

eBook

Supply Chain Trends for 2022



GEMBAH



What is Your Supply Chain Strategy in the COVID Era?

Whether you have years of experience or this is your first foray into developing a product, the international supply chain outlook is rapidly changing.

What worked well five years ago may not work in this new era. In a world that is grappling with international trade conflicts and pandemic travel restrictions, it is important to understand the global

landscape and what viable opportunities are available for your business and products. Those that can update and pivot their supply chain and logistics can have an advantage over the competition.

What worked well five years ago may not work in this new era.

Supply Chain Disruptions: A Timeline

With COVID-19, 2020 saw an unprecedented change in global supply chains, with an extreme impact that will have ripple effects through 2023. While most are just weathering the storm of inventory shortages, increased shipping costs and production outages, you can plan ahead with an informed strategy.

2020

COVID-19 shut downs impacted factories, businesses, and stores. Most were moving to e-commerce

or a hybrid model which resulted in a boom in online retailers. Consumers who were locked-down also switched to e-commerce. Four to six years of e-commerce growth was compressed into one year. All those consumer products from Asia and shipments into the United States surged and instead of being delivered to stores, they went to distribution centers for direct delivery to homes. There was not enough distribution center capacity and a reduced pool of warehouse workers and drivers.

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Early 2021

Businesses reopened to inflated costs, inventory and worker shortages continued, transportation issues, and ocean freight disorganization because of pent-up demand from e-commerce expansions. Containers were taking much longer to unload and move and newly arrived ships were waiting a week or much longer to unload. Containers were either piling up at the port with no workers available to unload them and nowhere to put them.

Holiday Season 2021

Supply chain issues continue with increased demand and an inability to get products from where they are made to where they need to go. Air Freight is strained by labor shortages and increased costs

Expected 2022

Cost pressures from network inefficiencies and issues with staffing will continue to impact the supply chain, as well as constraints in China and other markets. Businesses should be planning for spring 2022 right now.



Key questions to understand your supply chain options:

1. Where is the best market for me to source for my product?
2. How can I avoid the extra tariff costs from the US-China Trade War?
3. Is it still possible to launch my new product given the global pandemic impact?
4. Is China still safe to work with? What are my alternatives?
5. How do I ensure that I receive consistently good quality from my overseas suppliers?
6. This is my first time launching my own product. How do I get started?

Hot Markets for Your Supply Chain in 2022

A factory's location is just as important as its capabilities.

Each country has its own manufacturing and transportation infrastructure, skilled workforce, and international trade policies to consider.

In building our factory network, we took advantage of the strengths of each region, while mitigating the risk posed by trade wars. While China remains the largest force in manufacturing, we recommend that companies who are looking to source new products should review their options for alternative markets such as Mexico, India, and Vietnam to diversify risk.





China

With a 2+ year trade conflict, emergence of a global pandemic, and a myriad of other front-page headlines, it has been impossible to ignore China.

Since China began opening up to foreign trade and free-market reforms in 1979, the country has averaged a 9.5% GDP growth through 2018 leading it to become the world’s largest manufacturer and largest import trade partner with the USA, leading Mexico and Canada by more than 50%.

With the introduction of Section 301 Tariffs on the majority of Chinese imports to the USA in 2018, some US-based companies have sought to reduce risk by finding alternatives to manufacturing in

China, the largest being Vietnam and Mexico. Still, China’s embedded dominance as a global manufacturing powerhouse will not unravel overnight.

US imports from China actually increased in 2020 as the pandemic unfolded and Chinese businesses were some of the quickest to get back to business as “normal” to serve their US customers.

In a post-COVID era, the Chinese economy showed a slow down in growth to 7.9% in Q2 of 2021, slowing sharply from a record 18.3% growth in Q1. The National Bureau of Statistics of China attributes this to a decline in factory activity, higher raw material costs, and new COVID-19 outbreaks in some regions.

