Exponential technology change and Automation :Opportunity and Chanllege for Developing countries

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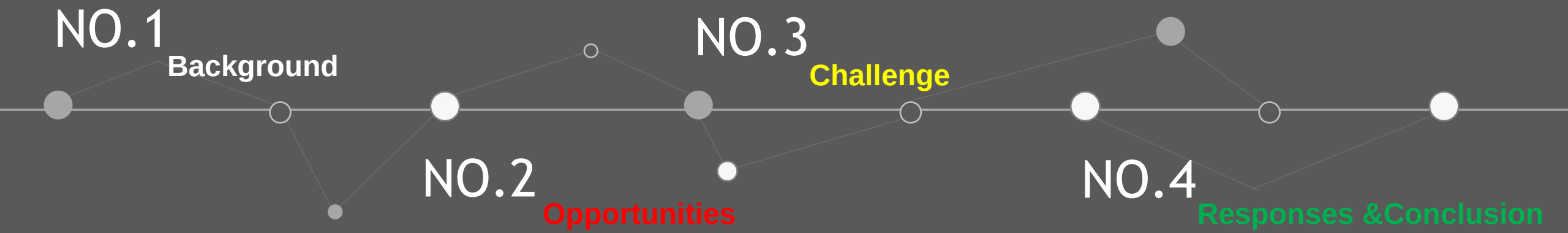
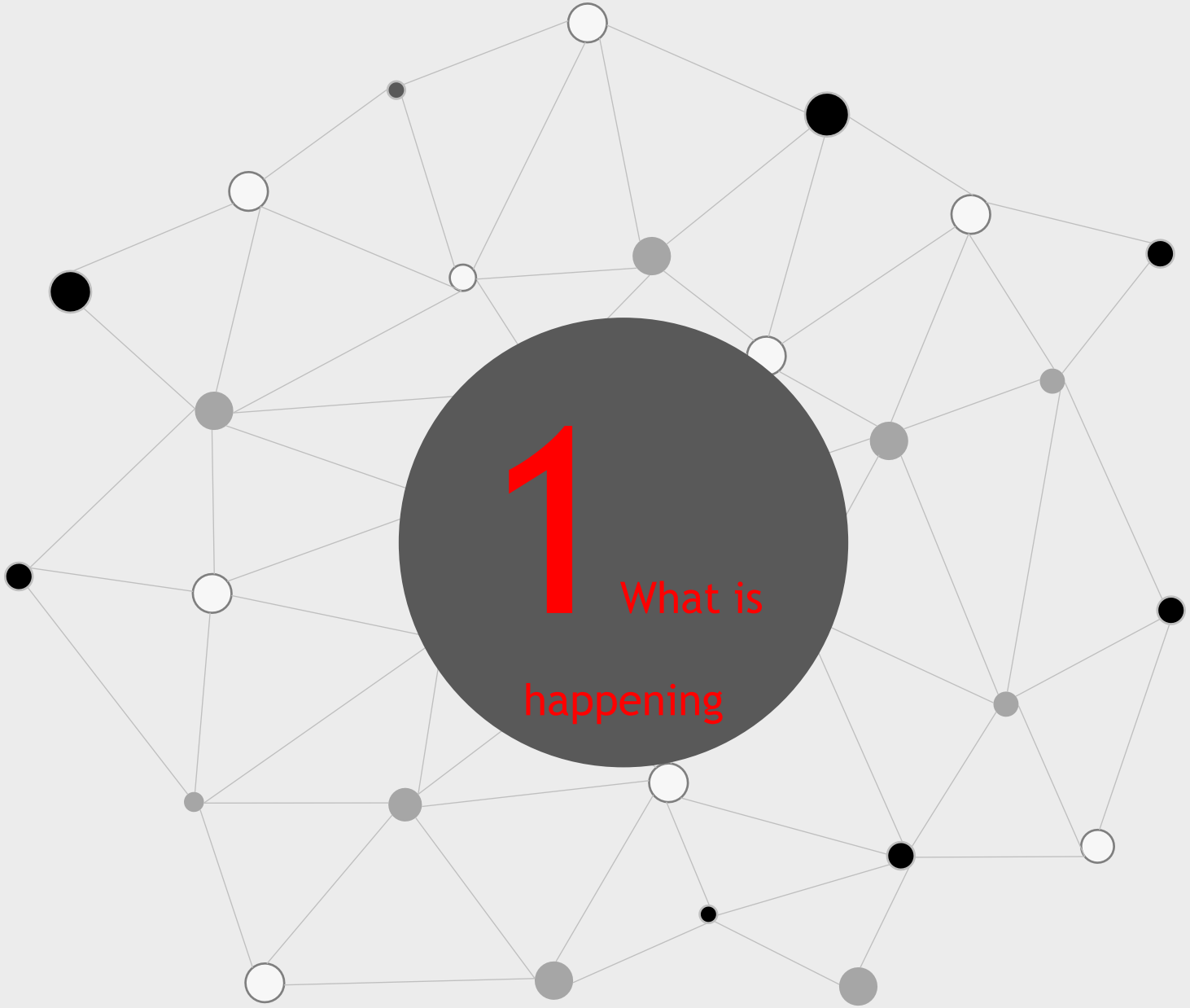

