entrants from existing industry ecosystems and the emergence of nontraditional competitors.

Gartner’s Future of Supply Chain Survey conducted in late 2019 found that more than half of supply chain organizations, across a range of industries, believe that they are at risk of disruption in the coming years. Undoubtedly, the aftermath of the COVID-19 event will drive two outcomes —
development of new, agile business models, as well as leaving less-responsive business models and, potentially, industries in the history books. To thrive, supply chains must be enablers of these changes by possessing solid operational models and transformational capabilities.

Leading supply chains have positioned themselves as the disruptors to traditional business models, either through reinvention of their offerings and the ability to deliver them with agility or by acquiring startups that offer the expertise and DNA necessary to compete in new or reinvented markets. Alibaba is a great example here of an organization using its supply chain capabilities to disrupt the traditional retail market. It is constantly expanding its business offerings and driving competitive advantages by continuously investing in supply chain innovation.

**Digital Orchestrators.** In the current environment, the natural tendency of many companies is to pull back spending, including money tied to transformational programs. Advanced supply chains are pressing forward and, in some cases, accelerating investments in real-time visibility, planning and agile supply chain execution capabilities, well-suited for supporting uncertain demand mixes and volumes. Leading companies in the Supply Chain Top 25 are early, and frequent, adopters of digital technologies. More importantly, these investments enable business capabilities and outcomes that allow them to thrive in even the harshest economic conditions.

Gartner’s most recent Supply Chain User Wants and Needs Study shows advanced analytics and big data applications voted as the most important and frequently adopted (~70% of the population) digital capabilities. Other important, and frequently, adopted technologies include robotic process automation (RPA), artificial intelligence (AI) and/or machine learning (ML), and the Internet of Things (IoT) applications. Robots have also proliferated on the floors of factories and warehouses, often paired with automated guided vehicles (AGVs) to shuttle materials and finished items between stations and out the door. In addition to automation and augmentation in operations, many of the Supply Chain Top 25 also have some form of connected products in their portfolios to increase the value-add of customer offerings. Huawei has seen this transformation coming and their investments in 5G will help many of the world’s supply chains become more connected, integrated and digital.

**Highlights From the Top-Ranked Asia/Pacific Supply Chains**

**No. 1: Alibaba (No. 7 in Gartner’s Global Supply Chain Ranking)**

Chinese retail giant Alibaba comes in at No. 1 again this year on strong financial metrics as well as recognition of its leadership in the community opinion polls. Similar to its largest Western competitor Amazon, supply chain is very much at the center of Alibaba’s business with this being particularly highlighted during the COVID-19 lockdown.

A key differentiator of the Chinese digital giant is the sheer scale at which its supply chain operates. Consider that, for its Singles’ Day sales event on 11 November 2019, nearly 1.3 billion orders were placed across Alibaba’s platforms, with a gross merchandise value of $38 billion in just 24 hours. Of this, the first 100 million orders were shipped in under eight hours.

Alibaba remains challenged in terms of ESG performance as measured by Gartner, however investments are starting to be made, such as the development of 75,000 recycling depots for
consumers to drop off unwanted shipping boxes and bags. The business is also leading retail supply chain efforts globally, in terms of online-offline integration, via almost 200 Freshippo (often referred to as Hema in China) grocery-focused concept stores that enable fulfillment from store and delivery to consumers in as little as 30 minutes.

**No. 2: Lenovo (No. 15 in Gartner’s Global Supply Chain Ranking)**

Lenovo rejoins the list, jumping two spots to No. 2, with record revenue in 2019, which continues a four-year growth trend. Lenovo has a unique heritage with the integration of nine companies and the cultural combination of East and West. By embracing diversity and the best of all worlds it has fueled a transformation journey for more than 20 years. Lenovo has developed a wide portfolio of products, but more importantly, in the move to customer-centricity it has been able to harvest the customer insights that drive customer-valued innovation.

Leading supply chains in the region are using data to derive insights and to act on those insights to drive value, and Lenovo has done this on multiple fronts. The innovation foundation that is used includes technologies such as predictive analytics, AI, blockchain and autonomous things. Lenovo now leads the region and demonstrates leadership in sustainability, the CE, and diversity and inclusion, and raised its ESG score to a perfect 10.

**No. 3: Samsung Electronics (No. 34 in Gartner’s Global Supply Chain Ranking)**

South Korean conglomerate Samsung Electronics is No. 3 in the 2020 Asia/Pacific ranking, despite some challenges that continue from 2019 including slow revenue growth and lower inventory turn performance. Samsung’s supply chain strategy revolves around five criteria — cost competitiveness, on-time delivery, human resources capacity, supplier competitiveness and response to risk.

That last pillar was on full display as the organization demonstrated supply chain agility responding in real time during the pandemic. Rerouting the manufacturing of key products to Vietnam in response to the scale of the outbreak impacting its traditional supply locations in South Korea. Samsung Electronics supplier collaboration programs continue to bear fruit with over 830 billion Korean won invested, close to 19,000 supplier staff attending training programs and over 480 companies involved with innovation initiatives through smart factory support.

