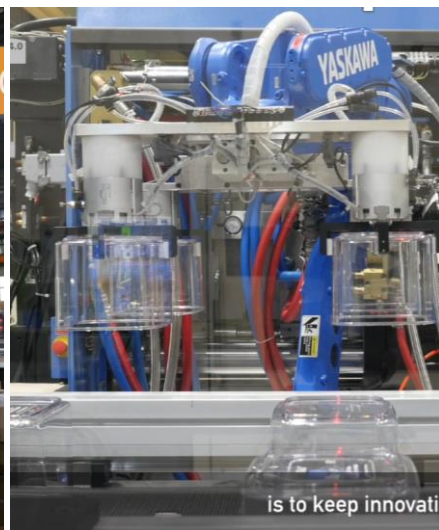


FIRST STEP

Injection Moulding 4.0



Greater China Region

YouTube



Youku



Free-Free Industrial Corp.

Mike Liu, Chairman

After all, the legacy factory is more like a traditional,

iPlast 4.0[®]



Our Company

iPlast 4.0

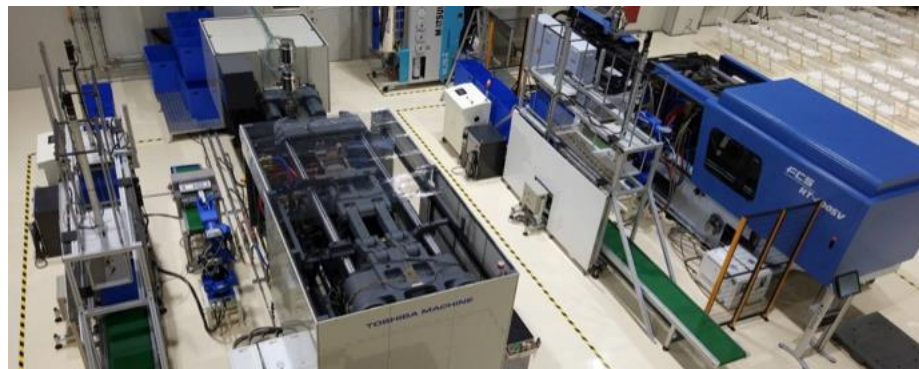


Our vision is to **enable people-centric smart manufacturing for the many companies.**

iPlast 4.0 helps our clients to implement **Innovation Centres** and **Model Factory Cells (MFC)**

Our implementations combine readiness check, consulting, hardware, training and software in the fields of **Scientific Moulding, Smart Maintenance, Smart Automation** and **Smart Manufacturing.**

OUR ECOSYSTEM



EDUCATION INSTITUTES



GMI
GERMAN-MALAYSIAN INSTITUTE

YunTech

建國科技大學
Chienkuo Technology University

珠海市技师学院
ZHUHAI TECHNICIAN COLLEGE

ASSOCIATIONS



RETIRED ENGINEERS | PRACTITIONERS | YOUNG ENGINEERS

Injection Moulding | Tooling | Maintenance | Quality
LEAN | Automation | Supply Chain Management
Digitalisation | Business Development

SOFTWARE

monitor
ERP SYSTEM

GOOD SOLUTIONS

Moldex3D

T.I.G.

ADVANTECH
研華科技

BUSINESS PLATFORM



HARDWARE

ENGEL

KUKA

HAITIAN
PLASTICS MACHINERY

WAFANGDAI
Dai Conifold

FANUC

Sodick

EPSON

BEKUM

STOLZ
CO.,LTD.

Sailor

FUJIMI
FUJIMI CORPORATION

MATSUI

gwk

MALCAM

HB-THERM

HASCO
Enabling with System.