NO.1
Background
NO.2
Opportunities
NO.3
Challenge
NO.4
Responses &Conclusion

For Session 3:

- EXPONENTIAL TECHNOLOGY CHANGE AND AUTOMATION – POTENTIAL IMPACTS ON DEVELOPMENT AND SUSTAINABILITY IN KEY AREAS OF CONCERN (E.G., SUSTAINABLE CONSUMPTION AND PRODUCTION, POVERTY, AGRICULTURE, INFRASTRUCTURE, ICTS)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What is
happening

The potential impacts of automation technology

- Firstly, industrial and agricultural automation technology can improve the efficiency and quality of industrial and agricultural production, through the production of more products and food, eliminate hunger and improve nutrition status, provide the sustainable settlements area for human.
- Secondly, Automation technology in daily life can compressed work time, makes life become more convenient, and provide more free time to human.

- In addition, computer and Internet can provide online education resources for humans, which make everyone can accept education, improve quality, balanced employment, reducing the gap between different people, and makes people have more knowledge to take care of the earth, and respond to natural disasters and climate change.


MADE IN CHINA 中国制造
2025

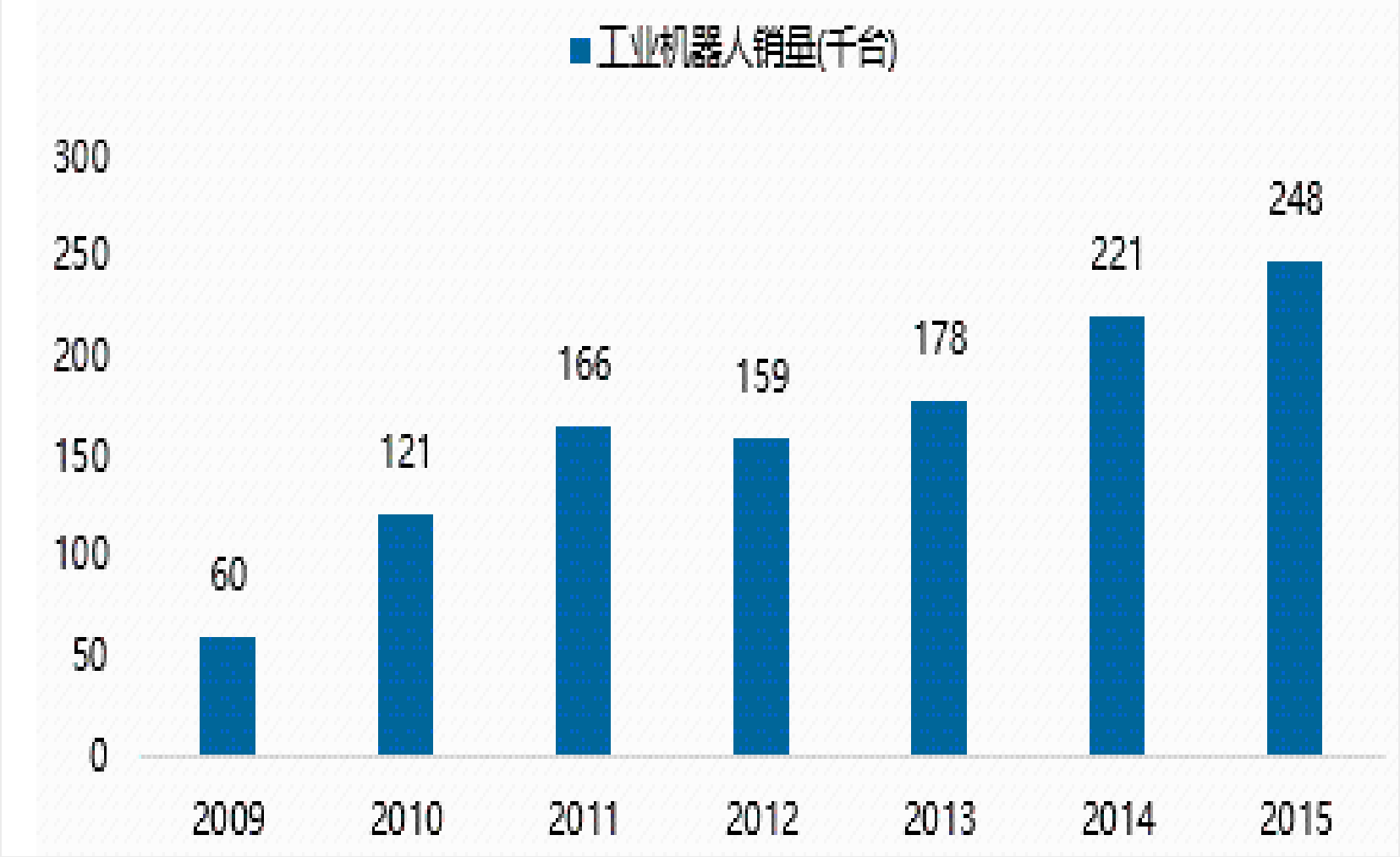

4.0
INDUSTRY 4.0
INTERNET OF THINGS
Smart Factory
BIG DATA
Safety
C++
NC
XTS
CNC


MADE IN USA

The data from **IFR** (international federation of robotics)

Three quarters of sales are concentrated in the top five consumer markets:
China
Korea
Japan
the United States
Germany

