



Welcome to the IFR CEO Round Table

20 June 2018 Munich



#### **Schedule**



Welcoming and presentation of the participants of the IFR CEO Round Table Gudrun Litzenberger, IFR General Secretary

Preview on World Robotics Industrial Robots 2018 Junji J. Tsuda, IFR President

Discussion on Robots and Al: Vision and Reality

Get together and personal interviews with the participants

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#### International Federation of Robotics

Representing the global robotics industry

IFR
International
Federation of
Robotics

- Robotics turnover 2017: about \$50 billion
- More than 50 members:
  - National robot associations
  - R&D institutes
  - Robot suppliers
  - Integrators

- Sponsor of the annual International Symposium on Robotics (ISR)
- Co-sponsor of the IERA Award
- Primary resource for world-wide data on use of robotics – IFR Statistical Department









#### **Speakers on the Panel – Robot Suppliers**





**Dr. Kiyonori Inaba**Director Executive
Managing Officer, General
Manager

ROBOT Business Division, FANUC CORPORATION Japan



Stefan Lampa
CEO
KUKA Industries
Germany



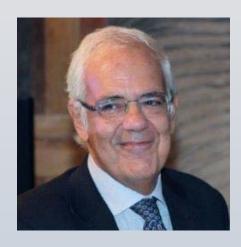
Per Vegard Nerseth
Group Senior Vice President
ABB
Switzerland

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### **Speakers on the Panel:**



### **Expert**



Professor Dr. Bruno Siciliano
Director of ICAROS and Coordinator of
the PRISMALab

University of Naples Federico II, Italy

**Robot user** 



Dr. Markus
Kueckelhaus
Vice President
Innovations & Trend Research
DHL
Germany

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#### **Presentation of WR Data**



Junji J. Tsuda
IFR President
Representative Director Chairman of the Board

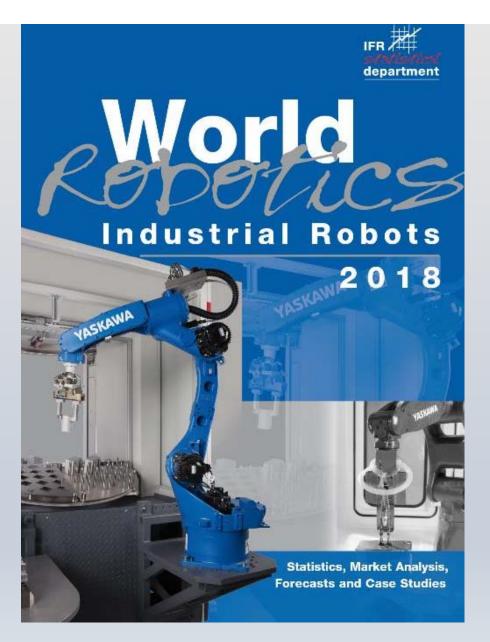
Yaskawa Japan

#### **Moderator**



Ken Fouhy
Moderator, Editor in Chief,
Innovations & Trend Research
VDI nachrichten
Germany

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# Preview on World Robotics 2018



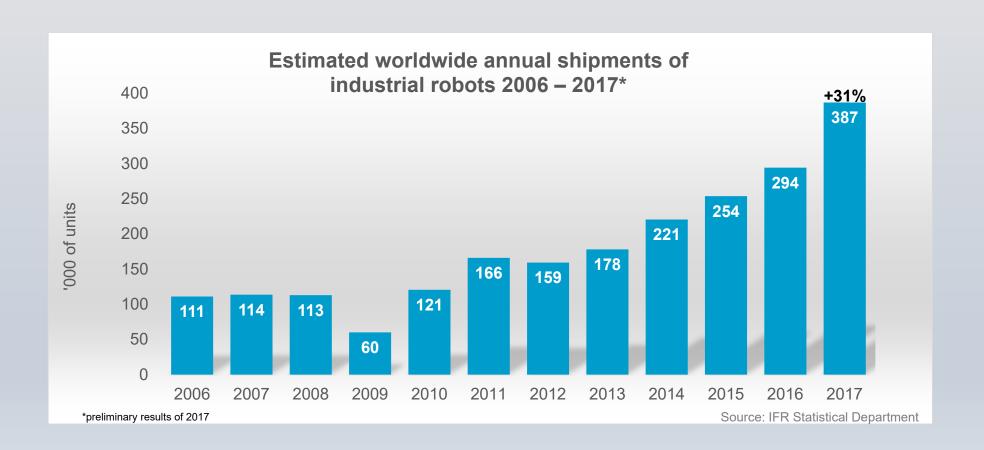
#### **Industrial Robots 2017**

- Global installations
- Regions
- Main Markets
- Main Customers
- Challenges of the Robotics Industry