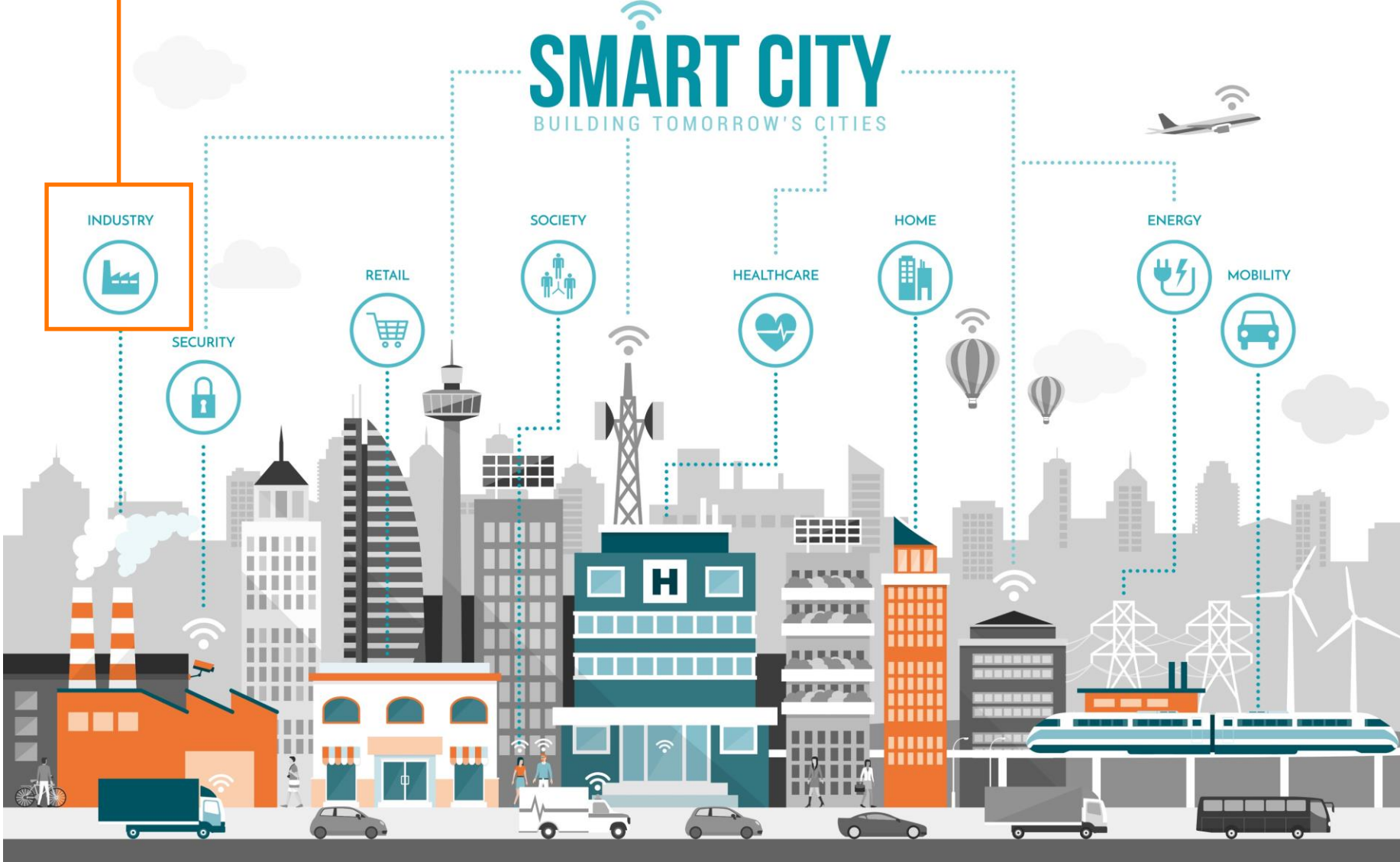
Piovan
Customers. The core of our innovation.