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CHINA – CONTINUED

2021 in Review

Spring Surge: COVID-19 restrictions in countries like Vietnam resulted in large numbers of orders being redirected to China. Consumer demand signals also spiked leading to large orders

Summer of Logistics: A surge in orders, port shutdowns, and on-going container bottlenecks at destination ports led to a record high in shipping prices and delays in moving cargo.

Winter Constraints: Power rationing affecting 20+ provinces lead to the shuttering of many manufacturers or sub suppliers. The COVID-19 stance strengthened going into winter and is expected to last through spring.

Putting the recent tariffs aside, the benefits of importing from China remain numerous.

China's internal supply chain network is unparalleled and quite mature with nearly any product category having a presence.



When is China the right fit?

- Product has a need for engineering talent from complex product designs to “off-the-shelf” options
- Involves electronics, plastics, high-end apparel, stainless steel designs
- Need low to high quantity orders
- A high volume of mature suppliers with advanced capabilities
- Are planning to sell in the China market
- If you are looking at the benefits of automation with a product like injection molding or electronics (government is incentivising factories to move in that direction)

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CHINA – CONTINUED

Given the increased risks and tariff costs of importing from China to the US, companies should review their options for alternative markets and keep all factors in mind to help diversify risk.

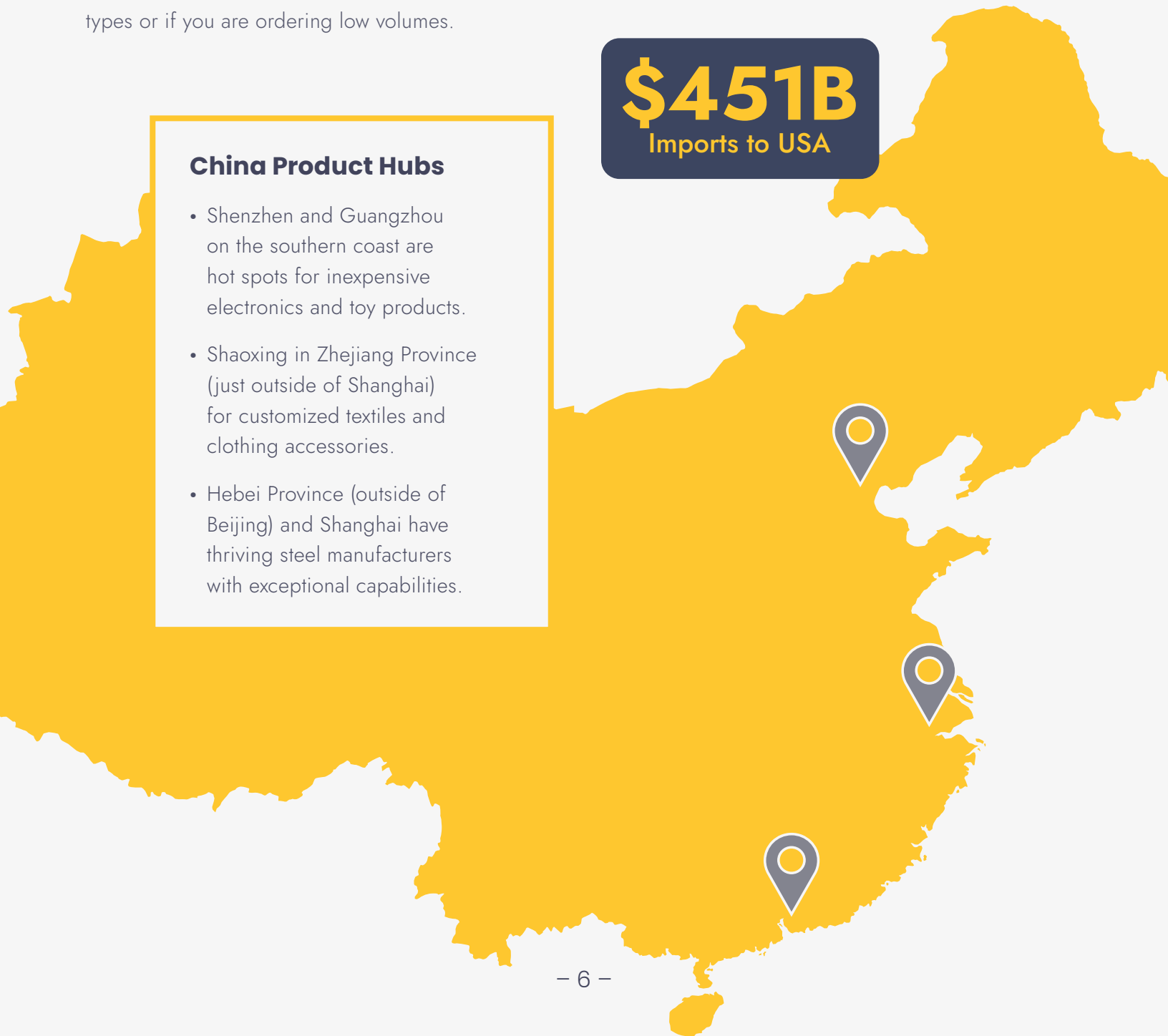
China still may be your best option in 2022 and beyond, especially if you are looking for complex product assemblies requiring electronics and multiple other commodity types or if you are ordering low volumes.

