

Taking the global stage in advanced manufacturing

Over the decades, Singapore has shifted from producing labour-intensive goods to complex, low-volume, high-mix products. This is possible through advanced manufacturing, in which companies use technologies like data analytics to make the manufacturing process more efficient and to ramp up output of high-value goods. As technologies change and with developments around the world, Singapore has had to adapt its manufacturing strategy.

1980s to 1990s:

- Singapore experiences its first disk drive wave with the city-state producing about 40 per cent of the world's hard disk drives at its peak. Hard disk drive company Seagate sets up in Singapore.



- Singapore becomes the second nation in the world to enter the semiconductor foundry industry, establishing itself as a key semiconductor hub for some of the biggest semiconductor companies globally such as Micron.

2000s:

- Singapore begins to lag on labour costs and research & development, amid the rise of manufacturing powerhouses in the region.



- The city-state, which had thrived on an electronics boom, loses out to low-cost China and India as multinational corporations take their plants there.

2010s:

- A push into innovation-intensive activities such as biomedical sciences manufacturing sees the Economic Development Board wooing global pharmaceutical and medical devices companies to use Singapore as a base for their global markets.



- The likes of Novartis, Lonza, Roche, Amgen, AbbVie set up their biologics plants here.

2016:

- The government set aside a budget of S\$19 billion or about 1 per cent of GDP to fund research, innovation and enterprise activities in Singapore until 2020.



2020:

- Geopolitical factors such as intensifying United States-China tensions and diversification of supply chains due to the pandemic lead to South-east Asia's growing prominence as a global manufacturing hub.



- A \$25 billion plan charting Singapore's research landscape is unveiled with a focus on health, sustainability, the digital economy, and manufacturing. A third of the funds will go towards basic research.

2021:

- A 10-year plan is announced to grow Singapore's manufacturing sector by 50 per cent and maintain manufacturing's share of GDP at 20 per cent.



- The plan involves attracting global companies in niche areas as well as ramping up efforts to grow the size and capabilities of local enterprises in advanced manufacturing to create better job opportunities.