MATCON

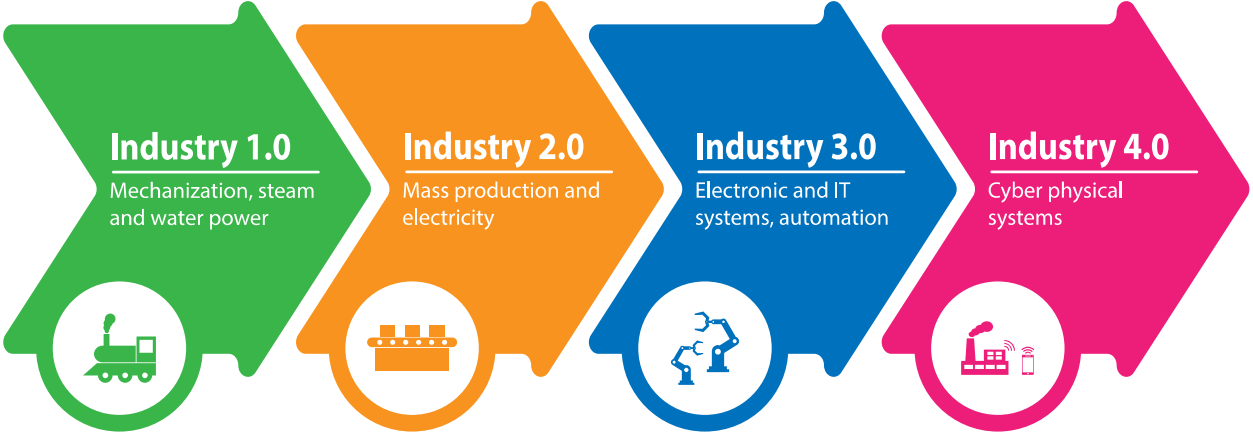
CONAIR

Our FOCUS

- Industry
 - Manufacturing
 - SMEs
 - Plastics Industry



INDUSTRY 4.0



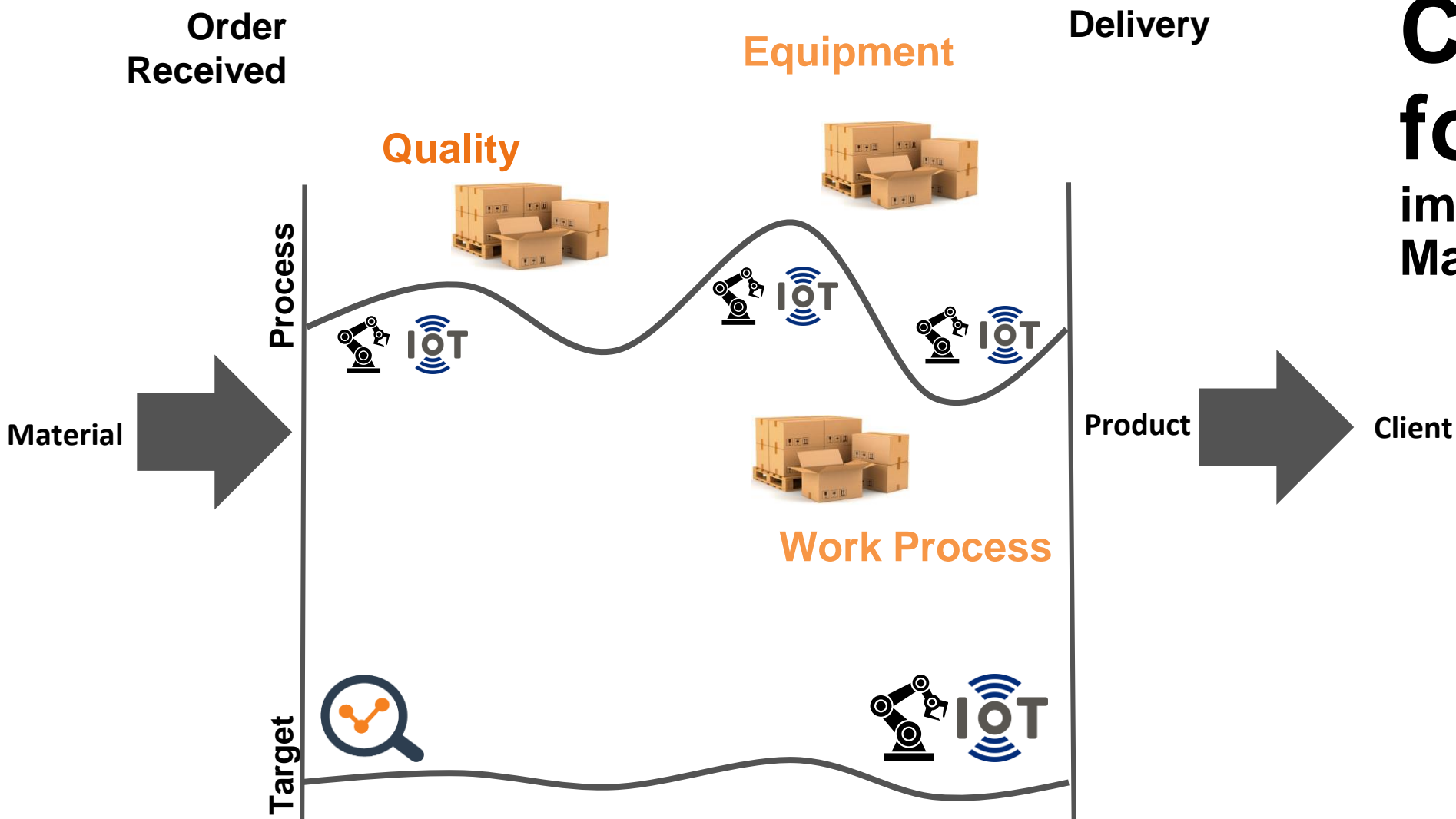
Why it matters?



