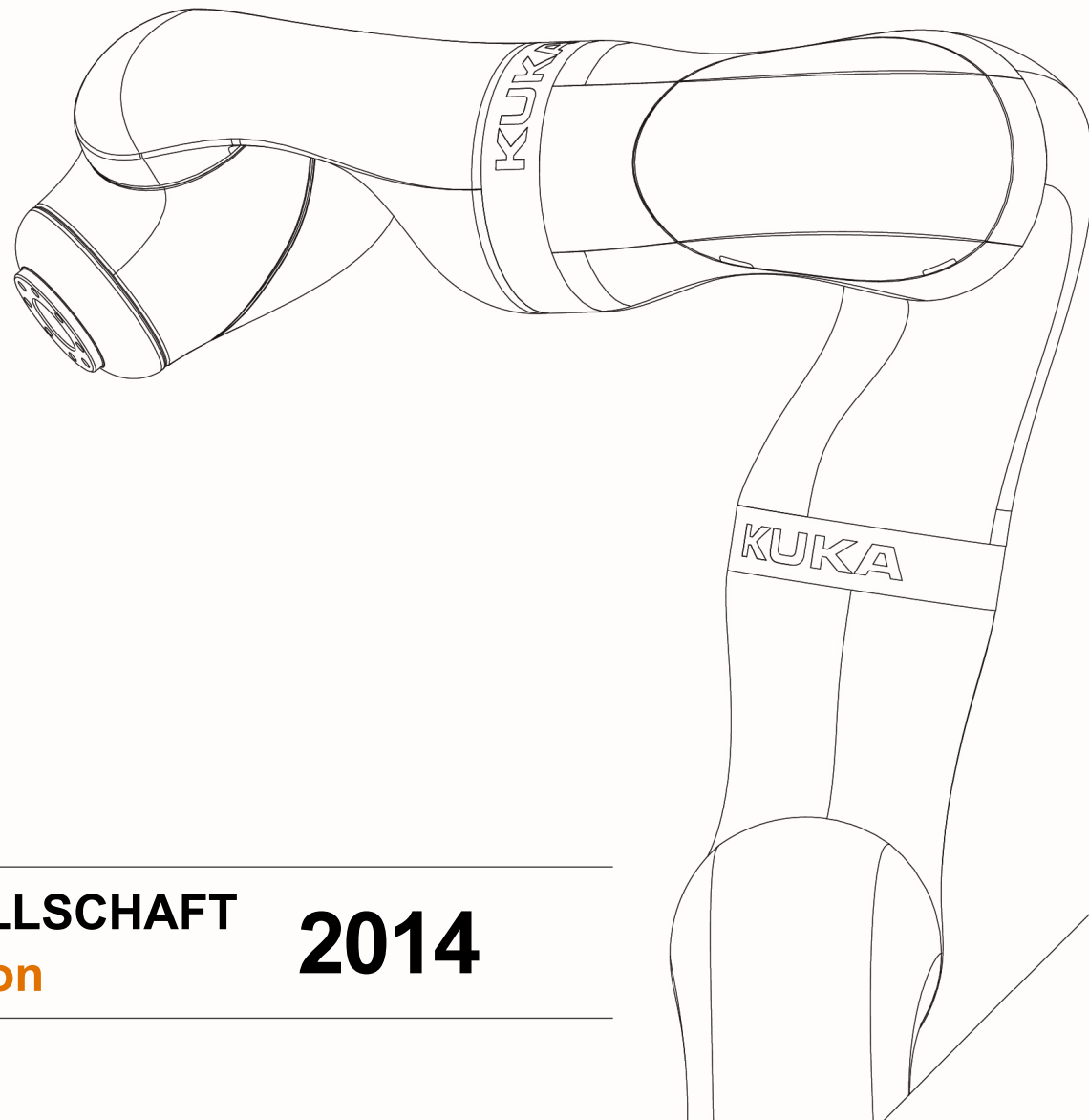


# KUKA



---

**KUKA AKTIENGESELLSCHAFT**  
**Company Presentation**

---

**2014**

KUKA group - strategy

## Boost value of KUKA

### KUKA Systems



### KUKA Robotics

#### Industrial Robotics



#### KUKA Laboratories



**Focused  
strategy**

- Safeguard automotive business
- Increase general industry business
- Strengthen global positioning

