Federal Ministry
for Economic Affairs
and Energy

European
Commission

2017/01/31, Essen/Germany - Christian Decker - CEO

IMPULSE PRESENTATION
DESMA SHOE MACHINE PRODUCTION

Federal Ministry
for Economic Affairs
and Energy

European
Commission

The Company DESMA

- Location Bremen/Germany
- founded 1946
- 225 Employees
- 44 mio USD
- Machines, Automation and Molds for the industrial footwear produktion

Global sales (average 5 years)

- Exportrate over 92 %
  - 34% Asia
  - 31% Europe (incl. Germany)
  - 15% USA/Canada/Mexico/Caribbean
  - 9% South America
  - 5 % GUS
  - 6 % Oceania, Japan, Afrika, near East

DESMA

Federal Ministry
for Economic Affairs
and Energy

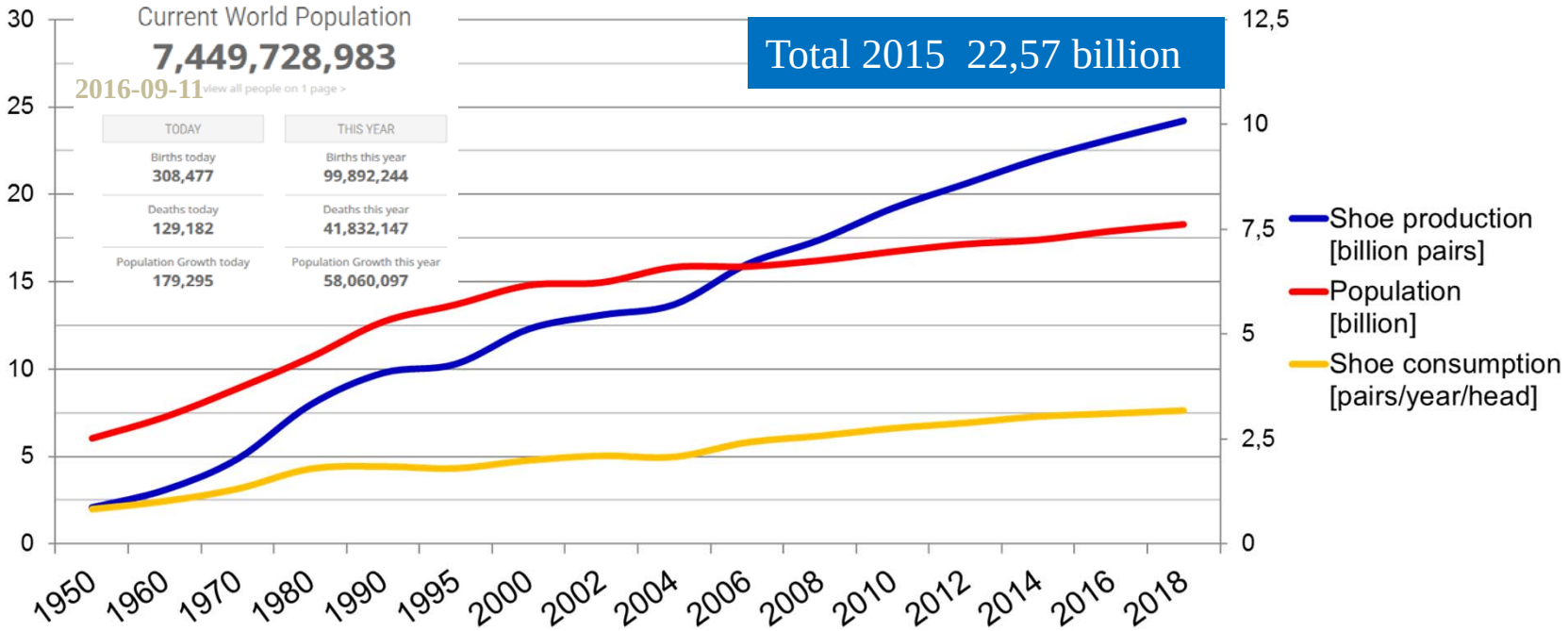
European
Commission

TRENDS AND KEY FACTS OF THE FOOTWEAR MARKET

Federal Ministry
for Economic Affairs
and Energy

European Commission

Global Footwear Production and Consumption



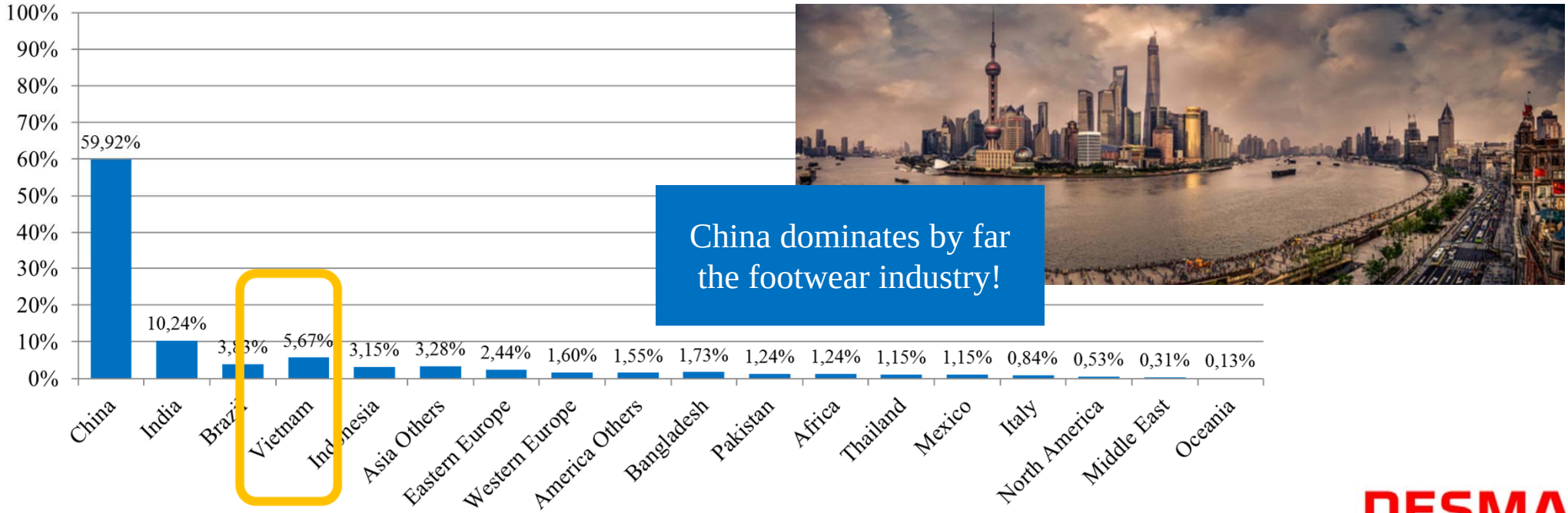
Sources: DESMA market analysis 2016; based on numbers of WTO, UN, Footwear organisations, Material supplier

DESMA

Federal Ministry
for Economic Affairs
and Energy

European Commission

2015 Production in Countries and Regions



China dominates by far the footwear industry!