However, if you have plans to scale your volume or your product requires more labor-intensive manufacturing processes, you should consider alternative emerging markets with better cross-border trade incentives and more competitive labor rates. If your factory is currently impacted by power rationing, expect that it may continue and look at alternative options inside or outside of China.

China Product Hubs

- Shenzhen and Guangzhou on the southern coast are hot spots for inexpensive electronics and toy products.
- Shaoxing in Zhejiang Province (just outside of Shanghai) for customized textiles and clothing accessories.
- Hebei Province (outside of Beijing) and Shanghai have thriving steel manufacturers with exceptional capabilities.

\$451B
Imports to USA





Mexico & South America

¡Viva México! As the USA's next-door neighbor, 2nd largest import trading partner, and gateway to South American manufacturers, Mexico is a top strategic sourcing location for your new product launch.

In terms of trade stability, while the US has imposed heavy import tariffs on companies sourcing from China and threatening similar measures for Vietnam imports, Mexico has ratified the USMCA trade agreement with the USA and Canada, giving it a more stable and predictable trading environment.

For products involving electrical equipment, mid- to high-end footwear, textiles, medical equipment, or furniture, Mexico has become an alternative to China (post-tariffs).

In addition to these categories and due to disruption in the supply chain and rising costs, US-based companies are looking for other options on how to reshore manufacturing operations closer to the United States.

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Mexico’s close proximity to the US significantly reduces turnaround times for prototypes, samples, and production orders, especially compared to trans-pacific sea shipments that risk being delayed during high-volume seasons when seaports get backlogged. Same day round-trip travel is feasible from the US to Mexico, making supplier engagement much easier. It’s easy for managers at U.S. companies to visit facilities in Mexico on a regular basis.

It is also a cost effective alternative for the US since the average manufacturing wage is approximately \$24 per hour but for Mexico, the average manufacturing wage is only slightly less than \$3 per hour.

For some manufacturers, labor can account for up to 70% of their total expenses and that kind of savings in labor costs becomes significantly beneficial for the bottom line.

2021 in Review

Lockdowns in 2021: A bullwhip effect is being felt in the supply chain and the cause for closures with shortages common over the first part of 2021

Spikes in Raw Materials Cost: Due to raw materials, subcomponents and tooling used in production are originating in East Asia, Mexico saw a spike in raw materials costs compounded by inbound logistics costs

Cost Benefits: While the Mexico and US currency remained neutral for US purchases, labor costs remained extremely competitive. Sea shipped containers shipped from Mexico to the U.S. were 60% less cost than East Asia and trucking was 90%+ cheaper.