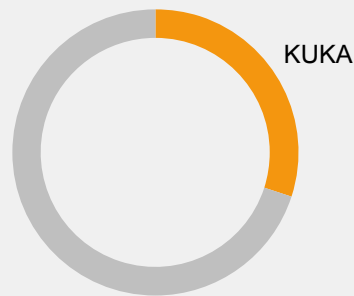
- Development of lightweight robot
- Increase revenues from health care
- Market entry in service robotics



KUKA group - competition

## Leading positions in Robotics and Systems

### Robotics - Automotive



#### Market position Robotics

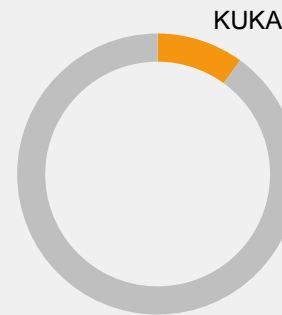
- Worldwide: #1
- Europe: #1

#### Main competitors:

Fanuc, Yaskawa, ABB, Nachi, Comau, etc.

Source: IFR market data

### Robotics - General Industry



#### Market position Robotics

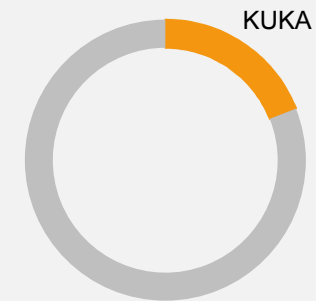
- Worldwide: among Top 5
- Europe: among Top 3

#### Main competitors:

Yaskawa, Fanuc, ABB, Adept, Stäubli, etc.

Source: IFR market data

### Systems - Body-in-White



#### Market position Systems

- #1 in the U.S.
- #2 in Europe

#### Main competitors:

Comau, Thyssen, FFT, EBZ, etc.

Note: Non accessible market incl. Africa, Australia, Asia (except China/India), OEM tool shops