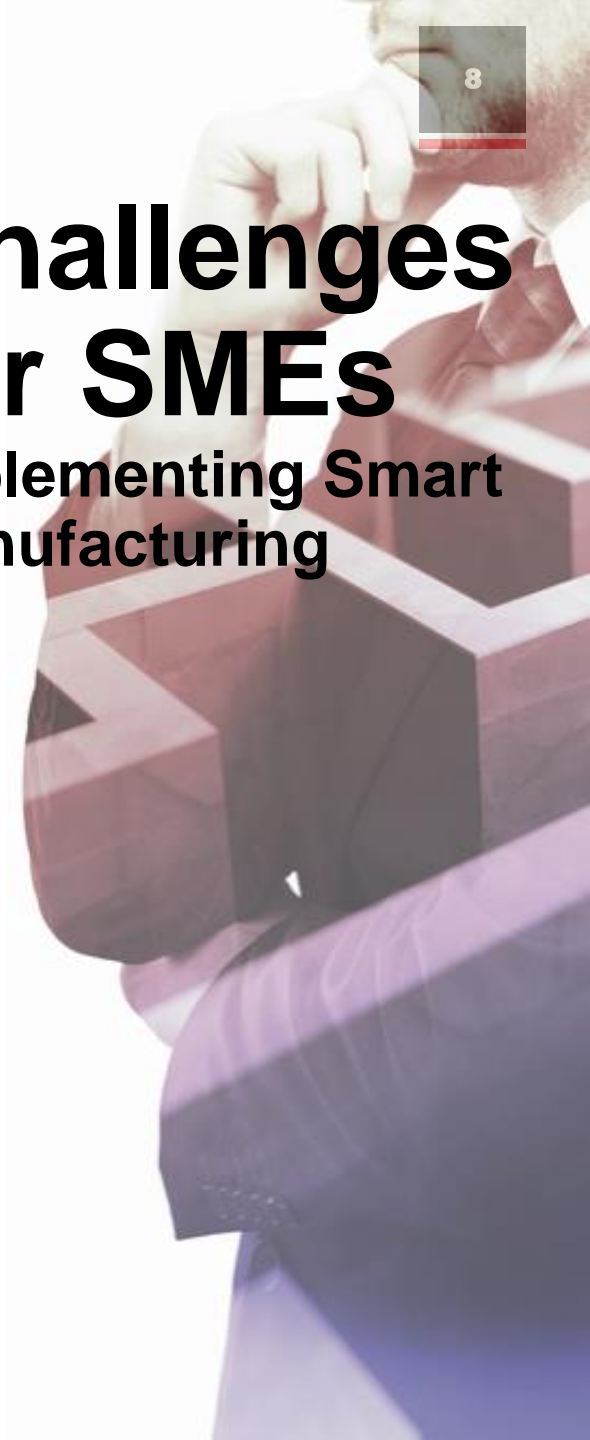
**THREATS or OPPORTUNITIES?
A choice or A MUST?**



**Let's not discuss Industry 4.0
10,000 feet above ground**



Challenges for SMEs implementing Smart Manufacturing



**Invest first?
New business first?**



**Train first?
Pay first?**

Industry **2.0**

Industry **3.0**

Industry **4.0** Ready

Industry **4.0**



With Industry 4.0 concepts in mind

Industry 4.0: Highly disruptive?

