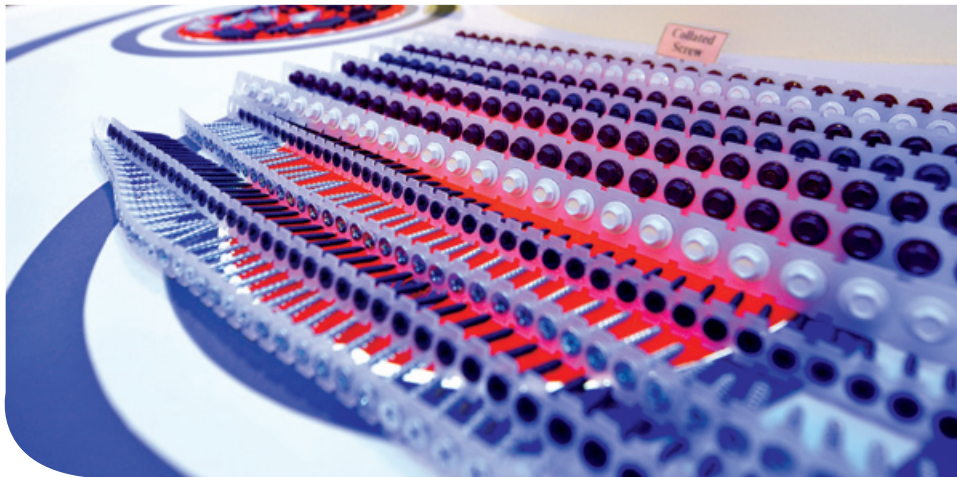


# Taiwan: Closer than you think



Companies in the Republic of China (Taiwan) are engaged in practically every business one could think of, from the design and manufacturing of almost all types of electronics, such as home appliances, mobile devices and personal computers, to products as diverse as bicycles, boats, functional fabrics and medical equipment. The firms behind these goods are located across the nation, closely follow global industrial trends and supply products that allow consumers around the world to benefit from the latest technological advances.

Through flexible development strategies and their renowned ability to innovate, Taiwanese companies have taken advantage of industrial clustering at home to become dominant players in international markets. Taiwanese firms often possess many of the characteristics of “hidden champions,” a term coined by German management scholar Hermann Simon to describe little-known companies, typically small and medium-sized enterprises (SME), that become global market leaders by focusing on the development of unique and critical technologies in specific areas.

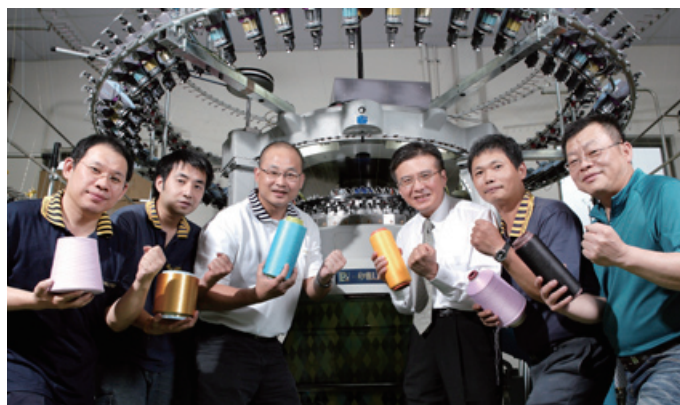
## A Nation of Hidden Champions

The strength of Taiwan’s manufacturing sector is demonstrated not just by large enterprises like Taiwan Semiconductor Manufacturing Co., the world’s largest contract computer chip manufacturer; Largan Precision Co., a global leader in smartphone camera lenses; or mobile phone brand HTC Corp. The nation’s industrial sector is bolstered by more than 1.3 million SMEs working in virtually every field of endeavor. In 2013, SMEs accounted for more than 97 percent of the total number of businesses in Taiwan, and employed more than 78 percent of the nation’s workforce.

There are hundreds of industrial clusters throughout Taiwan. Mostly composed of SMEs, the clusters have formed as a result of common local resources, or are grouped around industry leaders. The enterprises within an industrial cluster develop a symbiotic relationship, forming a closely integrated supply chain through the division of labor. Each individual company makes investments in research and development in its specific field, thereby strengthening the cluster’s overall ability to take orders, customize goods and deliver products. This enables the SMEs to make up for their small individual size and limited resources when competing against conglomerates in Japan and South Korea as well as state-owned enterprises in mainland China.



Taiwanese manufacturers have established a role in the regional automaking industry as well as the global automotive parts supply chain. (Photo courtesy of Taiwan Transportation Vehicle Manufacturers Association)



Pai Lung Machinery Mill Co. Ltd. in New Taipei City produces a wide range of knitting machines for the global market. (Photo courtesy of Pai Lung Machinery Mill Co. Ltd.)

It is the leaders in these clusters that often become a hidden champion of their specific industry. A sample of these hidden champions provides an excellent introduction to the innovative and industrious nature of Taiwan’s dynamic SMEs.