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#### 2017: record growth of industrial robots

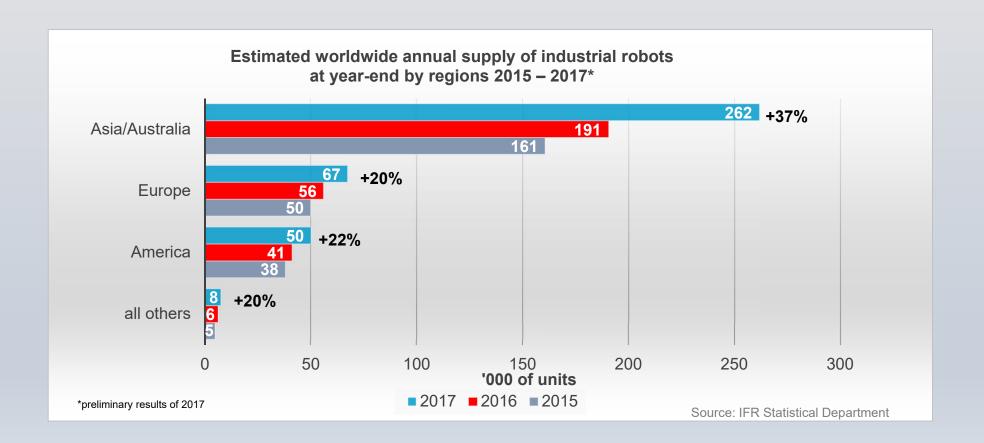




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### 2017: considerable increase in all regions

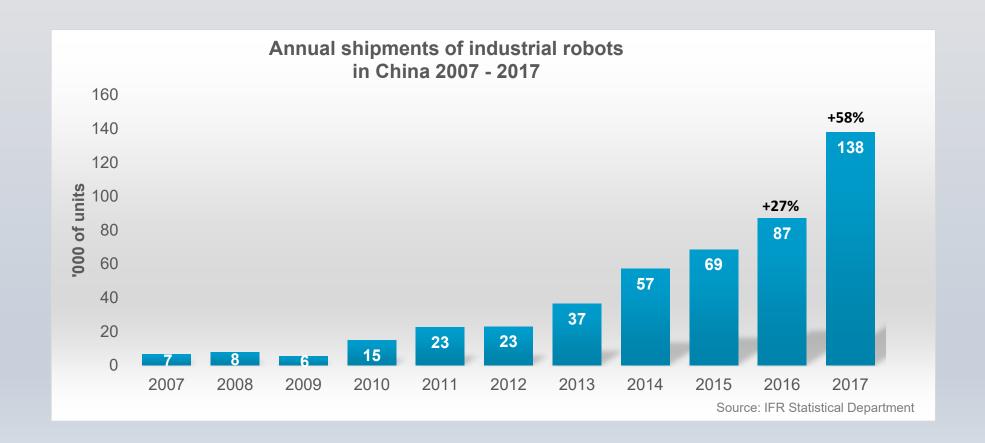




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### China: Main driver of growth in 2017

