CONTRACT MANUFACTURING IN VIETNAM INCREASES PROFITABILITY

OEMS CAN LOWER LABOR COSTS, IMPROVE QUALITY, AND PROTECT IP WITH THE RIGHT PARTNER

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ABSTRACT

Vietnam has emerged as a leader for outsourced manufacturing among southeast Asian nations due to its exceptional cost competitiveness and consistent high quality. Vietnam's location — adjacent to established supply chains across the border it shares with China — provides original equipment manufacturers (OEMs) with alternative sourcing as the costs of doing business in China escalate. Hourly labor rates in Vietnam are significantly lower than other nearby countries; and the nation has implemented strict laws and regulations to protect the intellectual property of foreign companies. The marketplace and political conditions together have enabled Vietnam to sustain the highest economic growth rate in the world since 2000. Understanding Vietnam's unique financial advantages can help OEMs that outsource manufacturing to achieve a lower total cost of ownership that fuels higher profits and growth.

VIETNAM EMERGES AS A CONTRACT MANUFACTURING OPTION

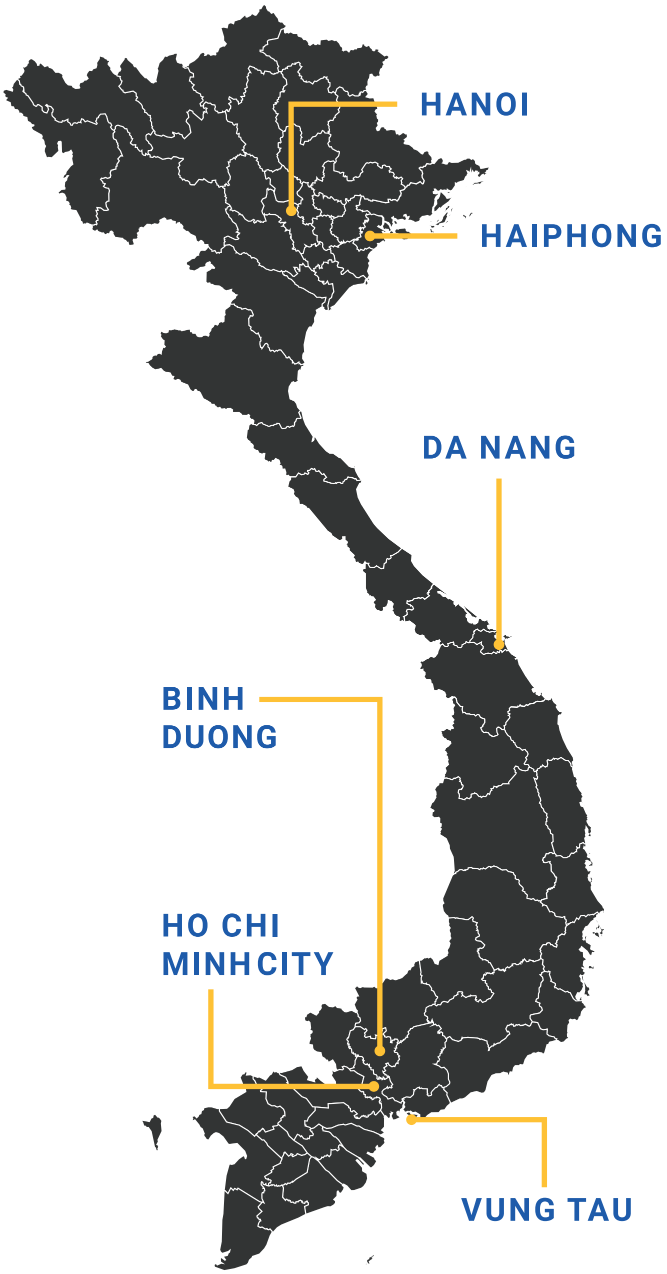
The inflation of labor costs in China[1] combined with the impacts of the recent trade war between the United States and China are prompting OEMs to look for an alternative market in which they can locate production.

This creates an opportunity for which Vietnam is well-positioned geographically, politically and economically. U.S. companies are recognizing that opportunity, particularly those that partner with contract manufacturers (CMs) to make electromechanical devices for commercial aerospace, defense, space, life sciences, medical devices, industrial and semi-cap applications. Their urgent need to develop alternative supply chains is driving an accelerating shift of manufacturing from China to Vietnam.

Vietnam's next-door proximity to China makes it an ideal alternative location for OEMs that intend to diversify their supply chains. The countries share a border, which simplifies ground transportation compared to locations in other nearby nations, such as Thailand and Malaysia. The main manufacturing region in Vietnam, near Ho Chi Minh City, is less than two hours from major ports that provide access to international shipping routes.

IDEALLY LOCATED

More so than other southeast Asian countries, Vietnam has a unique set of economic, geographic and political conditions that make it well-positioned to reduce manufacturing costs while consistently meeting product quality requirements.



Vietnam has followed an export-led growth model, combining trade liberalization and foreign direct investment (FDI) promotion to spur exports.

