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Apple Inc

## Apple's manufacturing shift to India hits

### stumbling blocks

The iPhone maker is under pressure to unwind its China-orientated supply chain strategy following Covid disruption

Patrick McGee in San Francisco and John Reed in New Delhi 4 HOURS AGO

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Apple is hitting stumbling blocks in its effort to increase production in India, as the US tech giant faces pressure to cut its manufacturing reliance on China.

The iPhone maker has been sending product designers and engineers from California and China to factories in southern [India](#), to train locals and help establish production, according to four people familiar with the operations.

It comes as Apple attempts to unwind its dependence on a China-centred supply chain strategy, following months of Covid-19 disruption that led to it reporting its first decline in quarterly revenues in [three and a half years](#) earlier this month.

[Apple](#) is building up nascent operations in India in an overdue diversification strategy, following the blueprint it set in China two decades ago, with engineers and designers often spending weeks or months at a time in factories to oversee manufacturing.

While Apple has been producing lower-end iPhones in India since 2017, last September was significant with Indian suppliers building flagship models within weeks of their launch in China, where virtually all iPhones and other Apple hardware are made.

But its experience in recent months has demonstrated the scale of the work to be done in the country.

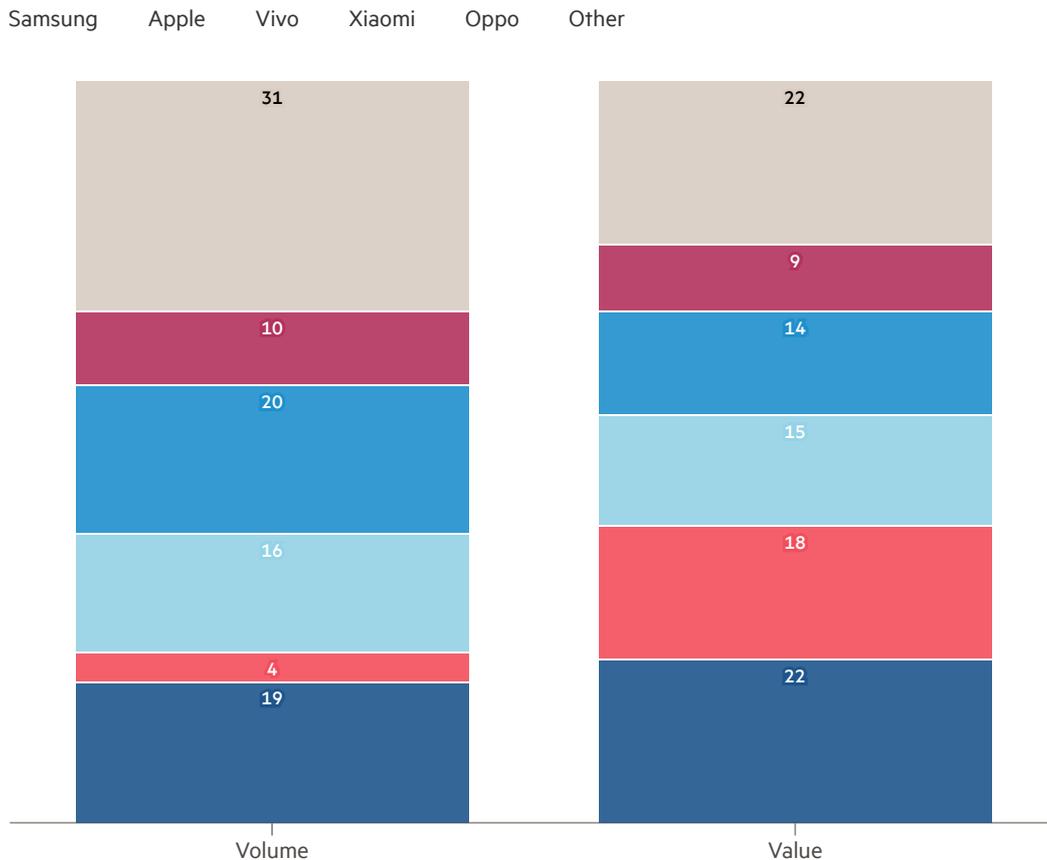
At a casings factory in Hosur run by Indian conglomerate Tata, one of Apple's suppliers, just about one out of every two components coming off the production line is in good enough shape to eventually be sent to Foxconn, Apple's assembly partner for building iPhones, according to a person familiar with the matter.

This 50 per cent "yield" fares badly compared with Apple's goal for zero defects. Two people that have worked in Apple's offshore operations said the factory is on a plan towards improving proficiency but the road ahead is long.