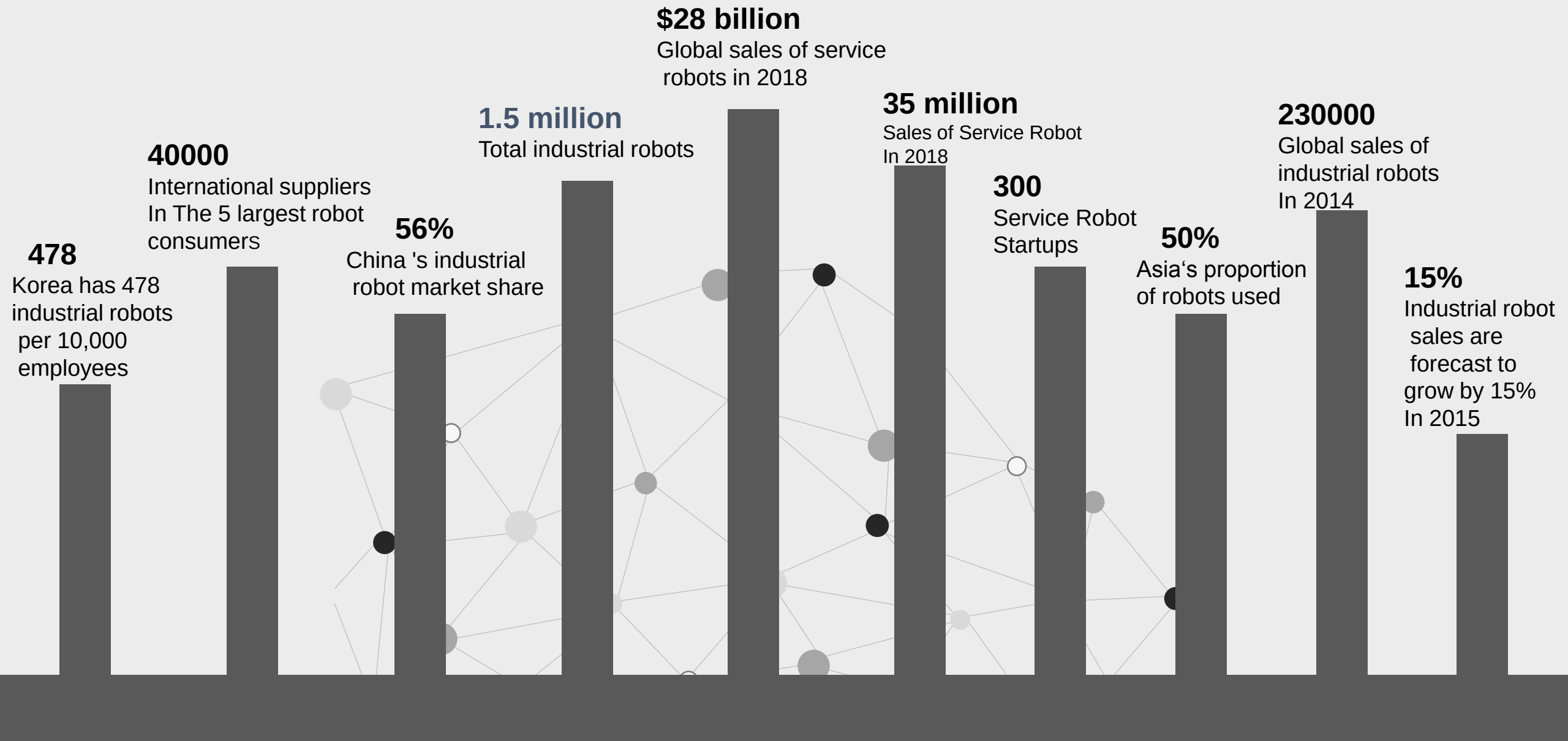
2009-2015 Global Industrial Robot Sales (unit：thousand)