On the ESG front, Samsung continues to push, measuring earnings against a combination of socioeconomic indicators such as investor value, supplier support, and community development and environmental targets such as aquatic impact, environmental waste and emissions.

**No. 4: Toyota (No. 42 in Gartner’s Global Supply Chain Ranking)**

Japanese automotive giant Toyota drops one spot this year to No. 4 on the 2020 Asia/Pacific list. Over the years, Toyota has been on a journey toward building a more resilient supply chain by investing in new capabilities capable of delivering value during disruption. Collaborating with partners, the company has created a system to digitally display supply networks for each individual component or part. As disruption occurs, Toyota can immediately identify parts at risk. The system then communicates to the supply chain components that are supplied by single manufacturers and
are in jeopardy of being irreplaceable. Using this insight, Toyota can begin to decrease the
dependence on single providers and reduce the volume of unique designs by sharing equipment
specifications with other production facilities and suppliers.

In the digital space, Toyota has launched a cross-group virtual organization called Toyota
Blockchain Lab to explore and implement at scale the use of blockchain across a range of focus
areas that includes customers, vehicles, supply chain and value digitalization. In the supply chain
arena, Toyota is looking to scale the technology to drive business process efficiency and traceability
by recording and sharing information on parts, manufacturing locations, shipping lead times and
supplier performance, across its ecosystem.

No. 5: Sony (No. 54 in Gartner’s Global Supply Chain Ranking)

Japanese conglomerate, Sony, rejoins the Asia/Pacific list this year coming in at No. 5 with
particularly strong ROPA performance. The business operates a diversified portfolio of products
ranging from consumer electronics to imaging technologies for the healthcare industry. Efforts have
been made to broaden the geographic distribution of its most important facilities, however, it has
still faced significant challenges due to plant closures during the COVID-19 crisis. Despite these
challenges, the business has exhibited real supply chain agility. For example, in the manufacture of
ventilators and medical face shields, as well as its pivot in the development of its soon-to-launch
PlayStation 5 console, from in-person reviews of production lines to remote camera-enabled
prototyping and analysis.

ESG is a central pillar of the supply chain organization at Sony, reflected by the business receiving a
score of 9 out of 10 in this key measure. Assessments, at both owned and supplier production sites,
are being expanded. With a wide range of initiatives in place focused on challenges such as the
hiring and labor conditions of foreign workers, responsible sourcing of raw materials and deepening
insight into supplier networks.

No. 6: Huawei Technologies (No. 62 in Gartner’s Global Supply Chain Ranking)

Huawei Technologies, the world’s second-largest smartphone vendor, ranked No. 6 in Asia/Pacific
with a 18.5% three-year weighted average revenue growth rate. As sanctions imposed by the U.S.
on the use of Google’s Android operating system, including applications such as Google Play and
Gmail, Huawei focused on its own mobile apps, known as Huawei Mobile Services, to drive phones
sales overseas and also expanded self-made chips in cloud and enterprise businesses.

China’s biggest technology company has continued to innovate, collaborate with suppliers, support
the community and invest in emerging supply chain capabilities. Huawei established 5G joint
innovation centers with carriers in Europe, aiming to continuously drive the commercial deployment
and service innovation of 5G, mobile internet services were provided to more than 40 million people
living in remote areas across 50 countries. It partnered with 600 brands to deliver IoT devices and
smart home platforms to 50 million users, launched the world’s most powerful AI processor and
built the cloud-based Horizon Digital Platform. Also, as top priorities, cyber security and privacy
protection were implemented.
No. 7: Honda Motor (No. 79 in Gartner's Global Supply Chain Ranking)

At No. 7, Honda's approach to a new business model encompasses ride-sharing technology, enhanced electrification, AI, 5G connectivity and autonomous driving, which are transformational initiatives to support Honda's collision-free initiatives.\(^3\)

Honda has also established its purpose on sustainable initiatives to achieve a carbon-free society. In supply chain, the focus was on shifting long-haul transport away from trucks, and into sea and rail. Due to this effort, transport for motorcycle shipments in Vietnam has reduced CO\(_2\) emissions by approximately 1,000 tons and in India CO\(_2\) emissions reduced by 330 tons annually. Honda has also innovated packaging technology to reuse containers and reduce the weight of packaging materials, thereby reducing both waste and CO\(_2\) output.\(^4\)

Across the end-to-end supply chain, Honda collaborates between the automotive industry and its suppliers, promoting initiatives together to reduce environmental impacts, reduction of CO\(_2\) emissions and efficient use of resources.

No. 8: Haier (No. 80 in Gartner's Global Supply Chain Ranking)

Chinese home appliance and consumer electronics company, Haier, is No. 8 and making the Asia/Pacific list for the fifth consecutive year. Haier invested ¥270 million in building smart home and industrial internet platforms, along with implementation brand initiatives and portfolio management.

Haier has transitioned from large-scale manufacturing to large-scale customization by establishing 15 global-leading smart factories as examples for the industry. This smart manufacturing applied new generation of AI technology to achieve the interconnection and intelligent optimization of its ecosystem.