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MEXICO & SOUTH AMERICA – CONTINUED

Apparel manufacturing is becoming increasingly competitive in Mexico and is expected to continue growing rapidly with an 11.4% growth rate (CAGR) from 2021–2025.

Textile suppliers are most heavily concentrated in the central parts of the country, such as Puebla and Mexico City with others in the north-eastern regions.

Mexico has remained a dependable, accessible, and fast growing supply market through the COVID turbulence, making it a prime choice if you desire a highly competitive and more predictable business environment.

\$358B
Imports to USA





India is a fast-changing supply market with emerging opportunities for manufacturing. India has witnessed a 257% growth in GDP between 2004-05 and 2018-19. As the 6th largest consumer market globally and with 49% workforce participation, India is likely to be a growth engine for global economic growth for the foreseeable future. In 2020, the US became India's largest trading partner, surpassing China.

While India's manufacturing and supply chain ecosystems are not as robust or mature as China, significant new investments promise a bright future and a steady growth in reliable manufacturing partners.

Small- and medium-sized enterprises are expected to grow rapidly in industries such as food production, consumables, health and wellness products, apparel, homeware, furniture, and others as investment in these markets continues to grow.

India is also rich in access to raw materials. It is one of the largest producers of cotton and jute in the world. India is also the second largest producer of silk in the world, and 95% of the world's hand-woven fabric comes from India.

The Indian technical textiles segment is estimated at \$16B, approximately 6% of the global market, and is the second largest producer of PPE in the world. India has removed the anti-dumping duty on Purified Terephthalic Acid (PTA), a key ingredient for the manufacture of man-made fiber and yarn.

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2021 in Review

Significant External Investment:

Special Economic Zones are being bolstered by long term loans and companies like Wal-Mart are making significant investments into e-commerce and second and third tier manufacturers

Growing Category Strength:

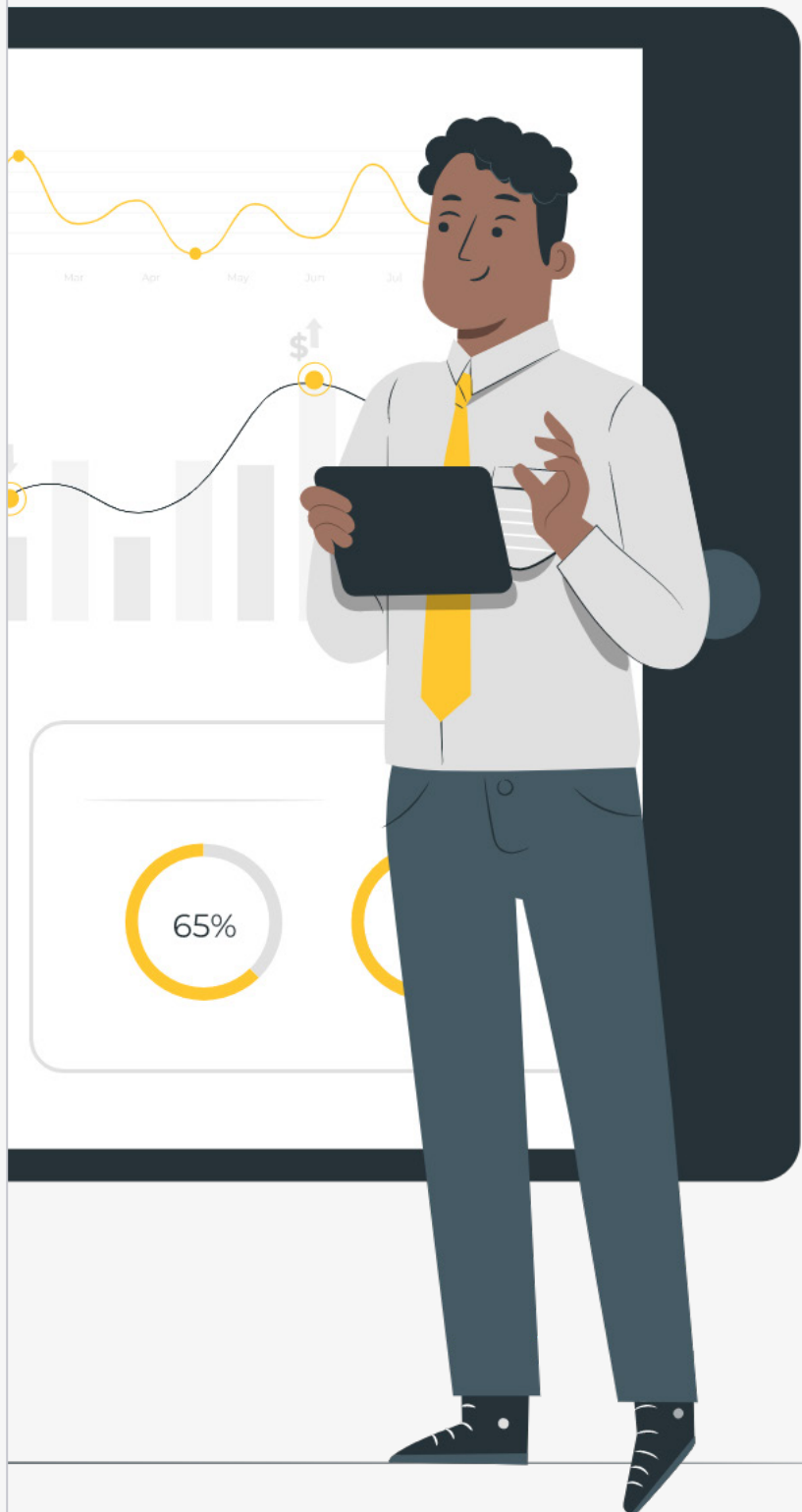
Several categories are gaining strength within the Indian manufacturing sector including electronic manufacturing services, plastic injection molding and strong steel production