Source: CMS database, KUKA estimates

Global market share of articulated robots in 2013: ~14%

Source: IFR market data, final figures 2013

Robotics - overview

## Growth through innovation and quality

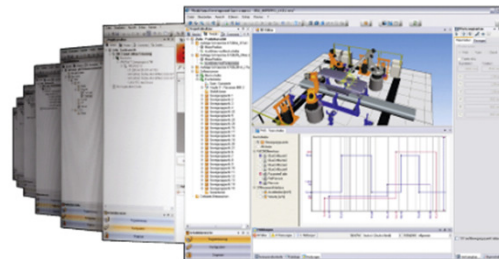
**KUKA QUANTEC**



**KR C4**



**smartPAD**



**Software**

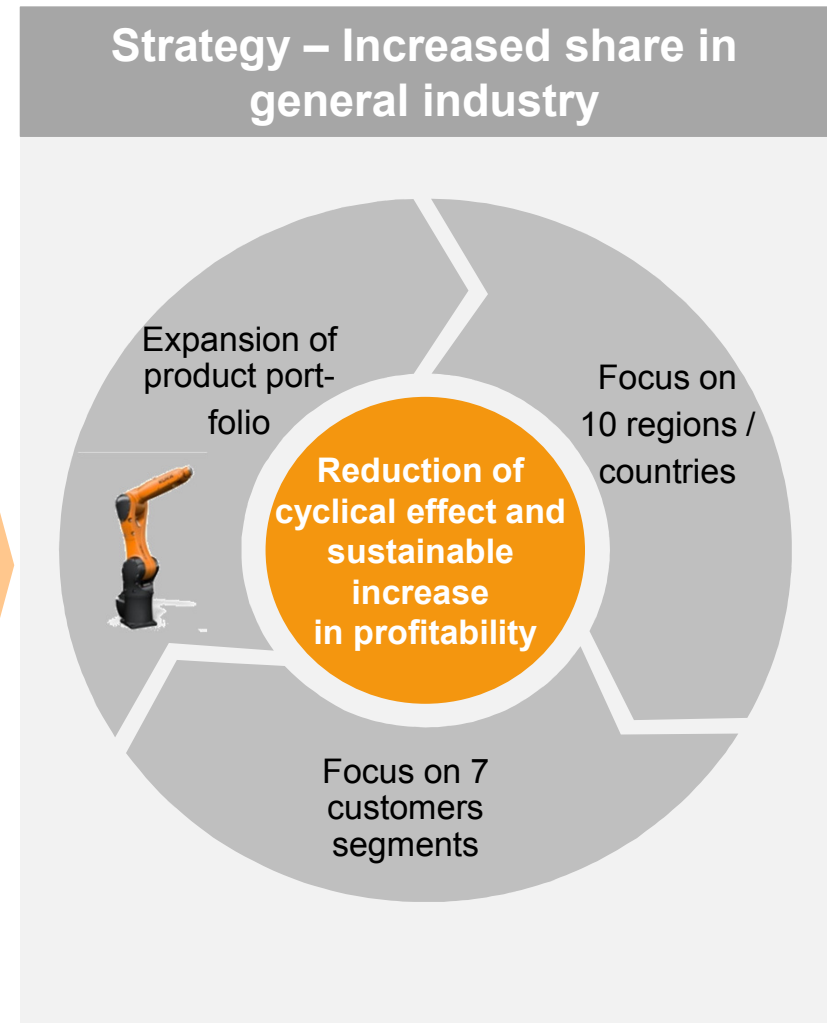
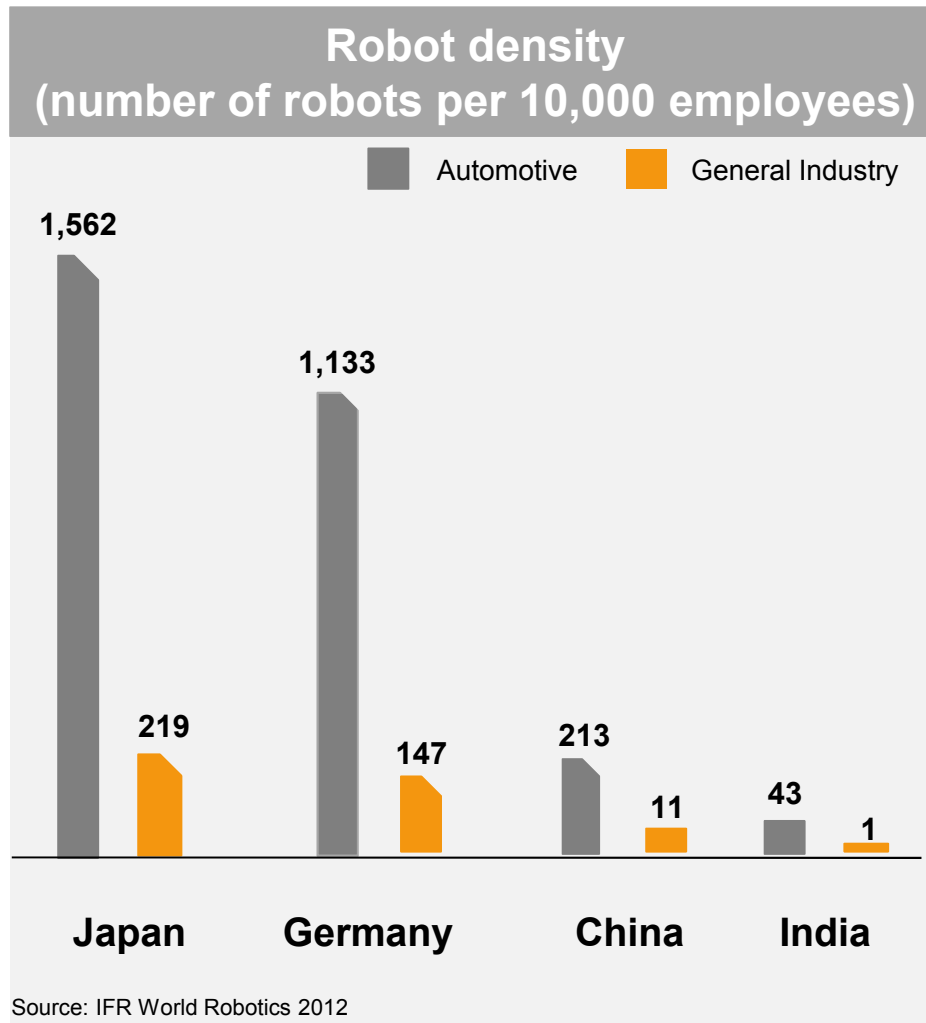
### Strategy and key facts