Haier also integrated cross-functionally in areas such as marketing, logistics, after sales and information management to unify warehousing and distribution, generating overall efficiency. As a result, user loyalty was enhanced with greater willingness toward multiple unit purchases and raising Haier's brand profile.

Through intensified AI and IoT investment, Haier upgraded the smart home cloud technology and launched the Smart Home App. This has enabled the release of a complete set of smart home products and customized solutions, based on the consumer needs and behaviors.

No. 9: JD.com (No. 84 in Gartner's Global Supply Chain Ranking)

JD.com, China's second largest e-commerce company, has maintained its position at No. 9 on the Asia/Pacific list, supported by strong peer and analyst voting scores, as well as its continued impressive revenue growth of 28.7%. The COVID-19 crisis has brought with it significant additional volumes with JD.com reporting that this additional scale has enabled its cost per delivery to be lowered — something that many other businesses operating in the e-commerce space have struggled to achieve.\(^5\)
Digital capabilities are very much central to the JD.com supply chain capability, ranging from big data analytics to AI and robotics. However, investments are also continuing that focus on expanding JD.com’s integration of offline and online retail. Gartner recognized these efforts in 2019, specifically for its collaboration with Walmart China, integrating inventory across the two businesses (see “Retail Supply Chaininnovator 2019: JD.com Wins for Rethinking Retailer-to-Retailer Collaboration to Deliver a Unified Shopping Experience”). This program has expanded over the past year with a number of new partners joining that include Better Life, Nongfu Spring, Nestlé, Coca-Cola, Tsingtao Beer, and liquor retailer 9Bianli. Currently the initiative covers 20,000 offline stores in 54 cities.

No. 10: Nissan Motor (No. 88 in Gartner’s Global Supply Chain Ranking)

Nissan, the ninth largest automobile manufacture in the world, debuts on the Asia/Pacific list at No. 10 and the global list at No. 88. A key driver of this strong result is its high ESG score. Under the Nissan Green Program, Nissan, has taken steps toward zero-carbon emissions across manufacturing, logistics, offices and dealers.

The New Nissan Transformation program has seen Nissan invest in operational and efficiency improvements with new technologies, and the Nissan Intelligent Mobility program. This is achieved through investments in R&D, including electrification and autonomous driving. Nissan’s supply chain extends across the globe, promoting consistency in procurement practices, shared goals with business partners and engaging with them to ensure their adoption.

Honorable Mentions

Every year, there are companies that demonstrate strong leadership in demand-driven principles, but do not make the list.

For example:

Kia Motors: South Korea’s Kia Motors has shown robust and agile supply chain capabilities during COVID-19, being one of the first automakers to restart manufacturing in Europe and in the U.S. Similar to others in the industry, it is also looking to spread its supply base to reduce its reliance on single-source suppliers, and further invest in automation and overall integration of its end-to-end supply chain capabilities, such as a no-touch selection and delivery of vehicles to customers.

Woolworths Group: The Australian grocery giant, Woolworths Group, showed real agility during the COVID-19 crisis, expanding online order fulfillment capabilities through initiatives, such as a 75,000 square feet pop-up fulfillment hub and new partnerships with the likes of Uber for last-mile delivery. Woolworths Group also won Gartner’s 2020 Retail Supply Chaininnovator award for its innovative approach to rethinking goods movements from distribution center to store shelf via a new form of unit load device dubbed the “⅔ pallet.” (See “Supply Chaininnovators 2020 Winners: Tackling Innovation Across Diverse Industry Groups.”)
Summary

With growth in the region expected to stall in 2020, leading supply chains in Asia/Pacific will need to adapt at a rapid rate. In times of downturn, the first reaction is for many companies to cut costs and pull back on innovation. Asia/Pacific supply chain leaders will need to push back against this tide in order to outperform their peers into 2021.

Supply chain leaders, working in concert with executive leadership across organizations, must start pushing their teams now to make sure they are prepared. (See “Winning in the Turns: A Supply Chain Action Guide.”)

CSCOs should be focused on the following three vital areas:

- **Strategy:** Prepare to act confidently amid uncertainty.
- **Cost:** Implement a cost management discipline to allocate and execute resources, while spurring innovation.
- **Talent:** Position talent to sustain progress on transformation.

Evidence

1 “Transcript of April 2020 Asia and Pacific Department Press Briefing,” International Monetary Fund.
2 “Sony on Track for PS5 Launch Despite Supply-Chain Challenges,” Financial Times.
5 “JD.com Delivery Costs Reach 'All-Time Low' With Pandemic Volume Growth,” Supply Chain Dive.
7 “Woolworths Opens Delivery and Pick Up Windows to All Customers as It Doubles Online Capacity to Meet Soaring Demand,” Woolworths Group.

Gartner Recommended Reading

*Some documents may not be available as part of your current Gartner subscription.*

“The Gartner Supply Chain Top 25 for 2020”

“Gartner Supply Chain Top 25 Results for 2020”

“2019 Gartner Supply Chain Top 25: Asia/Pacific”