The technical strength of affecting the future work

Source：
Tsinghua Business Review

Ten data on the robotics industry published by IFR,2015



China 's current situation

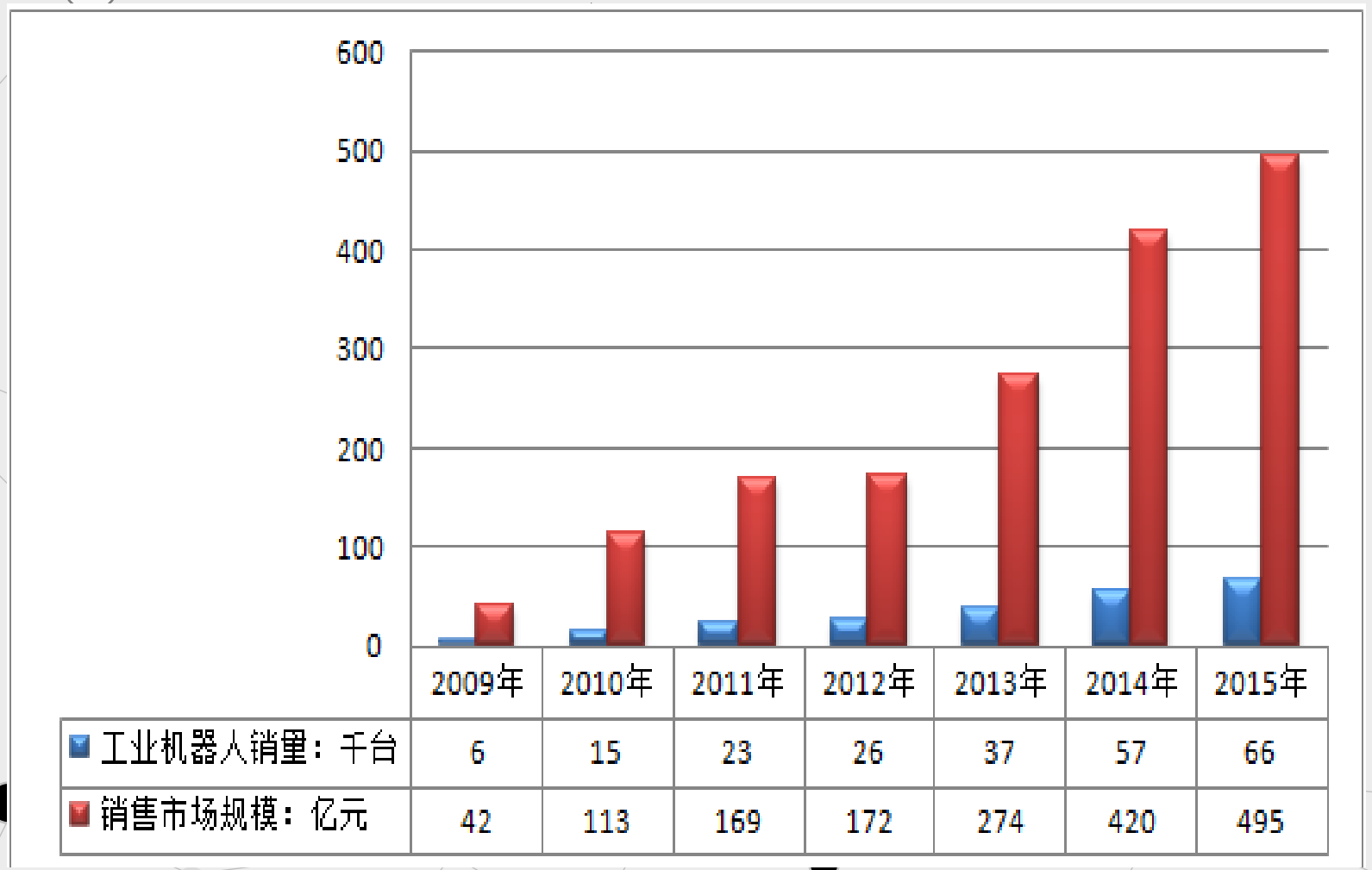
China’s Industrial Robot Production,2012-2015