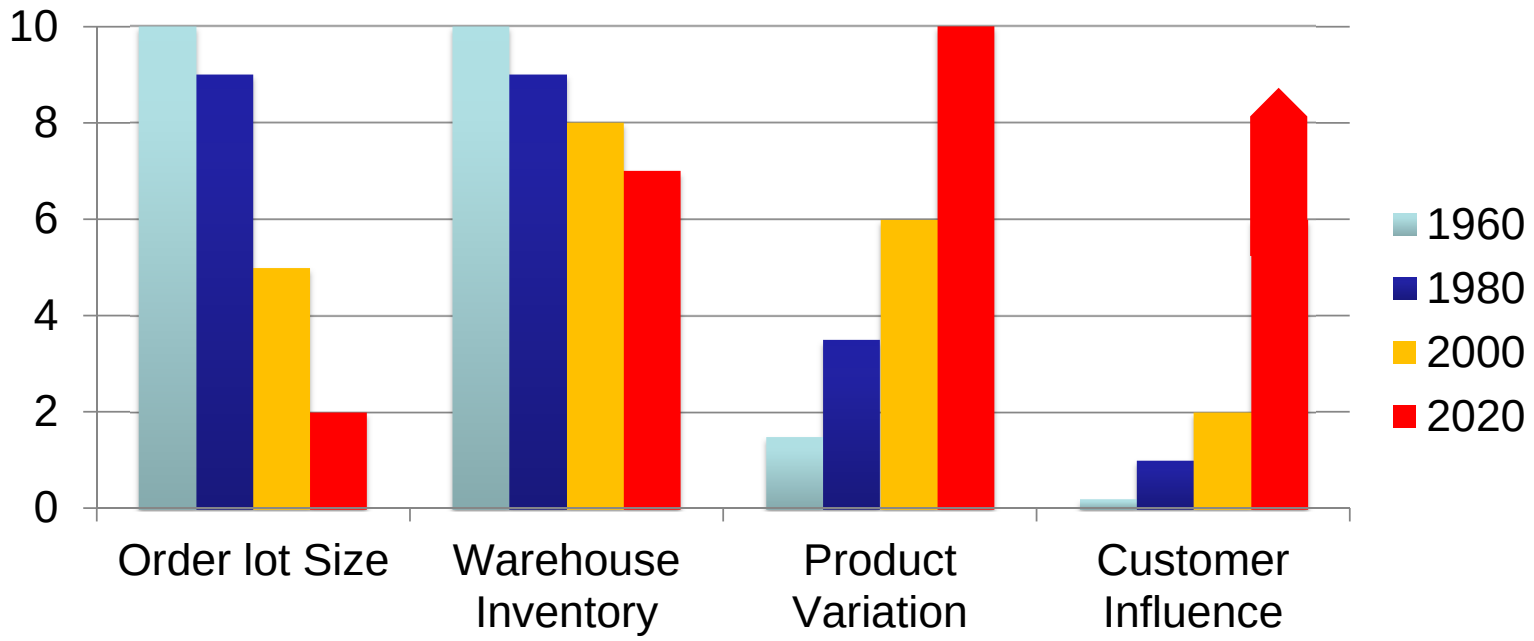
DESMA

Sources: DESMA market analysis 2016; based on numbers of WTO, UN, Footwear organisations, Material supplier

Federal Ministry
for Economic Affairs
and Energy

European
Commission

Development of the Footwear Industry over 60 years



DESMA

Federal Ministry
for Economic Affairs
and Energy

European Commission

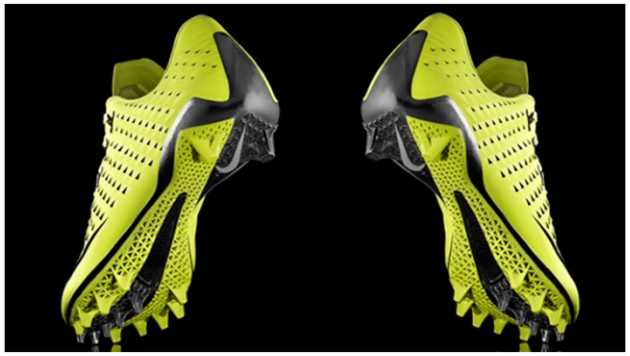
Trends – Developments - Keywords

DESMA

Federal Ministry
for Economic Affairs
and Energy

European
Commission

3D Printing – Additive Manufacturing



- **3D printing / AM is a general trend but not used in massproduction**
  Limitations by
  - **material + surface**
  - **time**
  - **cost**