Challenges

- Cost of investment
- Awareness and success stories
- Digitalised culture and skills
- Messy physical world

Benefits

- Better quality
- Lower operation costs
- Create additional revenue
- Adapt to changing environment

Think Big, Start Small

FIRST STEP



Injection Moulding 4.0

**Injection Moulding
4.0 Readiness
Check**

(iM40RC)



**Digital
Transformation
Roadmap**

(DTR)



**Set up Model
Factory Cell**

(MFC)



**Operational
Excellence**



**Business
Growth**

Consulting | Hardware | Training | Software

Industry 4.0

Readiness Check

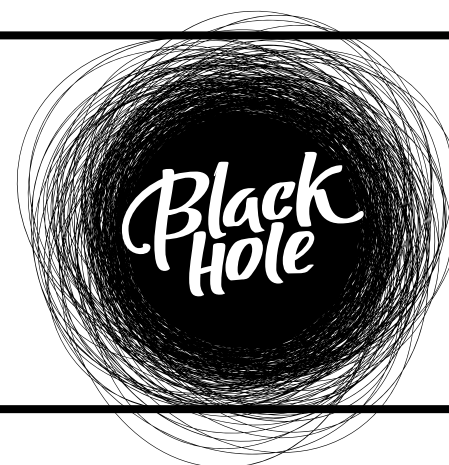


What is Industry 4.0?

Leadership | Organisation | Technology | Market

Baseline assumption

- Large well run companies
- Certain sectors
- Advanced economies

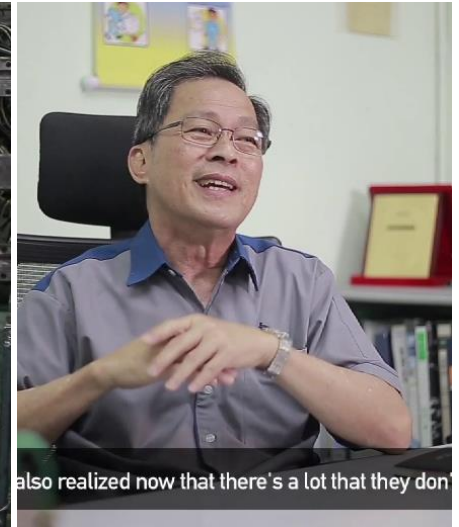
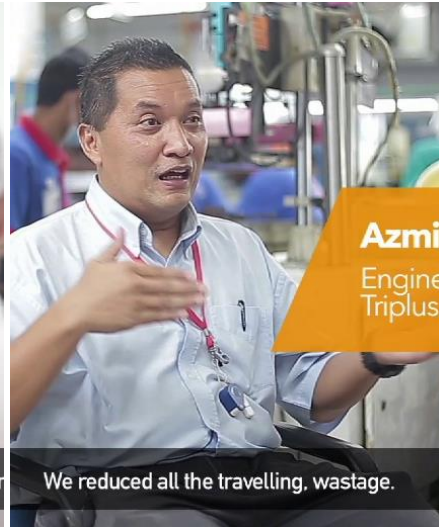


Actual baseline

1. **Baseline must be closer to actual state of industries**
2. **Applicable for SMEs**
3. **Reflect domain knowledge differences in sub-sectors**