- Balanced business structure<sup>1</sup>
  - Automotive 40%, General Industry 42% and service 18%
- Strong key customers in automotive
  - Daimler, VW, BMW and FORD
- Focused industries in General Industry
  - Food, electronics, plastics, foundry, arc welding, machine tools, T1/ others
- 100% control of service business
- Quantec/ KRC4 sets new industry standard

1) Split orders received FY13

Robotics – growth potential I

## Opportunity - Low robot density in general industry



Robotics – growth potential II

## High potential in the automotive sector

	Power train	Press shop	Body Shop	Paint shop	Final assembly
					
Number of robots per segment	40-100	7-15	<b>400-600</b>	40-50	<b>10-20</b>
Robot applications	<ul style="list-style-type: none"> <li>▪ Handling</li> <li>▪ Assembly</li> <li>▪ Welding</li> <li>▪ Machining</li> </ul>	<ul style="list-style-type: none"> <li>▪ Handling</li> <li>▪ Press linking</li> </ul>	<ul style="list-style-type: none"> <li>▪ Spot welding</li> <li>▪ Laser welding</li> <li>▪ Gluing</li> <li>▪ Riveting</li> <li>▪ Handling</li> <li>▪ Body transfer</li> <li>▪ .....</li> </ul>	<ul style="list-style-type: none"> <li>▪ Painting</li> <li>▪ Sealing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Assembly</li> <li>▪ Handling</li> </ul>
Degree of automation	<ul style="list-style-type: none"> <li>▪ Medium to high</li> </ul>	<ul style="list-style-type: none"> <li>▪ High</li> </ul>	<ul style="list-style-type: none"> <li>▪ Very high</li> </ul>	<ul style="list-style-type: none"> <li>▪ High</li> </ul>	<ul style="list-style-type: none"> <li>▪ Very low</li> </ul>



Laboratories - overview

## Growth potential in health care / service robotics



### Health care

- Diagnosis together with Siemens
- Radiation therapy together with Accuray and Forte
- Active with partners in other segments (e.g. rehabilitation)



### Service Robotic

- KUKA youBot
- Lightweight robot (LBR iiwa<sup>1</sup>) fast research interface
- Entertainment



### Production and assembly

- LBR iiwa<sup>1</sup> in assembly and production processes
- Mobile solutions with robots in logistics