DESMA

Federal Ministry
for Economic Affairs
and Energy

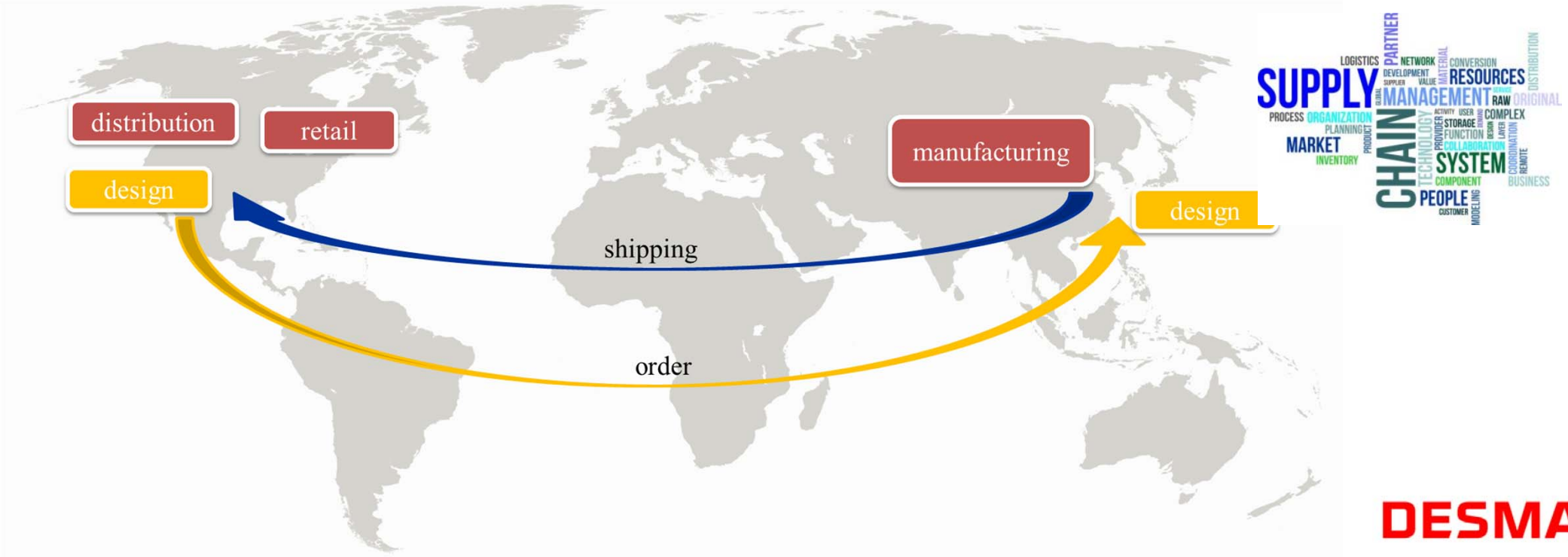
European
Commission

BUSINESS OF TOMORROW

Federal Ministry