Emerging OEM Opportunities:

OEM opportunities are rising with diversified raw materials mixed with subcomponents from East Asia and separate tooling in-country

If your product requires labor intensive manufacturing, India may be a good option to explore. India's average manufacturing labor rates are around 70% lower than China, 59% lower than Mexico, and 33% lower than Vietnam.

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While the US does not have a free-trade agreement established with India, import tariff rates are still much lower than China post-2018.

Many suppliers in India may require higher minimum order quantities (MOQs) to get started and lead times via sea freight can take between 4–8 weeks, so India could be an ideal supply market if you are ramping up your volume and seeking to save on labor costs.



India Product Hubs

- Tirupur has the largest cotton textile and knitwear manufacturing hub in the country since the 1970s. It is also one of the biggest exporting centers of cotton textiles.
- Chennai/Vijawada has a growing presence of global automobile Original Equipment Manufacturers (OEMs) in the Indian manufacturing landscape and has significantly increased the localization of their components in the country.
- Surat is the world's largest center for cutting and polishing diamonds
- Kanpur is known for leather products and automobile & machinery parts.
- Ludhiana is big in the apparel industry with woolen garments and hosiery apparel, hand tools and industrial equipment, bicycle manufacturing, bicycle parts, and metals fabrication.



Vietnam is advancing as an alternative to manufacturing in China. Industries from furniture to footwear have been moving to Vietnam in droves as an ideal manufacturing location for import to the USA.

Imports to the US from Vietnam surged by 36% in 2019, largely driven by US companies shifting their supply chains as a result of the US-China trade conflict. Footwear imports from Vietnam to the US grew more than 11% in 2019, making up over 26% share of the total US market.

Vietnam was quick to contain the impact of COVID-19 in 2020 and is the only Asian economy besides China that achieved positive growth in 2020. However, with a population of only 97M people (about 7% the size of China), it has been experiencing skilled labor shortages and struggling to keep up with the surging demand.

This newly increased competition for highly skilled labor is likely to drive up labor costs in the coming years; however, Vietnam's current manufacturing labor cost is still 54% lower than China and 38% lower than Mexico. Vietnam is still a very attractive option for labor intensive manufacturing processes.