1) LBR iiwa – intelligent industrial work assistant  
KUKA Aktiengesellschaft

Systems - overview

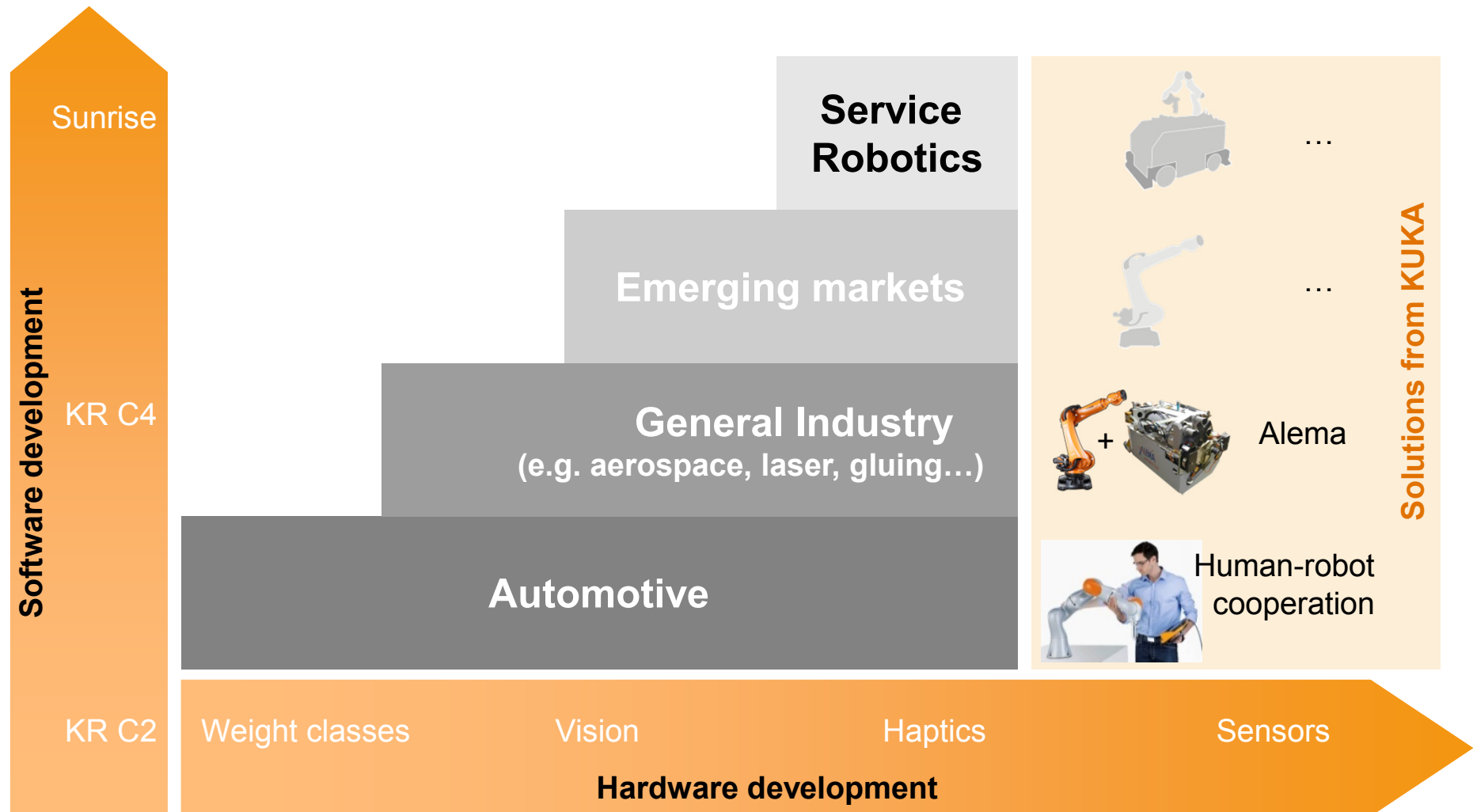
## Units of focus in automotive und general industry