for Economic Affairs
and Energy

European
Commission

Supply Chain 2015

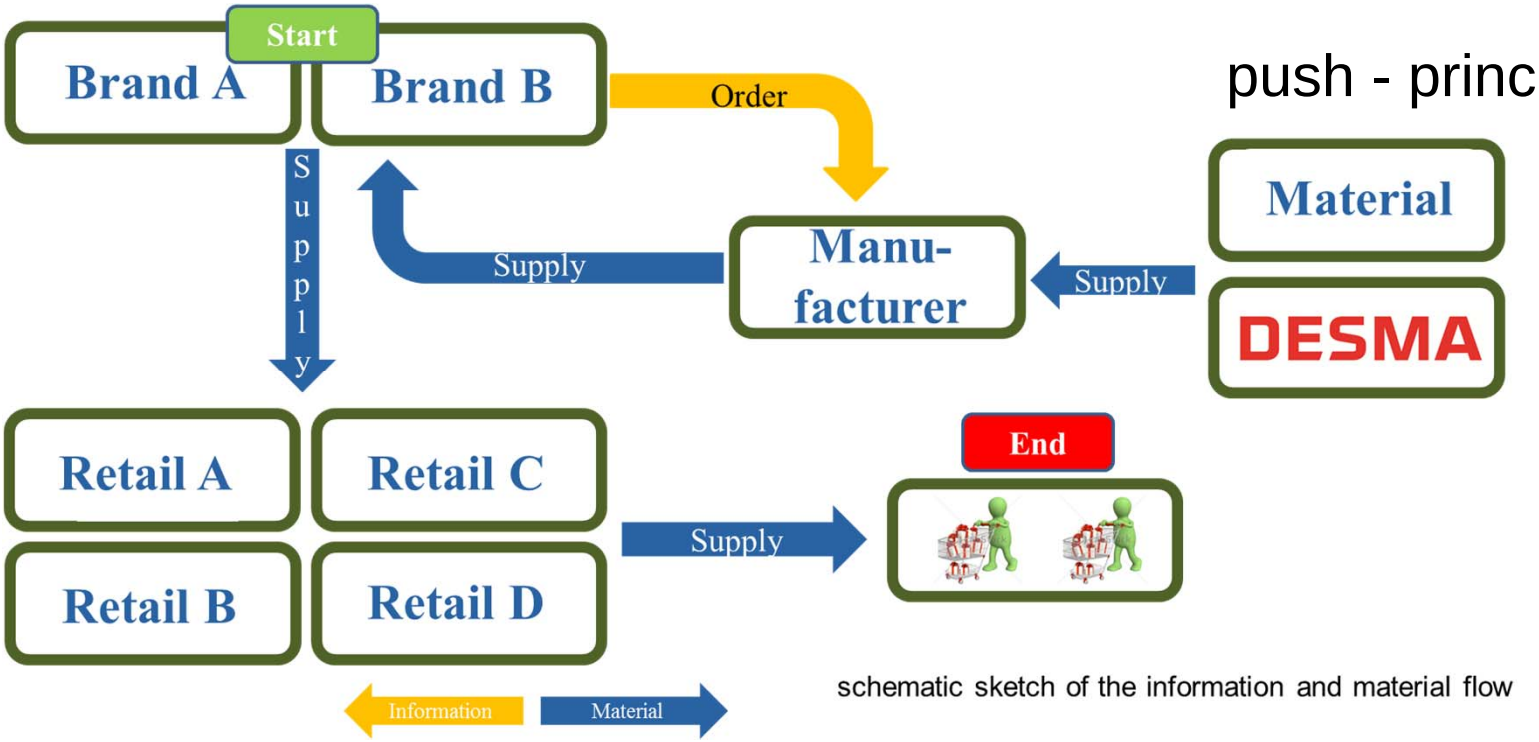


DESMA

Federal Ministry
for Economic Affairs
and Energy