If your product is related to knit or woven apparel, furniture, footwear, or other textiles, Vietnam will likely be an attractive supply option with suppliers readily available to meet your demand.

In these product categories, many suppliers are willing to supply even very small MOQs, accepting orders as low as 200 units.

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VIETNAM – CONTINUED

Vietnamese textile suppliers have been ranked as having one of the world’s fastest “speed-to-market” rates and can often provide very quick turnaround times for samples and production orders — without sacrificing quality. In fact, quality rates from Vietnam are among the top 10% in the world. Vietnamese suppliers are also welcoming of customization requests and can provide excellent service.



\$67B
Imports to USA

Vietnam: Surging Growth

- Vietnam is a textile & apparel hot spot — think footwear, knit & woven apparel, furniture, and other textiles — with 26% of the total US imported footwear market.
- Lower costs (for near-term) make Vietnam a hot alternative post-2018, with labor rates 54% lower than China. However, labor shortages may increase labor rates.
- Many suppliers in Vietnam are willing to take low initial order quantities, especially for standard product types, making them an attractive alternative to China.





The Latest Global Supply Chain Trends

Rising Cost of Chinese Labor

Throughout the 1980's, 1990's, and into the early 2000's, China competed on low labor costs, a rapidly developing infrastructure, and relatively stable trade policies.

In the last 20 years, China's labor cost has increased nearly 1000% and this trend has only been accelerating. In 2019 alone, Chinese average wages increased by approximately 10% over 2018. China's current wages in its largest cities like Shanghai, Beijing, and Shenzhen are on par with much of Eastern Europe. In fact,

the average worker in Shanghai earns more per year than workers in Albania, Romania, Bulgaria, Slovakia, and Montenegro.

Despite the rising labor costs, China factory labor rates are still highly competitive with the average factory worker in China costing roughly 5% of those in the US or Germany.

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Still, with the steady rise of attractive production ecosystems in Mexico, Vietnam, India, and other ASEAN countries, US companies who are looking to China simply to import products using cheap labor should look elsewhere.

Supply Chain Diversification

How do you find increased security in an increasingly uncertain supply chain world? *Diversification.*

One lesson that the last few years have taught us all is that the world can change quickly and companies that create contingency plans to diversify their sourcing dependency will be the most resilient to unexpected and uncontrollable macroeconomic disruptions.

It is critical for companies to create a long-term supply chain strategy to achieve your product launch goals while minimizing potentially catastrophic risks.

Go to China if your product requires strong engineering talent, a robust supply network involving multiple commodity types, or if you are also interested in selling into the enormous domestic Chinese market.

For example, you may find that working with a supplier in Mexico is perfect for your rapid prototyping and expedited sample development goals to speed up your product design schedule, but a supplier in China or Vietnam may be better suited for your low volume production order quantities.

As you scale volume, you may find that a dedicated supplier in India will lower your production costs and improve your profit margins.

While we value long-term relationships and do not advocate for changing suppliers frequently, suppliers in strategic markets can provide options to lower your risk and find the best solution catered specifically for your specific situation.

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The Rise of e-commerce and its Impact on the Supply Chain

Due to COVID-19, there has been a rapid evolution of the retail space from brick and mortar to online. While supply chain costs are starting to level out from the summer 2021, there is still a massive impact both in cost, availability and efficiencies in supply chains.

Companies that do not have a solid supply chain and logistics plan, can find themselves out of business from inventory shortages and rising costs. As we move into 2022, expect for companies to start evolving and limiting their supply chain inefficiencies.