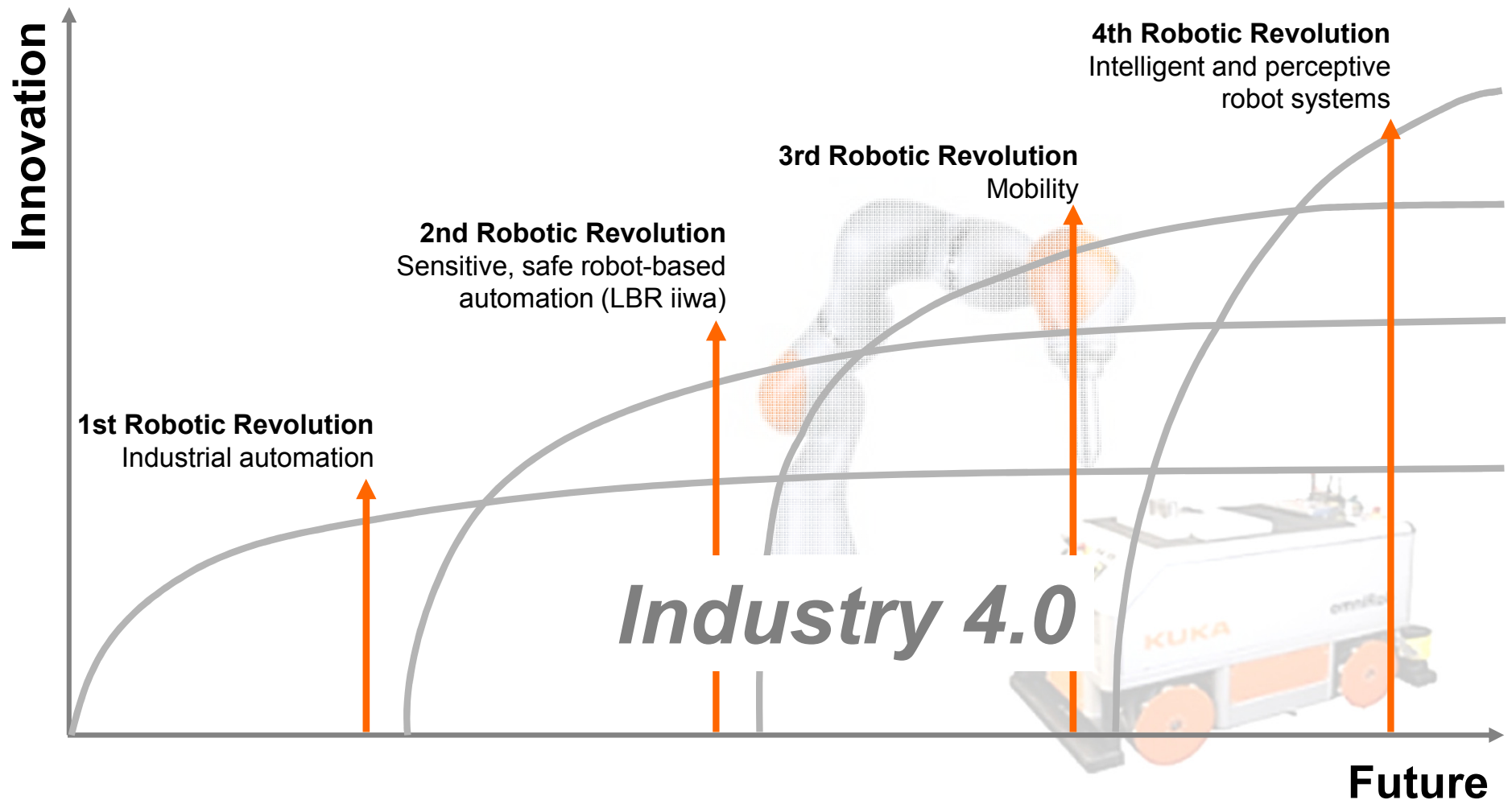
KUKA Group – development I

## Hardware – Software – Solution – Processes



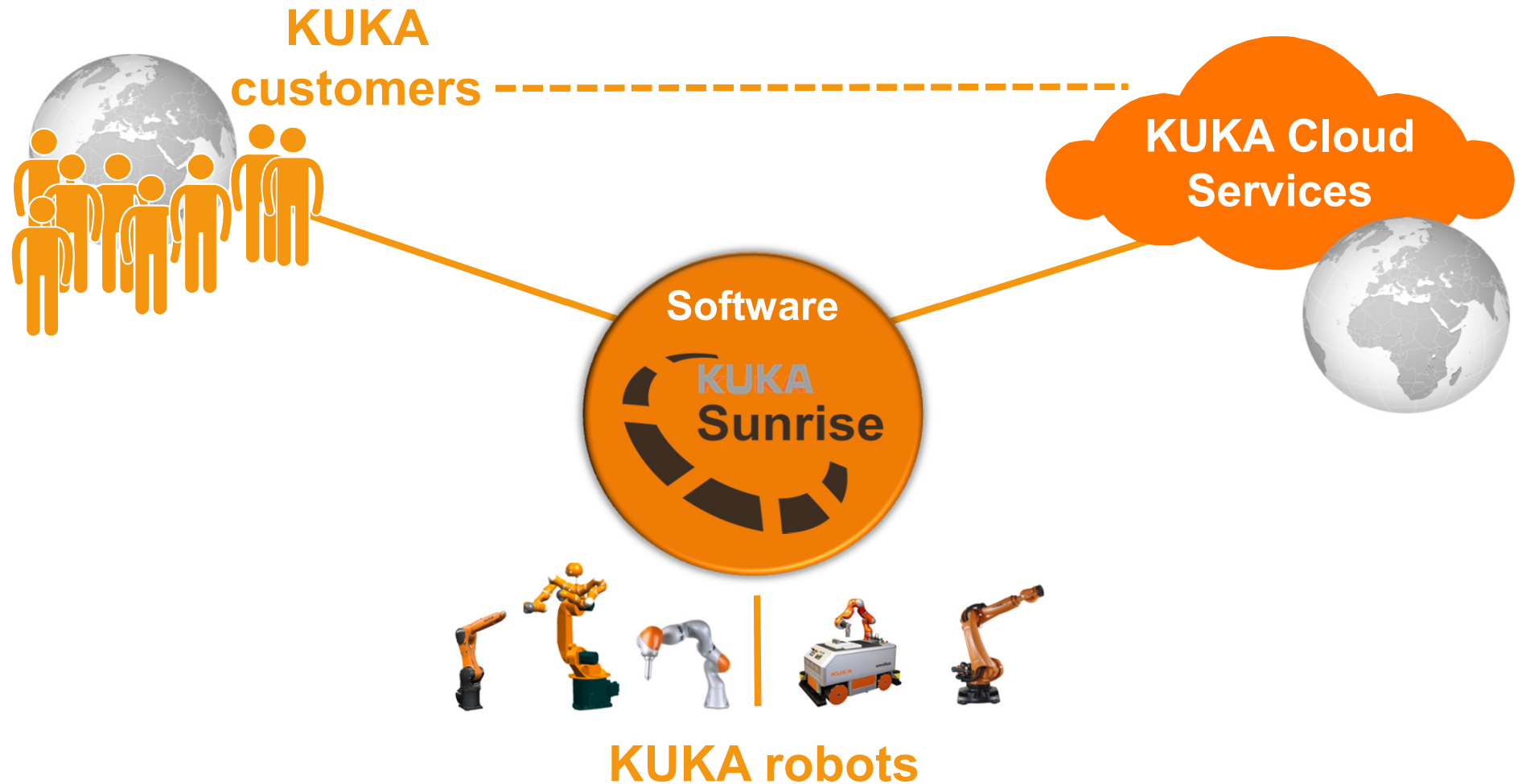