European Commission

Business model: Mass-Production



push - principle

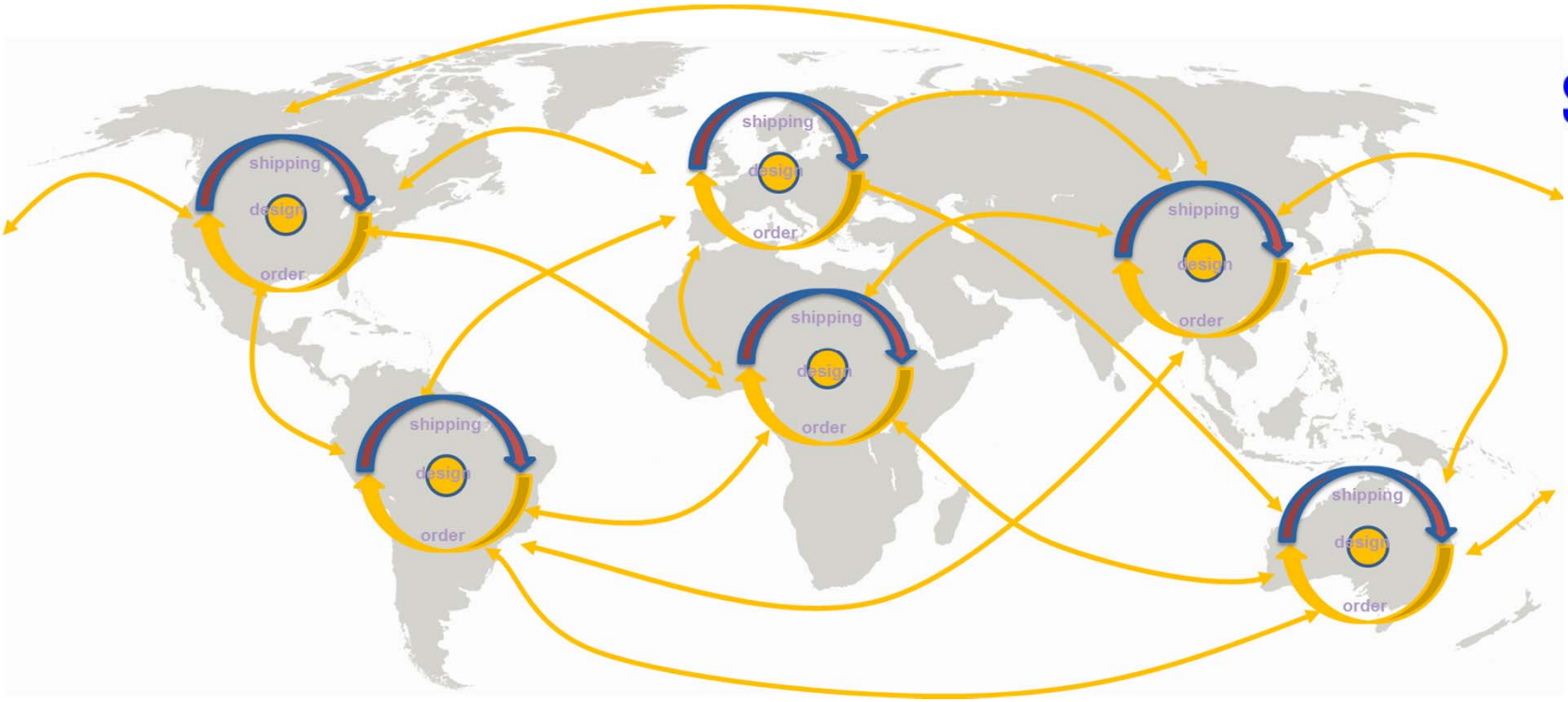
schematic sketch of the information and material flow