## Knitting it All Together

“If I said I was in second place in the industry, I am sure no one would dare to assert that they hold the world’s top position,” says James C.C. Wang, chairman of Pai Lung Machinery Mill Co. Ltd., which was founded in 1977. With international brand name customers like Adidas, Nike, Uniqlo and Zara, Pai Lung is now the world’s third-biggest knitting machinery company, holding the largest global market share for circular knitting machines at 12 percent.

Pai Lung Machinery markets its brand in 72 countries. The company also produces fabrics for a wide variety of sectors, including the automobile, construction, health care and high-end clothing industries.

Due to its ingenuity and innovation, the company now stands on an equal footing in the international market with century-old manufacturers such as Germany’s Stoll and Japan’s Shima Seiki. “The international companies have operated for a century, but we had to come up with ideas they never thought of and



TXC Corp. produces a variety of essential components for the mobile technology industry. (Photo by Chuang Kung-ju)

take a path they never traveled. I think it is absolutely necessary for us to respond quickly [to the needs of the market]. As a matter of fact, this is the right way to do business," Wang says.

## Crystal Clear Vision

**T**echnology and quality are imperative for success, and competitiveness holds the key to survival," says Peter Lin, general manager of TXC Corp., one of the world's largest quartz crystal technology components manufacturers.

Founded in 1983, TXC produces quartz crystal units, oscillators and other high precision frequency control products, which are widely used in mobile phones, networking equipment, personal computers and other electronic products. These parts function like the conductor of an orchestra, ensuring that all kinds of electronic components perform data computing and processing in an orderly fashion.



The Sheico Group in northeastern Taiwan's Yilan County is a major global manufacturer of water sports apparel. (Photo courtesy of Sheico Group)

Starting from a small facility with an annual revenue of NT\$100,000 (US\$3,300), TXC is now capable of producing more than 50 million pieces of quartz each year, and reported NT\$9.5 billion (US\$317 million) in revenue in 2013. The firm's products are now considered essential components for a variety of smartphone technologies such as near field communication applications in Samsung Electronics Co.'s mobile devices, wireless communications in Apple Inc.'s iPhones and the global positioning system (GPS) function of HTC's smartphones.

## Diving into New Industries

**T**he Sheico Group, the world's leading supplier of water sports apparel, is located in a rural area of Yilan County, northeastern Taiwan. Shiue Pi-goong, the founder of the business, was originally a primary school teacher. In order to support a family of 11, he opened a small shop selling umbrellas in 1948 before moving into the wholesale sector. The Sheico Group was formally established in 1966 as a manufacturer of raincoats and rubber boats for retailers, with the company going on to become one of the largest rain gear producers in the country.

In 1977, the Sheico Group began developing and producing diving shoes. In less than two years, it received orders from Japan and started growing its international business by producing diving gloves and wetsuits. In 1979, Sheico decided to

manufacture its own neoprene sheets, laying the foundation for its success in international markets. By 1997, it had become the world's largest diving suit manufacturer, and today it supplies over 60 percent of the world's diving suits.

## Navigating the Road to Global Dominance

**P**ortable navigation devices guide users in the right direction and come in the form of the GPS devices used in automobiles as well as the navigation watches used by long-distance runners and adventure sports enthusiasts. The leader in this industry is Garmin Ltd., whose largest operating subsidiary and primary production facility are located in New Taipei City, northern Taiwan.

Garmin was founded in the United States in 1989 by American Gary Burrell and Min Kao, who hails from Taiwan. The co-founders formed the company's name by combining the initial letters of their first names. When the United States was involved in the First Gulf War in 1991, it took two people to operate a GPS navigation device on the battlefield. Garmin was able to shrink the size of the device so that it could be carried by a single soldier, and it was not long before the company started receiving orders from the US military.

Diversifying the applications of navigation products has resulted in the birth of the driving recorder, a very popular device in Asia, and the invention of the smart watch, which combines GPS capabilities with displays of physical health and performance data. Garmin has built its global reputation through innovation, investment in human talent and equipment, product differentiation and vertical integration. This strategy will likely help the company maintain its dominance in the satellite positioning system industry.



A car designed by Taiwan's NOVA Design Co. Ltd. Today, Taiwanese firms have developed a significant market niche for devices used in automobiles. (Photo courtesy of NOVA Design Co. Ltd.)

## Integral to the Global Economy

**A**ccording to the World Economic Forum's Global Competitiveness Report 2013-2014, Taiwan ranked eighth in terms of innovation and was the top nation globally in terms of the state of its cluster development. These results provide yet further evidence of the effectiveness and dynamism of Taiwan's world-renowned SME sector. By focusing on the development of top quality, state-of-the-art products in specific areas, Taiwan's SMEs have consistently demonstrated an ability to become key players in global markets. Today, these hidden champions are the cornerstone of the nation's high-tech industries and the backbone of the economy. They also make Taiwan an integral part of the global supply chain.