FIRST STEP

Injection Moulding 4.0



Malaysia

YouTube



Youku



Anston Tan
Principal
iPlast 4.0

Organized by MPMA, supported by HRDF

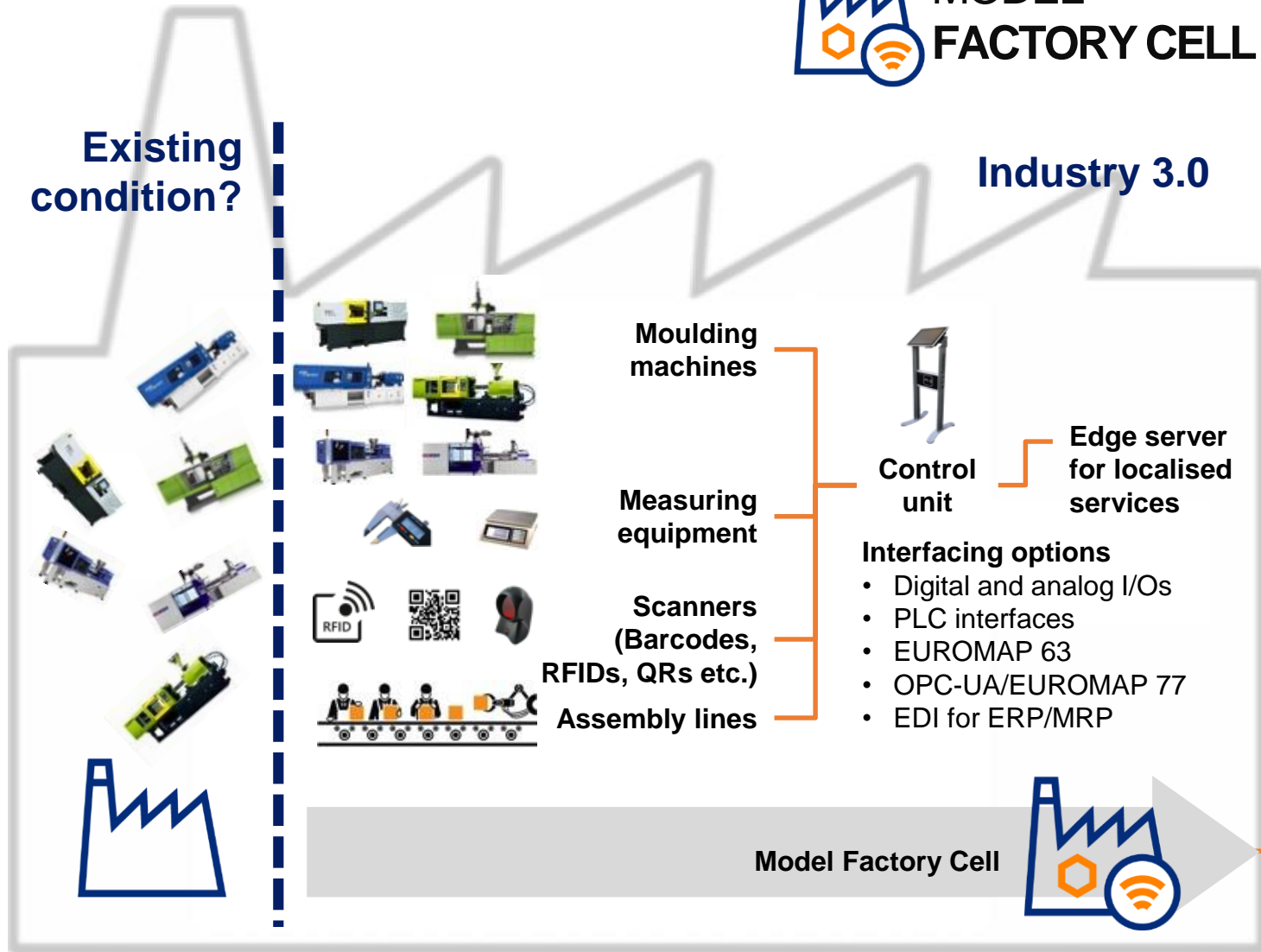