DESMA

Federal Ministry
for Economic Affairs
and Energy

European
Commission

Supply Chain 2025

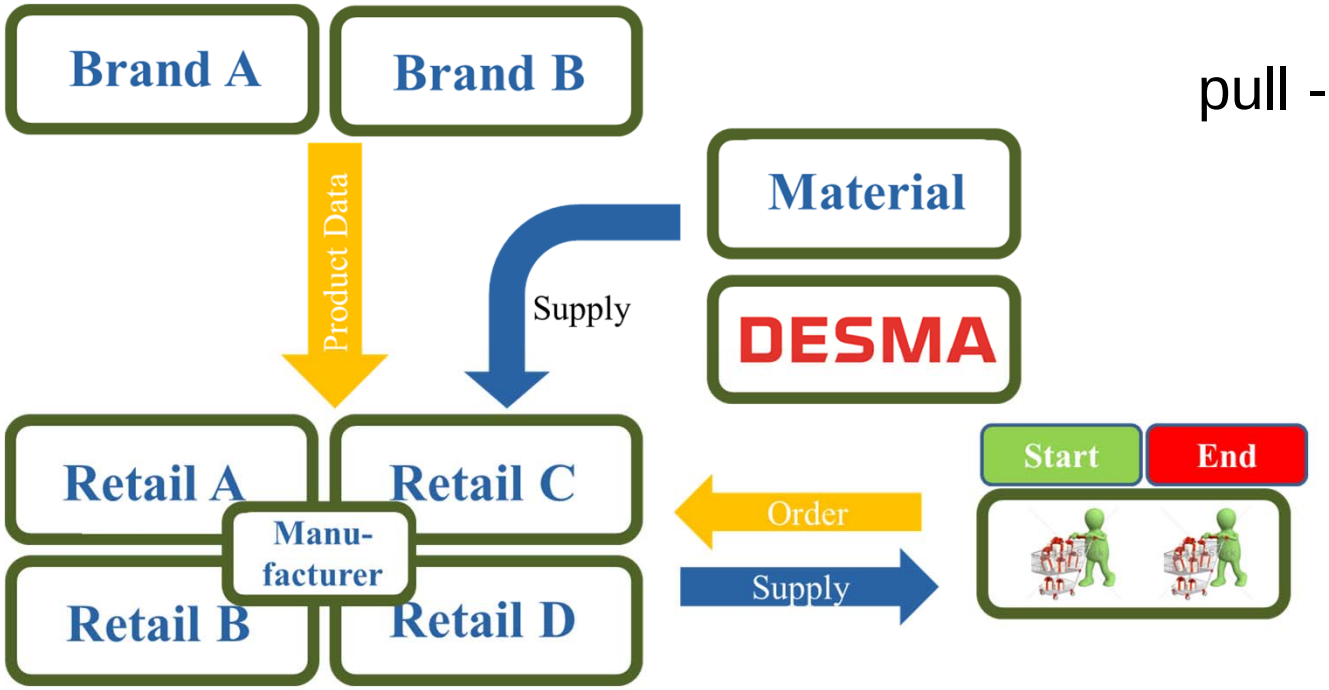


DESMA

Federal Ministry
for Economic Affairs
and Energy

European Commission

Business model: Mass-Production



pull - principle

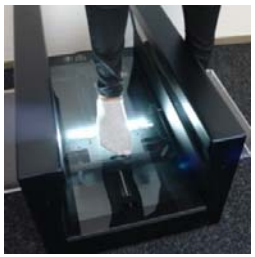
DESMA

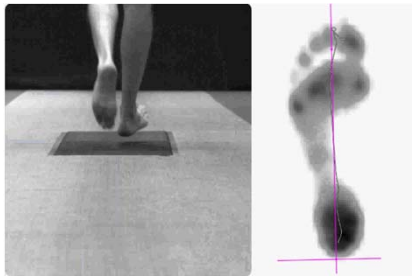
Federal Ministry
for Economic Affairs
and Energy

European Commission

Scan to Individual Insole or Shoe

Biometric Analysis





Shoe
Configuration

DESMA

PLEASE
ORDER
AND
PAY
HERE

TRUE FORM 3D

Production

Consumer

Federal Ministry
for Economic Affairs
and Energy

European Commission

Challenges in our Industry

conversion B2B business into B2C

- „push to pull change“ requires end-consumer integration
- tunnel-view of most stakeholder
- Fear of disruptive changes
- tradition before innovation
- requires totally new business models
- Integration of human in the total process is important

European and global view

- all countries are getting into IR4.0 direction (also Internet of Things IoT)
- the speed in the regions is different
- the skills are extremely different
- level 1: Europe, China
- level 2: USA, Korea, Japan

DESMA

Federal Ministry
for Economic Affairs
and Energy

European Commission

Some considerations based on the experience

Basics

- definition of IR4.0 is worldwide different
- entities are relatively slow in learning the effects and opportunities of IR4.0
- China is pushing the IR4.0 development since 2015 very intensivly forward