Predictions for 2022 & Beyond

Sustainable Products

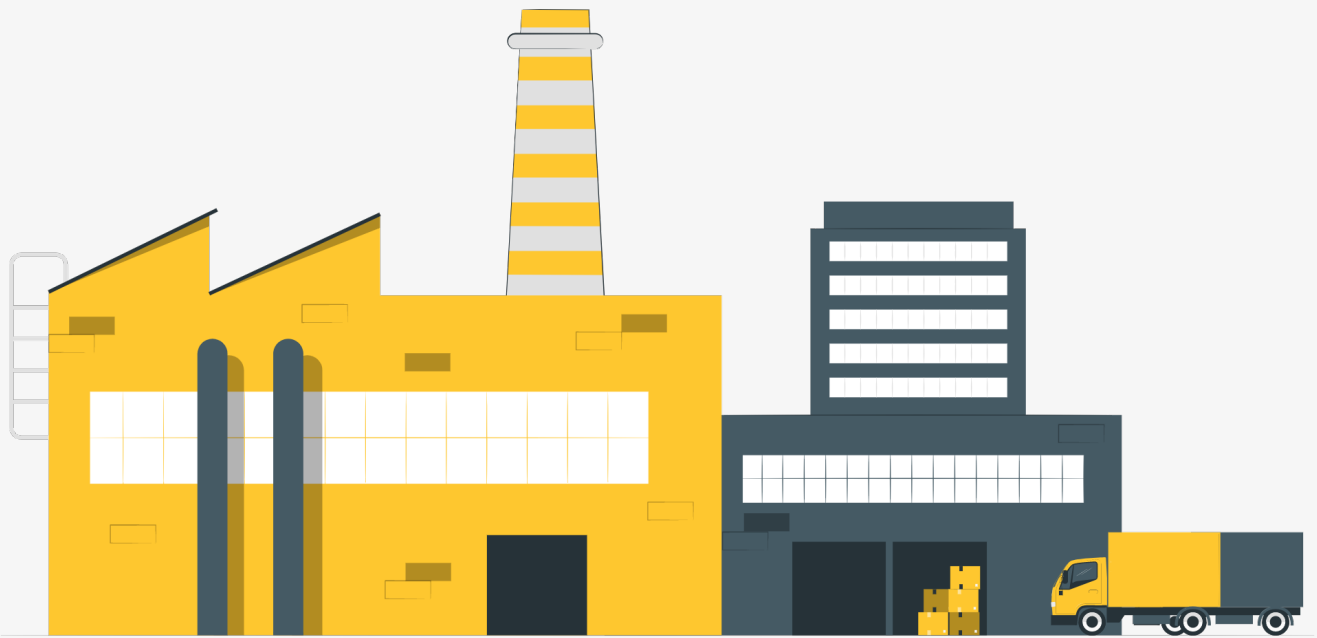
While many trends ebb and flow, sustainable product design is a trend that continues to rise in demand each year as US and global consumers become more concerned with the environmental and local community impact of their purchasing decisions.

In fact, 9 out of 10 Generation Z consumers believe that companies have a responsibility to address environmental and social issues. With Gen Z and Millennials representing approximately \$350B of spending power in the US and with Gen Z alone representing 40% of the global consumer population, integrating sustainable design into your products is a trend you cannot afford to ignore.

Sustainable product design can also be a savvy business move. For example, Amazon's "Compact by Design" certification rewards you for using more efficient packaging for your products. By removing excess packaging material, you may even lower your packaging costs and boost your profit margin.

Additionally, 67% of all US-based consumers are willing to pay extra for sustainable products, with a whopping 87% of Gen Z consumers willing to pay more. To top it off, retailers like Amazon promote products that satisfy their "Climate Pledge Friendly" certification requirements and make it easier for consumers to find your products.

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PREDICTIONS FOR 2022 & BEYOND — CONTINUED

US-China Trade War Tariffs

US companies sourcing products from China have been holding their breath for a trade deal since the Section 301 cross-border import tariffs were introduced by the Trump Administration in 2018. Many of these tariffs add an extra 25% import fee on products sourced from China and the US importer is 100% responsible to pay these fees.

Some US companies have passed these costs on to consumers by increasing their pricing, but if your competition is not raising their prices then you risk losing your market share.