Source：China Industrial Information Network

China 's industrial robot sales,2009-2015

Source：China Industrial Information Network

China 's current situation

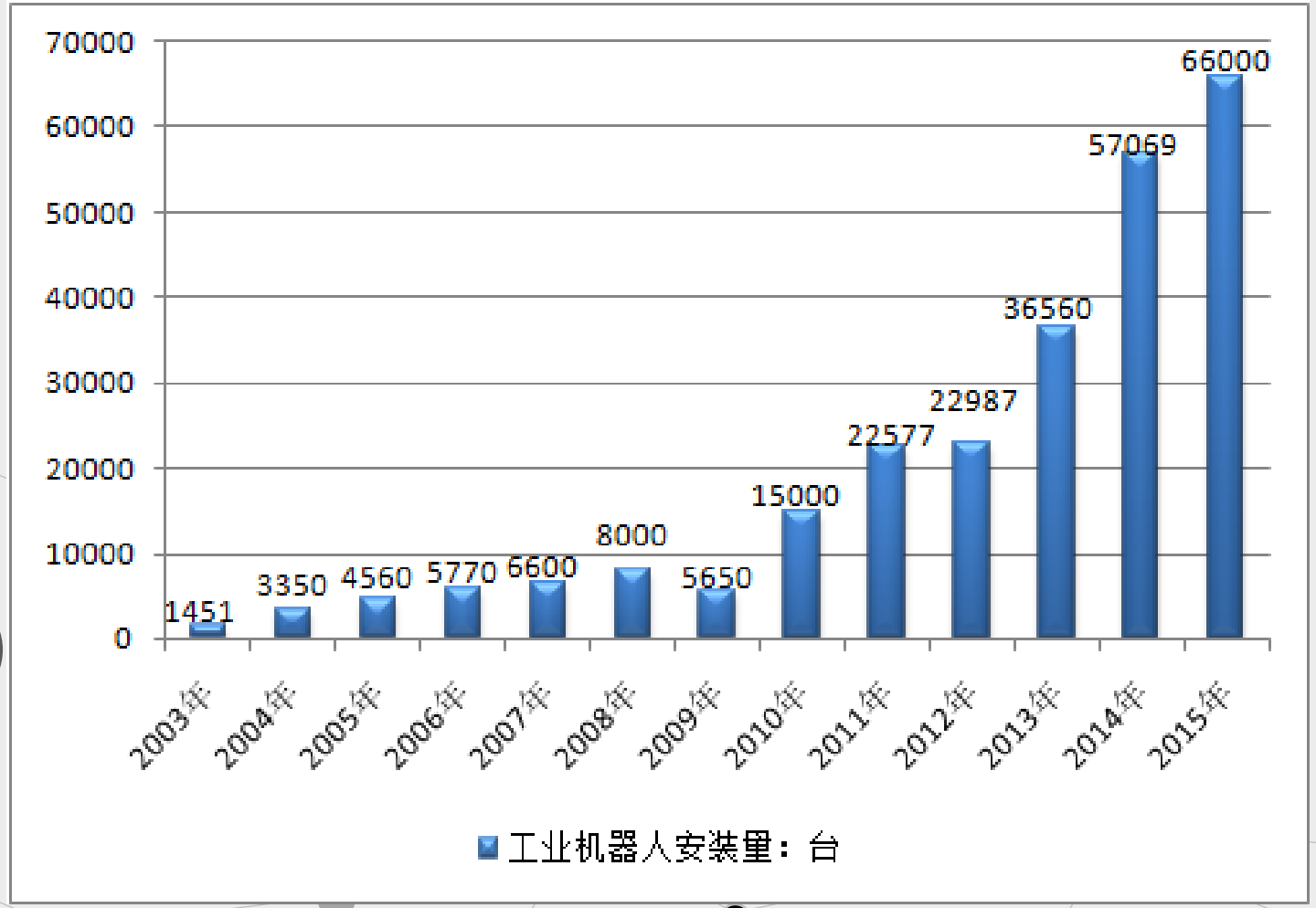


	2009年	2010年	2011年	2012年	2013年	2014年	2015年
工业机器人销量：千台	6	15	23	26	37	57	66
销售市场规模：亿元	42	113	169	172	274	420	495