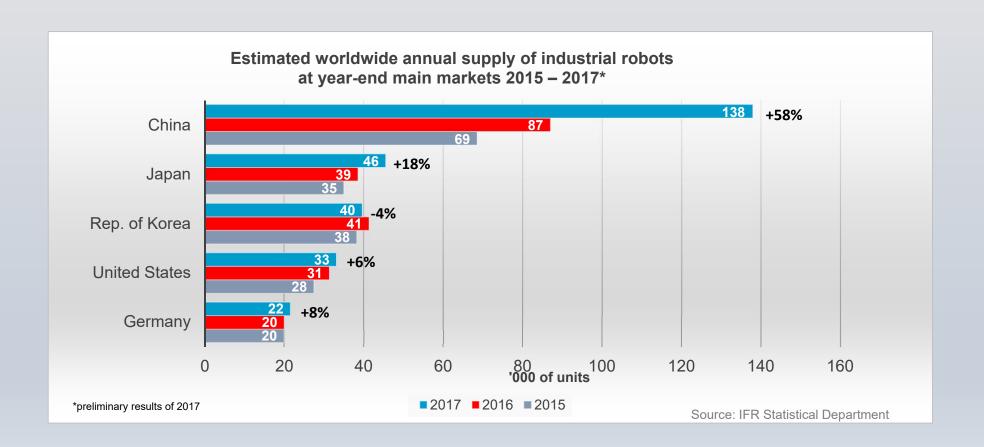




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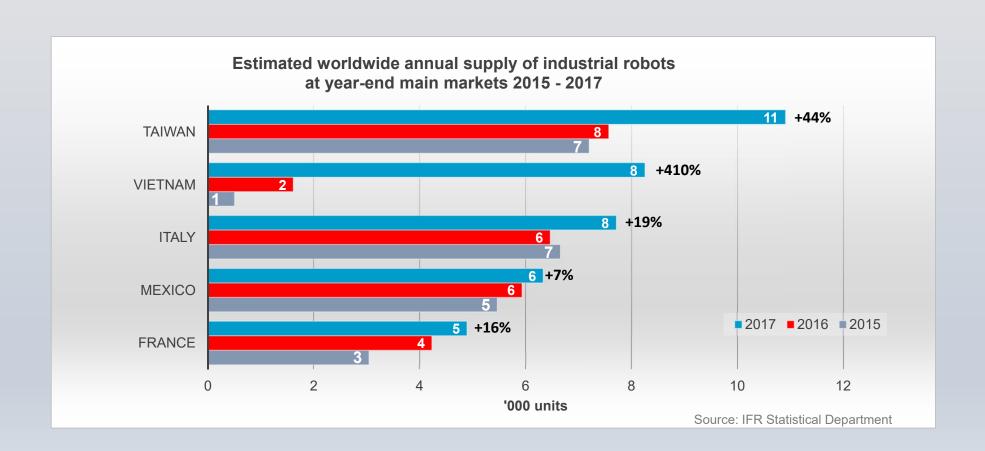




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### Vietnam now 7th largest destination

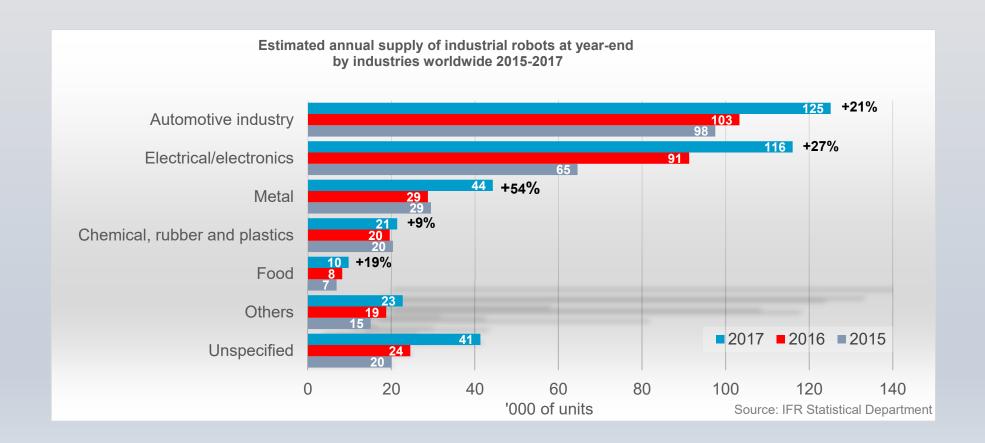




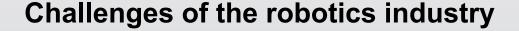
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# IFR International Federation of Robotics

## 2017: electronics, automotive and metal industry are main drivers



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### Simplification – critical to SMEs, but also important for large Global Manufacturers

- Easier to use robots with more intuitive programming
- Standardisation and consistency across global brands

### Digitalisation - Big Data allowing people to make better decisions about factory operations

- Industry 4.0, linking the real-life factory with a virtual one
- Vision and sensing devices, coupled with analytics platforms
- Machine Learning/Al

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### Collaboration - humans and robots in shared workplaces without fences opens up new possibilities and concepts in production and in non-industrial areas

- Robots assist humans in the workplace
- More flexibility in the production process Increase of productivity
  - Shop floor flexibility not defined by cages
  - New processes to manage low-volume high-mix production
- Cobots in warehouses to manage increasing order volume

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### Robots and Al – Vision and Reality





## Thank you!

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