

# ADVANCED MANUFACTURING IN CHINA



13th Sep 2022

**ACCIÓ**

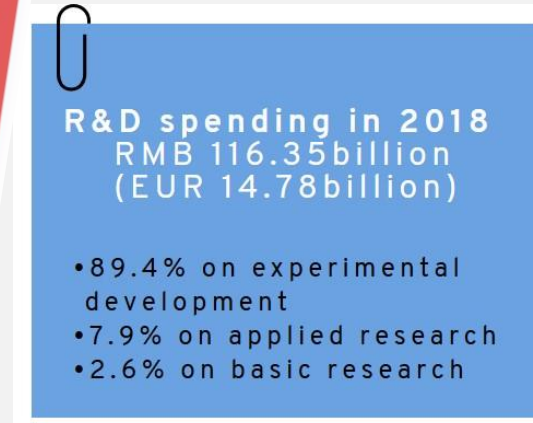


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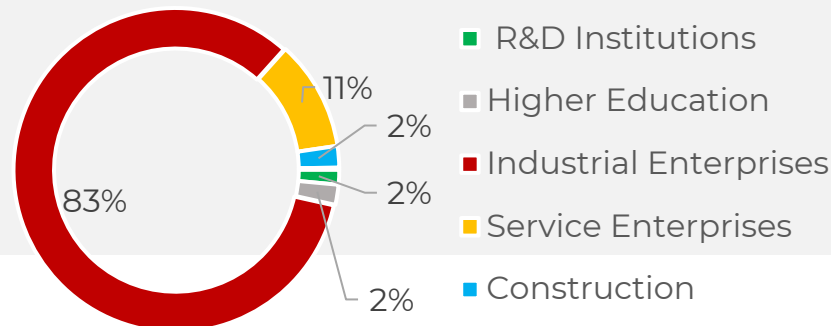
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# 1. CHINA and SHENZHEN's INNOVATIONS ECOSYSTEM

- Shenzhen stands out for its incredible transformation.
- Within 50km radius of Shenzhen are the production and R&D centres established in China of a 180 of "FORTUNE 500" companies.
- From Shenzhen's ecosystem have emerged some of the most innovative brands in the world such as Huawei, Tencent, ZTE or BYD confirming that Shenzhen is the perfect platform for high-tech companies, startups and, ultimately, innovators from around the world



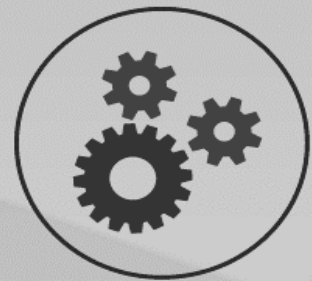
SHENZHEN R&D expenditure by unit





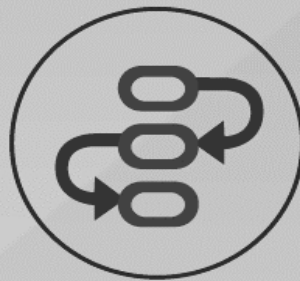
## 2. INDUSTRY 4.0 / ADVANCED MANUFACTURING IN **CHINA**

### 2.1 OVERVIEW and TRENDS



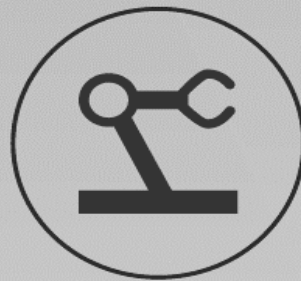
#### Industry 1.0

Mechanisation and the introduction of steam and water power



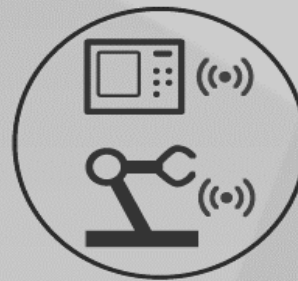
#### Industry 2.0

Mass production assembly lines using electrical power



#### Industry 3.0

Automated production, computers, IT-systems and robotics



#### Industry 4.0

The Smart Factory. Autonomous systems, IoT, machine learning

- Leading centres of smart manufacturing are already emerging in China. These include above all the districts of Pudong in Shanghai, Wujiang in Suzhou and Longgang in Shenzhen.
- There are regional specialisations: Shanghai is China's leader in key components, robotics and aerospace equipment manufacturing. Suzhou is strong in the field of smart manufacturing.
- Across the country, 537 industrial parks specialized in smart manufacturing have been established.
- China's IIoT market has seen a rapid growth, reaching nearly 700 billion yuan last year.
- IIoT (Industrial Internet of Things), is among the #NewInfrastructure agenda.