China 's industrial robots installed capacity,2003-2015

Source：China Industrial Information Network

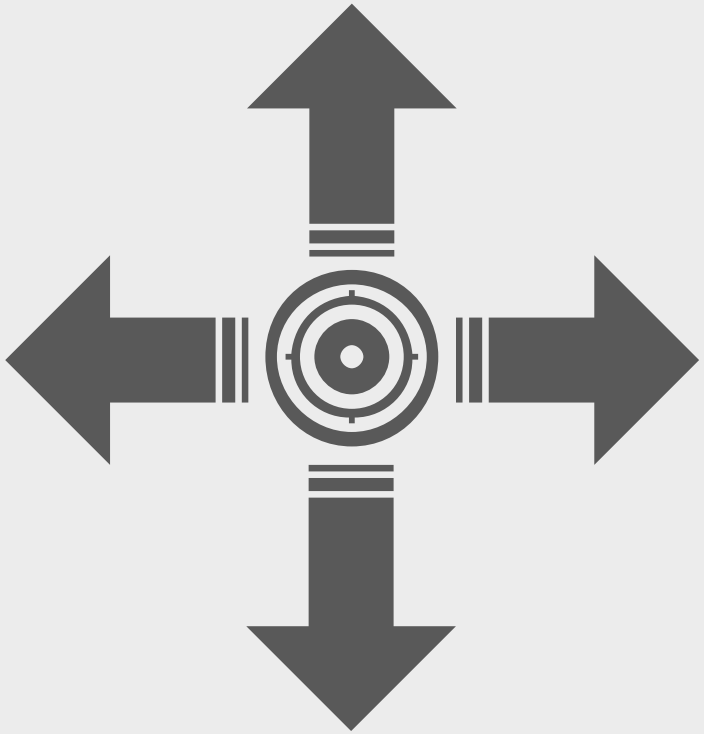
China 's current situation




2
opport
for
Developing