The Biden Administration has already signaled that they will not be swift to abolish these tariffs and we expect they will continue to be used as a bargaining tool in the US-China trade conflict.

Our advice? Start reviewing your China-alternative options. While we cautiously predict that these extra

tariffs will be removed prior to 2025, it may take an additional one to two years for a full trade deal with China to be reached and the tariff removal process may be phased out over multiple years.

Pandemic Impact

The effects of COVID-19 have been felt by nearly every human on the planet. For some, this has meant isolation or devastating heartbreak. For others, it has meant economic anxiety and unemployment. The pandemic has completely changed the way that we interact with others as we social distance and attend meetings via video conference.

While e-commerce has been steadily growing for many years now, the pandemic has caused a surge in online shopping with a forecast of continued growth for overall e-commerce sales in the US. Online sales revenue from April to June of 2021 exceeded \$222B, up from some \$215B in the first quarter and growing.

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PREDICTIONS FOR 2022 & BEYOND — CONTINUED

Retail giant, Amazon, was well-established to serve online customers and saw a 39.1% year-over-year growth in 2020 and is expected to finish 2021 with 27% year-over-year.

However, other traditional brick-and-mortar retailers like Best Buy, Target, and Kroger saw unbelievable e-commerce growth of 105%, 103%, and 79% respectively. This indicates that the e-commerce space is rapidly becoming more crowded and many companies that have been slow to improve their online retail ecosystem are now accelerating this strategy.

Even after the pandemic is controlled and the world returns to “normal”, the shift in consumer

online buying behavior is likely to continue as more and more retailers have invested to make this process more convenient for their customers.

What does this mean for you as you launch your new products? More consumers than ever are shopping online, which provides a great opportunity for you to market your new products. However, the competition for online retail sellers is increasing rapidly, which means it is more important than ever to have a robust product design and supply chain strategy that allows you to develop differentiated products at globally competitive costs.



Have it Made with Gembah

Gembah exists to bring more creativity, inspiration, solutions, and conversations into the world — and that makes all of us better. Allow us to guide you to **Gembah**: the place where value is created.

Supply chain strategy is about connecting the places where value is created into a chain that leads from the source all the way to your end customers. Gembah is your navigator that will walk beside you to illuminate your optimal sourcing locations and strategic suppliers where value can be maximized. So how does our Sourcing Process work?

A Look at Our Sourcing Process

1. Design Optimization & Product Spec Sheet Development

Bring your existing product designs or ideas to Gembah and we will work with you wherever you are on your journey.

Our design team is able to take your back of the napkin concepts and turn them into 3D CAD designs and 2D engineering drawings that are capable of being produced by our world-class supplier network.

When your design is complete, we will work with you to detail out all of the critical product specifications that your suppliers will need to build your product and meet your expectations.

2. Supply Chain Strategy Development

With your design and specifications completed, we will work with you to identify your ideal supply chain strategy for product launch and for full scale volume.

You can leverage our vast supplier network in China, Mexico, India, Vietnam and other regions to establish a long-term relationship with one of our trusted suppliers that will give you the attention you deserve.

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3. Prototype and Sample Development

With your strategic supplier relationship established, Gembah will work closely with the manufacturer through the multiple iterations that are often required to produce your perfect prototype. After your prototype is approved, we will work hand-in-hand with the supplier to set up your production processes and you will receive your production samples for approval.

4. Production Launch

After your samples have been approved, we are ready to move forward with your production launch. You will place your initial production volume orders and we will work alongside your supplier to ensure the highest quality standards are maintained in accordance with your product specifications.

When your order is ready to ship, we will coordinate the freight and customs logistics required to import your products. Or, if you prefer that orders are drop shipped directly to your customers, we may be able to arrange this solution on your behalf.

Let's work together to build your smart and sustainable supply chain and launch your dream product! In a rapidly changing world, Gembah will be your guide to simplify the complexity of product development and overseas sourcing.

Are you ready?
Email us now to schedule
a consultation today!

info@gembah.com





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