REALISING

INJECTION MOULDING 4.0

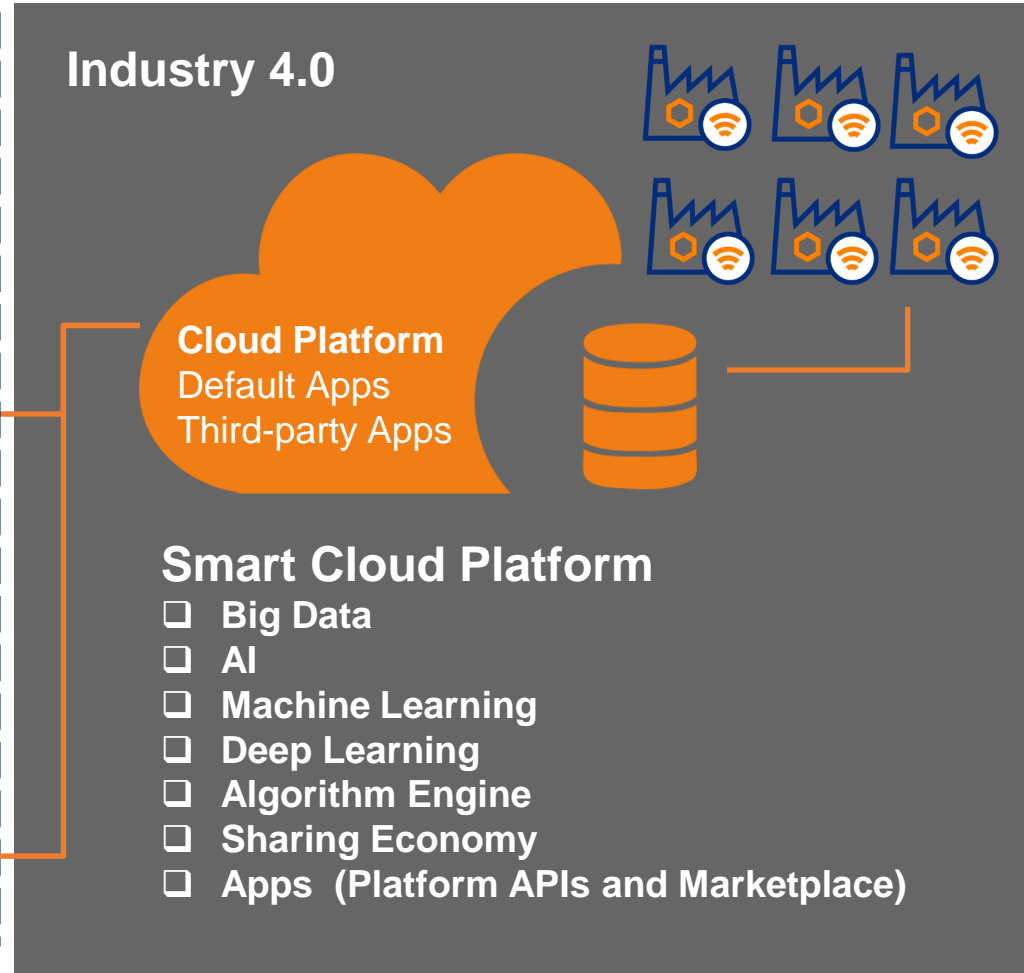


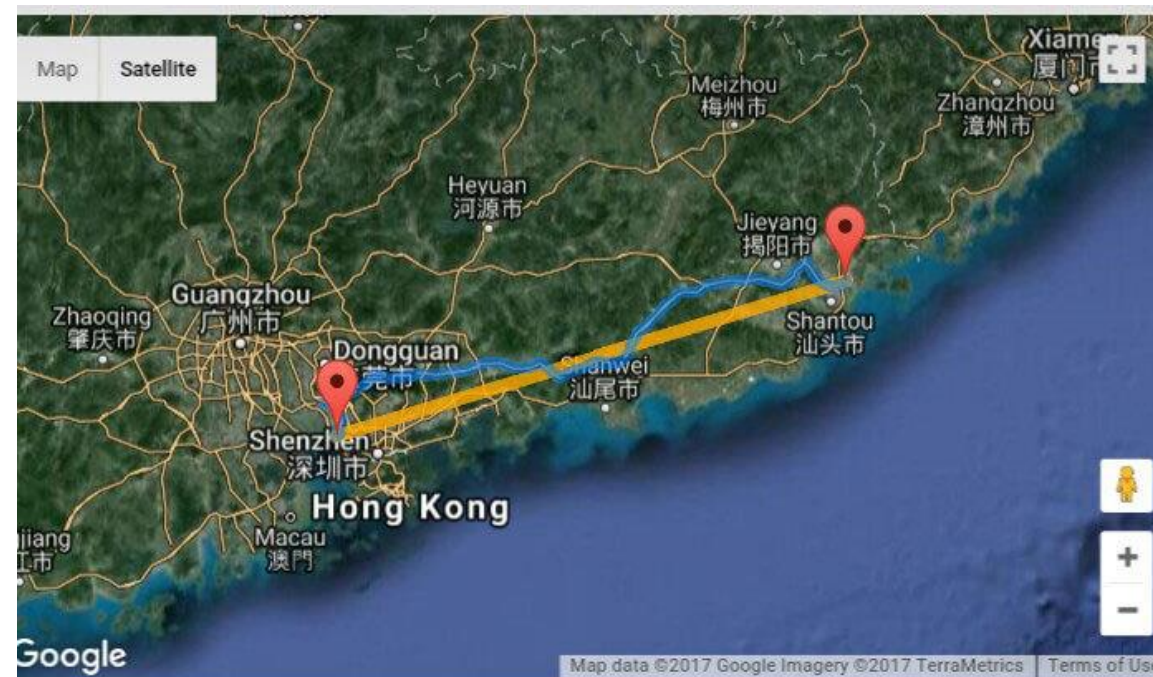
INNOVATION CENTRE

Existing condition?