unities
countries
take China as an example

Upgrading of industrial structure

To the national development strategy level



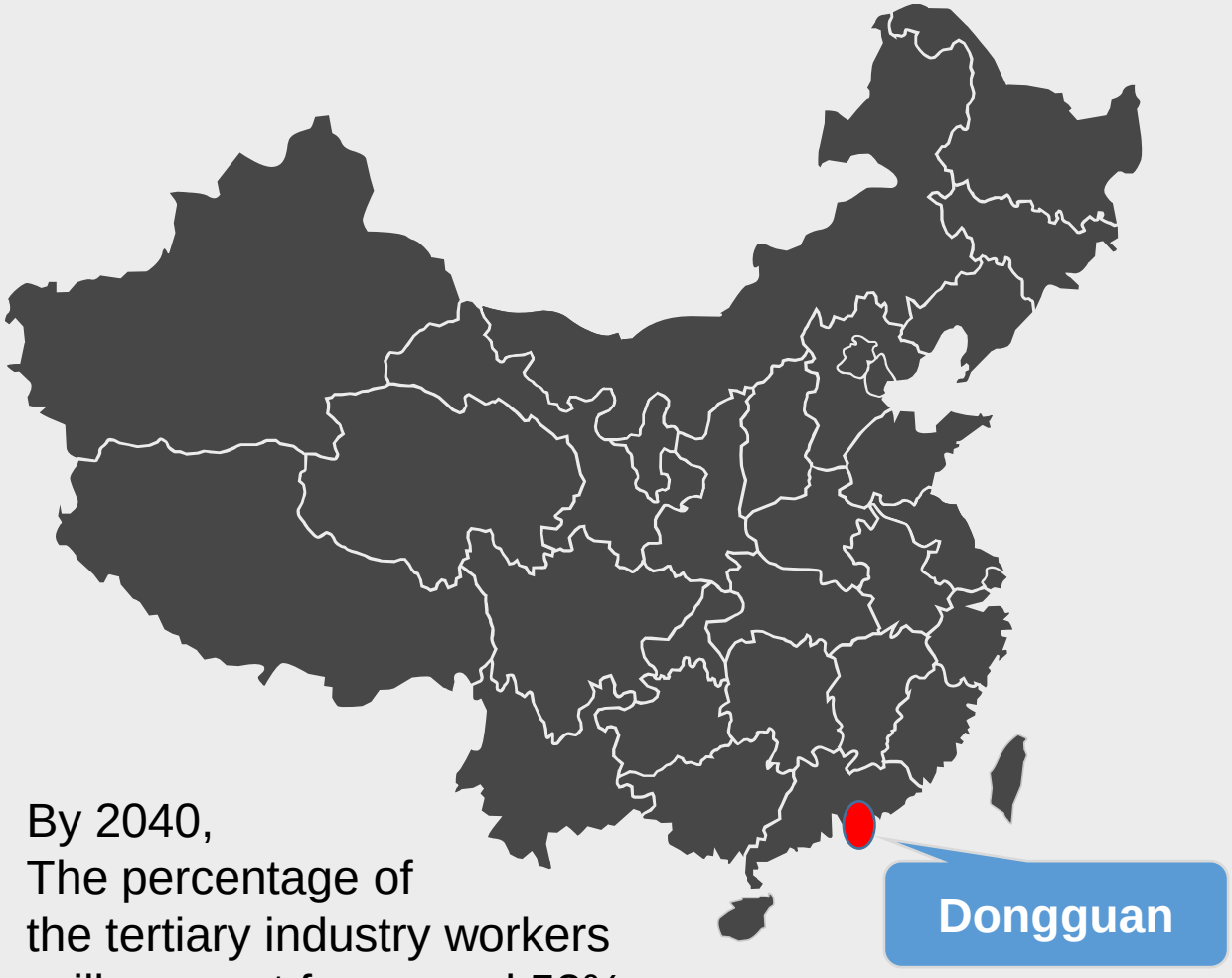
Bridging the "Digital Gap"