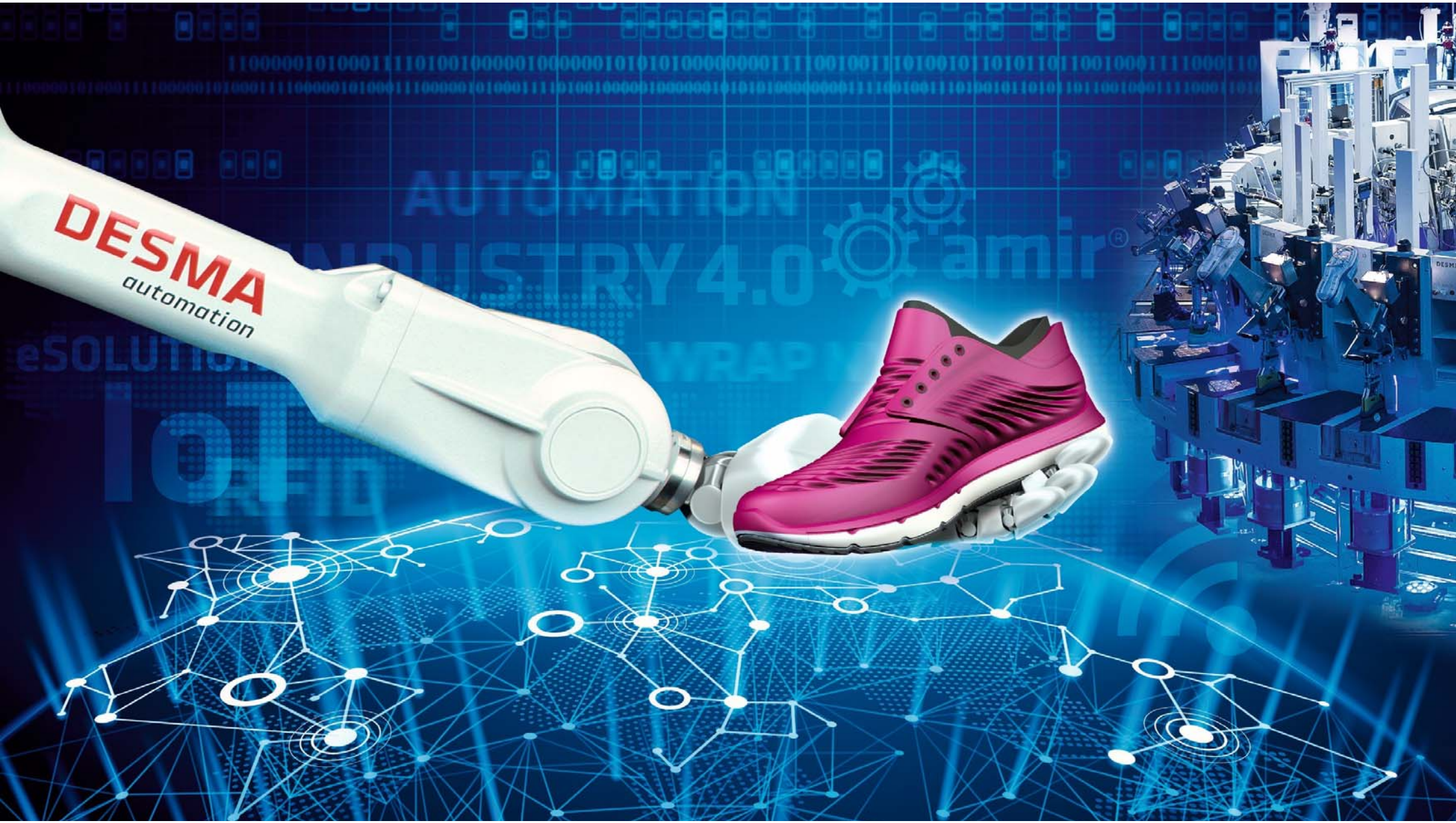
Organization

- enterprises are faster in the realization when generating new departments/units than converting existing departments
- IR40 is IT related … but not all employees have to learn programming
- opportunity but also challenge in combination with Generation Y and Z (Millenials,…)

Europe

- European project support is concentrated on IR4.0 technique
- Europe should consider more innovation support in company organization and modern working conditions to adapt to the requirements of the future

DESMA


DESMA
automation
INDUSTRY 4.0
IoT