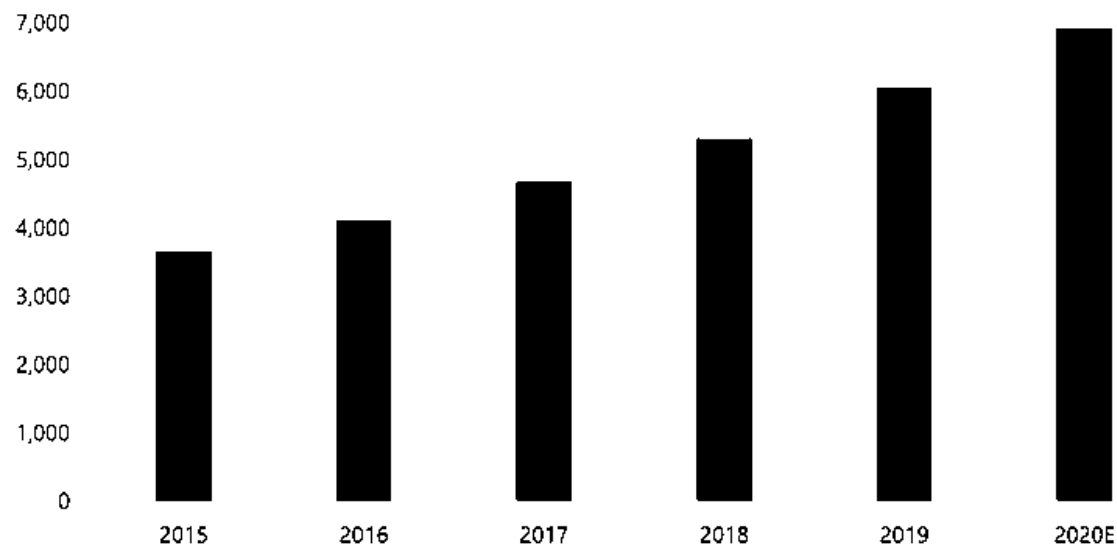
## 2. INDUSTRY 4.0 / ADVANCED MANUFACTURING IN CHINA

### 2.1 OVERVIEW and TRENDS

The  
#NewInfrastructure  
agenda



Figure 2: China IIoT Market Size (RMB 100 million)

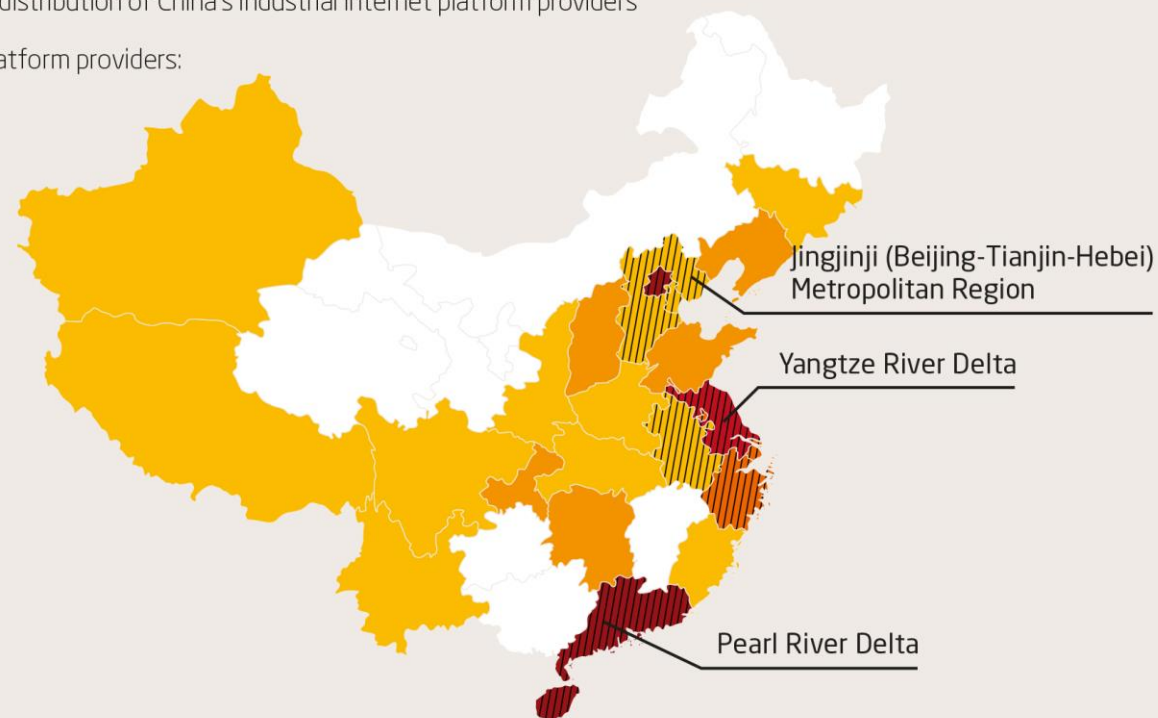


#### Landscape of industrial platforms

Geographical distribution of China's industrial internet platform providers

Number of platform providers:

- 1-5
- 5-10
- 10-20
- 20-30
- > 30

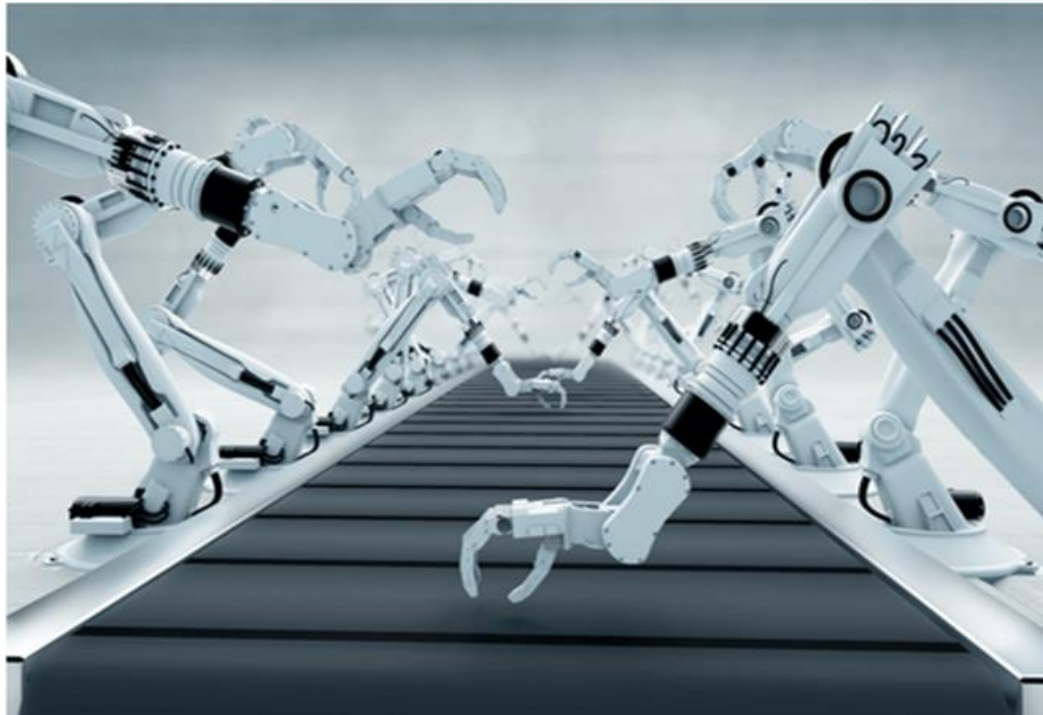


**Industrial Internet of Things is where 5G and Industry 4.0 collide.**

By 2023 China will have 30 new "5G factories"  
+ a "big data centre" for the industrial internet.

## 2. INDUSTRY 4.0 & ADVANCED MANUFACTURING IN CHINA

### 2.2. Startup (1/2)



#### A I N N O V A T I O N

- Incorporated in 2018 / Valuation over USD 1 billion in 2020
- Image classification algorithms and advanced detection and positioning technology to provide sophisticated computer vision and pattern recognition solutions
- Customers Foxconn Technology Group, Yee Tung Group, Carlsberg, Nestle etc.
- Case for Yee Tung - knitwear manufacturer with more than 12 sites globally and more than 20,000 staff
- Customers includes A&F, Polo Ralph Lauren, Vans etc.,
- QC using advanced AI computer vision technology
- Efficiency said improves by 7 times

## 2. INDUSTRY 4.0 & ADVANCED MANUFACTURING IN CHINA

SmartMore

### 2.2. Startup (2/2)



#### Smartmore

- Incorporated in 2019 / Valuation over USD 1 billion in 2021
- Headquartered in Hong Kong, with offices in Singapore, Tokyo, London, and 6 major cities in China
- Served more than 100 enterprises including Airbus, Bosch, Canon, P&G, Unilever, Carl Zeiss
- The all-in-one platform was built upon their precision optical engineering technology
- Application Scenario : fault detection, classification, quality control, OCR etc in electronics, optical, automotive, semiconductors sector

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