To solve the problem of labor shortage caused by aging population

Automation technology has **brought the upgrade of industrial structure** in China. To promote the manufacturing industry develop to **high-end**.

Dongguan City invested **140 million** yuan to **236** companies for upgrading technology in 2014.

The industrial structure of China is undergoing a transition, in which the proportion of manufacturing industry is falling and that of the tertiary industry is rising



By 2040,
The percentage of
the tertiary industry workers
will account for around 52%
of China's total workers

Help to solve the labor shortage caused by the aging of China's population and help to absorb the employed population

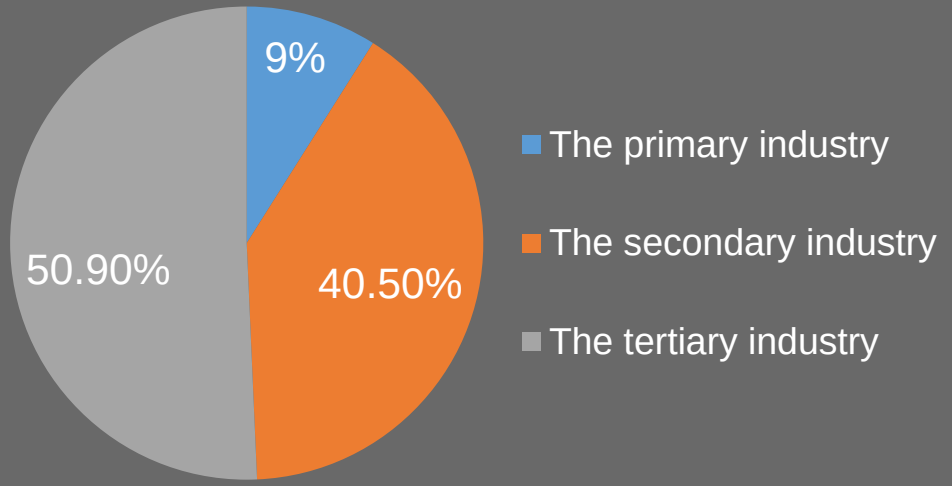
The application of automation technology has spawned a new talent demand.

In addition, the production of robot companies also need a large number of workers

To the national development strategy level

13th Five Year Plan(2016-2020)

China's GDP 2015 proportion



Made in China 2025

Robot Industry Planning

21%

The high penetration rate of automation technology is an opportunity to bridge the “digital gap" and help eliminate poverty.

79%

THANKS