Industry 4.0





CHINA's role in the region's digitalization journey



智 云

ZHUGE SMARTCLOUD





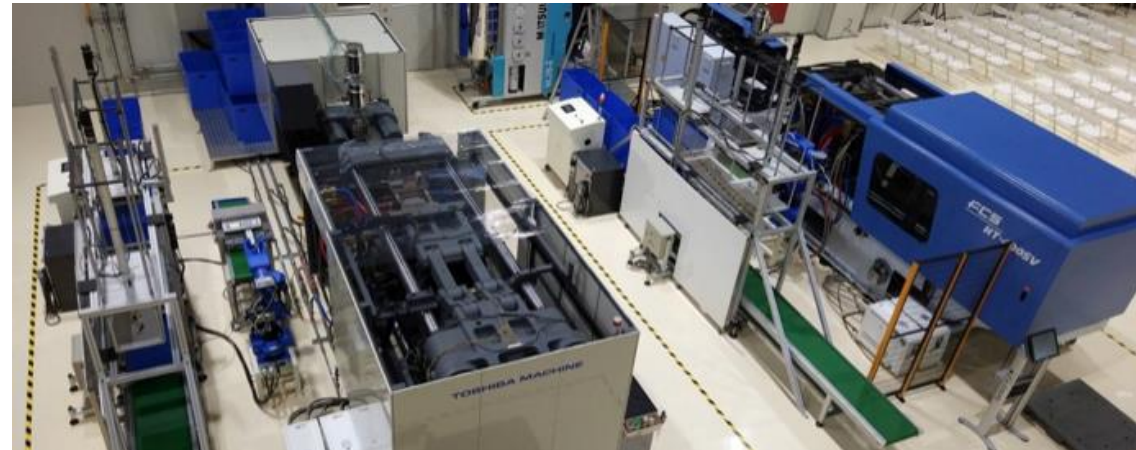
Education Revolution
Future Talent



Industrial Revolution
Existing Worker

TVET
TECHNICAL AND VOCATIONAL
EDUCATION AND TRAINING

Make manufacturing sexy again



Machine 1: I am running at target 70% OEE. Supplier A is 58.4% and supplier B is 62.7%

My temperature, water flow rate and cavity pressure is normal

The outside ambient temperature is 22°C, I will now lower my set temperature by 2°C to maintain the part quality.

I will need oil service in 7 days time. Please reschedule order 1123 to another machine.

I have an order for 5,000 pcs for next 2 hours. The next production is order 2245. Activate mould change procedure now.

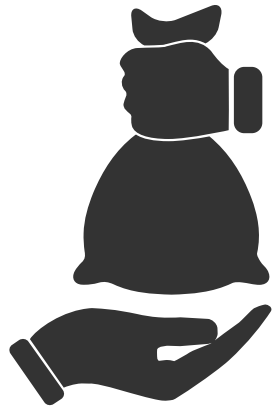
When
manufacturing **is**
sexy
again ...



GOVERNMENT SUPPORT



No Motivation



No Determination



Street Fighters

To enable *people-centric smart manufacturing*
for the *many companies*





Anston TAN
Principal
anston@i40.sg

Anston graduated with an Honours degree from Singapore's Nanyang Technological University in 1999. Over the course of the next two decades, he founded moulding factories in Europe and gained invaluable experience and insight into the plastics industries in Europe and Asia. He is also highly proficient in areas such as industrial process optimisation, production automation and turnkey factory design.

From 2001 to 2011, Anston led his company to become the second largest global plastic goods supplier to Sweden's foremost furniture and home furnishing company. Alongside the manufacturing business, he concurrently spearheaded the set up of a consulting arm to provide turnkey solutions to plastics companies in East Europe and Russia.

In 2014, with the emerging German Industry 4.0 concept, and building on his experience in Industry 3.0, Anston co-founded the German Training Centre for Injection Moulding (Asia), German Innovation Centre for Industry 4.0 (Asia) and the iPlast 4.0 people-centric smart manufacturing platform. He also created the Injection Moulding 4.0 development roadmap to implement smart manufacturing for numerous companies and is consequently now recognised as a pioneer in the field. Cementing this pioneer status, Anston is frequently invited to influential international conferences to speak on enabling Industry 4.0.

Today, Anston leads a global team of professionals and experts that has successfully enabled many Asian plastic moulders to embark on automated and digitised manufacturing, with the added benefit of raising their technical capabilities. He is also appointed by the Malaysian Plastics Manufacturers Association (MPMA) as their Lead Consultant for the Malaysian government's initiative to bring Industry 4.0 to the plastics industry.