Beginning in 1986, the government of the Socialist Republic of Vietnam moved from a centrally planned, agrarian economy to a more open, free market system. Internal restructuring and decades of reforms have paid off in remarkable economic growth, development and competitiveness. Since 2000, Vietnam has had the highest economic growth rate in the world.[2] The nation joined the World Trade Organization in 2007, which helped normalize Western trade relations.

By heavily investing in infrastructure such as highways and seaports, Vietnam is providing an efficient business environment for OEMs and contract manufacturers. From 2012 to 2016, Vietnam's infrastructure spending growth was among the fastest in southeast Asia at 11.5 percent, nearly double its average gross domestic product (GDP) growth.[3]

The result of this coordinated political and regulatory shift for the country is that all of its high-tech segments are growing, especially among foreign companies that have located production for commercial aerospace, medical and industrial devices.

Most telling about the transformation of Vietnam into a sought-after manufacturing center is this forecast by PwC's "World in 2050" report, which expects Vietnam to be among the world's top 20 economies within 30 years.

DRIVERS BEHIND VIETNAM'S COST COMPETITIVENESS

The trade war between the United States and China and the resulting uncertainty disturbed mature sourcing models for companies operating in China. "With tariffs a moving target, … U.S. companies are rethinking their supply chains and trying to find new solutions to new problems," Forbes reports.[5]

However, the dynamic U.S.-China trade relationship is only one factor behind the relocation by OEMs to Vietnam.

The business case for sourcing production in Vietnam is built upon positive economic and political trends. Foremost among them is Vietnam's robust growth, projected to expand at 6.4 percent annually through 2022, according to Moody's Investor Services. Other factors that make Vietnam attractive to OEMs and their contract manufacturing partners include the following:

LOWER LABOR COSTS

Vietnam's labor resources cost significantly less than other Asian nations and are powered by a youthful population.

Manufacturing labor costs per hour in Vietnam are 50 percent lower than in China.[6] Skilled Vietnamese manufacturing workers are also paid less than workers in Malaysia, Thailand and the Philippines.[7]

Additionally, Vietnam's labor force is large. About 60 percent of the country's 95 million people are of working age. Many of these workers are urban, digitally connected citizens with high literacy rates. This up-and-coming, youthful and engaged workforce stands in stark contrast to China's aging and higher-paid population.

VIETNAM'S GROWTH STORY[4]

6.6%
Average GDP growth rate during past three decades; reached 7.08% in 2018

4x
Increase in imports and exports to nearly $480 billion since joining WTO in 2007

$19b
FDI in 2018 — the highest in a decade

MANUFACTURING LABOR COSTS PER HOUR[8]	
$3.00	VIETNAM
$6.50	CHINA

HIGH PRODUCTIVITY

Vietnamese workers produce higher value-added goods. Between 2008 and 2016, labor productivity in Vietnam increased by 22.5 percent.[9] In 2018 alone, labor productivity rose by 6 percent compared to the previous year.[10]

ZERO TARIFFS

There is no tariff on products assembled and finished in Vietnam and shipped to the United States.

This is a significant financial opportunity and can certainly benefit manufacturers. However, keep in mind that the situation is likely short-term — the bigger, longer-lasting financial value lies in Vietnam's pricing, quality and ease of doing business.

STABLE GOVERNMENT

Vietnam's government and local administrations have been committed to economic growth and development for more than a quarter-century.

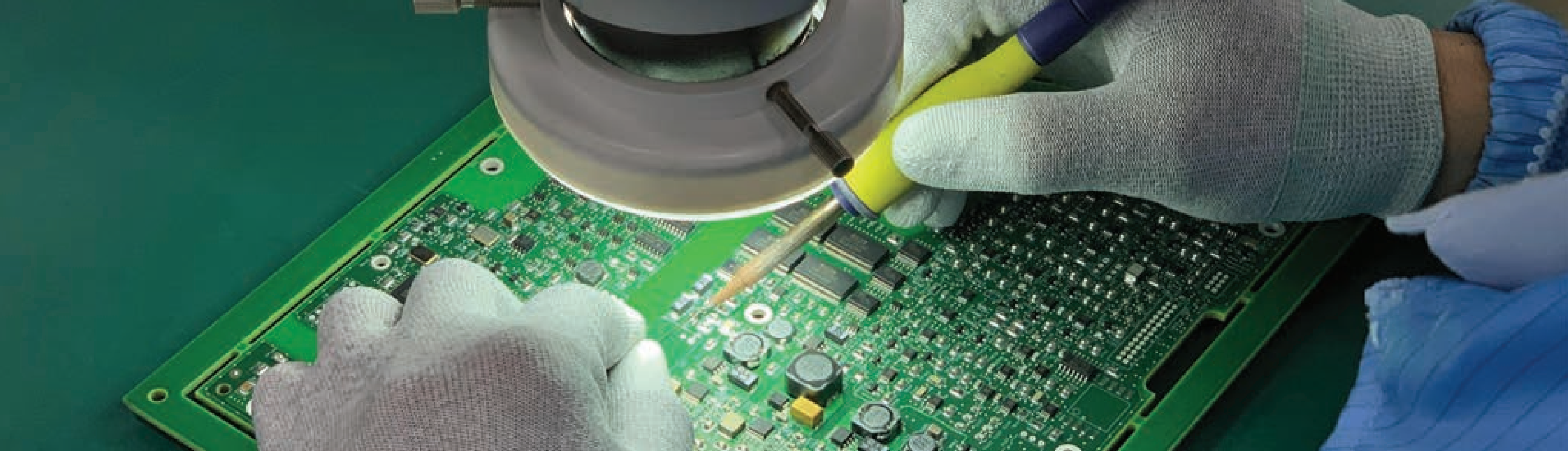
They eased restrictions on foreign investment and are opening the country's borders. The Ministry of Trade and other agencies actively work to control labor rates and inflation, ensuring that Vietnam will remain competitive for years to come.