Jue Wang, consultant at Bain, said Apple is at the start of its expansion into India. "We're not talking the same scale of the Zhengzhou factory" — a factory hub in China known as "iPhone City" that employs some 300,000 workers — "and everybody acknowledges there will be different efficiency, but it is happening", she said.

## In India, Apple is only just behind Samsung in value share, but from selling far fewer devices

Market share, 2022 (%)



FINANCIAL TIMES

Source: Counterpoint Research

In China, suppliers and government officials took a “whatever it takes” approach to win iPhone orders. Former Apple employees describe instances in which they would estimate a certain task might take several weeks, only to show up the next morning to find it already completed at inexplicable speed.

Operations in India are not running at that sort of pace, said a former Apple engineer briefed on the matter: “There just isn’t a sense of urgency.”

A person involved in Apple operations said the process of expanding to India is slow in part because of logistics, tariffs and infrastructure. This person said Apple’s diversification into south-east Asia has been smoother thanks to the Regional Comprehensive Economic Partnership, a free trade agreement among 10 regional nations.

Mark Zetter, president of Venture Outsource, a consultancy for the contract electronics industry, said such inertia has been a problem for years.

Five years ago, when Zetter did research for the Indian think-tank Gateway House, he found contract manufacturers would “frequently claim they can fulfil any need” for an electronics client. But in reality they would be “slow to respond to customer concerns after the deal is signed” and “lack flexibility” to respond to changes.

The Apple engineers have also, at times, been housed at city-centre hotels in Chennai, the capital of the southern Indian state of Tamil Nadu, two hours away from the factories where they are working. This requires four hours of daily commuting, with occasionally poor WiFi connections along the route.

Apple declined to comment.

Despite these teething issues, analysts say India's potential for Apple is huge. Bain, the global consultancy, estimates that manufacturing exports from India could more than double from \$418bn in 2022 to more than \$1tn in 2028, driven by policy support and low costs. It estimates that electronics exports alone will grow at an annual rate of up to 40 per cent.

Vivek Wadhwa, a Silicon Valley-based entrepreneur and academic who last month met with government officials including Prime Minister Narendra Modi, said the central government is encouraging businesses to take advantage of Apple's need to diversify from China.

Provincial governments "are bending over backwards to bring industry in, and they will do what China has done", he said. "But, these are baby steps. Apple is now getting its feet on the ground, learning what does and doesn't work . . . Give it three years and you'll see it scaling up."

Wadhwa acknowledged that the fragmented, bureaucratic government in India was something Apple would need to adapt to. He suggested its engineers learn the art of *jugaad* – a way of "making do" or transcending obstacles. "Because everything in India is an obstacle," he said.

Recent jobs ads from Apple make clear it has major ambitions in the country, which is on track to surpass China as the world's most populous nation this year.

One ad tells prospective employees they will "grow nascent operations in India to service all product lines of business at Apple while simultaneously building the factory of the future".

"India" was also mentioned 15 times in Apple's earnings call earlier this month, with chief executive Tim Cook saying he is "very bullish on India". He called the market "hugely exciting" and "a major focus", and confirmed plans to soon open the [first Apple Stores](#) in the country.

Tata has ambitious plans to become a full-service Apple supplier like the Taiwanese, and it has the approval and backing of the Indian government, according to people in India familiar with its plans.

The Indian conglomerate is in talks to buy an iPhone assembly plant outside Bangalore in the neighbouring state of Karnataka from Wistron, a Taiwanese rival to Foxconn that is seeking to exit after experiencing labour unrest and protests in 2020.

One person familiar with the plans said Apple was facilitating discussions that would allow Tata to take majority ownership rather than a 50:50 joint-venture structure. Bloomberg first reported on the talks. Tata declined to comment on its plans. Wistron did not reply to a request for comment.

Meanwhile, India's government has given the preliminary go-ahead to Apple's Chinese component suppliers to begin operation, in joint ventures with Indian partners, according to a person familiar with plans.

The move is significant as the Indian government has a simmering border dispute with China. It had banned dozens of Chinese apps and launched tax and other regulatory proceedings against phone manufacturers since a clash at its northern frontier in 2020 that left at least 24 dead.

Earlier this month, India's finance minister Nirmala Sitharaman said India intended to provide customs duty relief on the import of certain parts and inputs used in mobile phones, such as camera lenses, in a bid to "defend domestic value addition in manufacturing of mobile phones".

An electronics industry executive in Tamil Nadu said Apple is late to the game. “They should have started this exercise five years ago,” he said. “They should have started diversification earlier so they would reap the benefit at this time.”