FREE TRADE AGREEMENTS

Vietnam has free trade agreements (FTAs) with more than 200 countries — including the United States — giving the country access to multiple economies and creating opportunities for OEMs and CMs to connect with global production networks through Vietnam.

Financial and service benefits for manufacturers range from hassle-free customs, new export markets and supply chains, to staying price-competitive with rivals who operate in FTA countries. The Vietnam network of trade agreements is among the best any manufacturer will find at this point on the value chain.[11]

Vietnam's reformed customs process and many seaports make shipping fast and seamless. With the right custom manufacturing partner, sourcing from Vietnam can be simplified with a partner guiding your company through each step and ensuring that all documentation is in order.



PROTECTING INTELLECTUAL PROPERTY (IP)

OEMs operating in China have long been concerned about their IP, and lax protections are the reason many choose to leave that country. Vietnam offers strong IP protection, enabling OEMs to avoid time-consuming and potentially disastrous IP issues. This contributes to the lower total cost of ownership that can result from manufacturing complex electromechanical devices in Vietnam.

As a member of the WTO, Vietnam must follow this organization's IP requirements, which protect industrial property and other rights.

Patents for industrial designs are renewable for up to two successive five-year periods. Additionally, Vietnam protects the designs of semiconductor integrated circuits until one of the following is achieved:

- the end of 10 years as from the filing date
- the end of 10 years as from the date the designs were first commercially exploited anywhere in the world by the person having the right to registration or his licensee
- the end of 15 years as from the date of creation of the layout designs

Vietnam has had enforcement shortcomings due to insufficient technical knowledge and human resources to identify all instances of infringement.[12] To remedy this deficit in expertise, Vietnam has cooperated with international bodies as well as foreign agencies, according to the U.S. Embassy and Consulate in Vietnam.

In addition, companies that manufacture in Vietnam through a U.S.-owned company gain another layer of protection from U.S. IP laws.

LOWER TOTAL COSTS WITH U.S.-OWNED MANUFACTURERS IN VIETNAM

With labor costs increasing 3.1 percent in 2019 in the United States,[13] and labor accounting for as much as 30 percent of production costs, it might be the right time for OEMs to partner with a U.S. contract manufacturer that has operations in Vietnam.

Unlike other southeast Asian nations, Vietnam offers lower-cost labor along with the appropriate manufacturing skills, quality and reliability needed for complex electromechanical devices for commercial aerospace, defense, space, life sciences, medical devices, industrial and semi-cap applications.

The resulting combination makes Vietnam not just another low-cost production hub. Concerted political efforts and national and local levels along with significant capital investment from U.S.-based product design and custom manufacturing companies have prepared Vietnam to move into more complex, sophisticated technologies. Today, 65 percent of FDI in Vietnam is in manufacturing and processing, much of it for electronics.[14]

VIETNAMESE INNOVATION

45

Where Vietnam ranks among 127 countries

Source: World Intellectual Property Organization

Vietnam stands out in the region for offering substantial financial advantages without endangering intellectual property. When an OEM partners with a U.S.-owned contract manufacturing facility located in Vietnam, the OEM can realize other benefits, such as:

- Local supply chain sourcing to reduce costs
- Direct contact with project and engineering leads
- English-speaking service and engineering staff
- Guaranteed response times
- Measurement against international quality standards
- Rigorous training and skills that match what's available at U.S. facilities

LOCAL VIETNAM SOURCING FOR SUPPLY CHAIN

A U.S.-owned facility in Vietnam can also duplicate a U.S. service culture, so OEMs will experience the same responsiveness as they would when they work alongside a custom manufacturer located within the United States. Cost and quality, combined with customer service and adherence to U.S. regulations, all contribute to lowering the total cost of ownership by reducing or eliminating errors, delays, IP issues and reliability concerns.

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ABOUT SPARTRONICS

The more complex your product, the more you can maximize its potential — with help from Spartronics.

When you need to make your product better, faster and cheaper — or refocus your original concept into a product that meets a larger market need, Spartronics can help from locations in North America as well as our facility in Ho Chi Minh City, Vietnam. We provide complex product design and custom contract manufacturing services for aerospace, defense, space, life sciences, medical devices, instrumentation and control. We devote our intense curiosity, imagination and relentless problem-solving expertise to help you uncover the best possible version of your idea.

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