KUKA Group – development II

## New technologies are opening up new markets



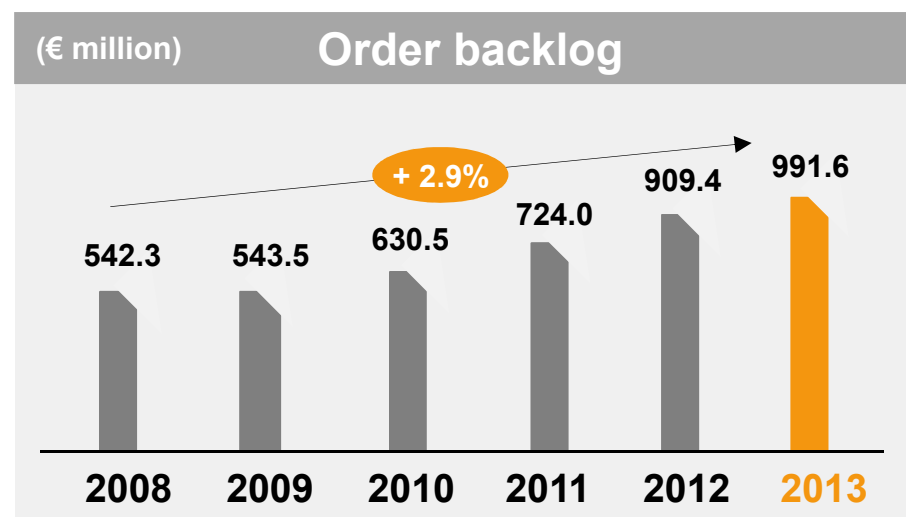
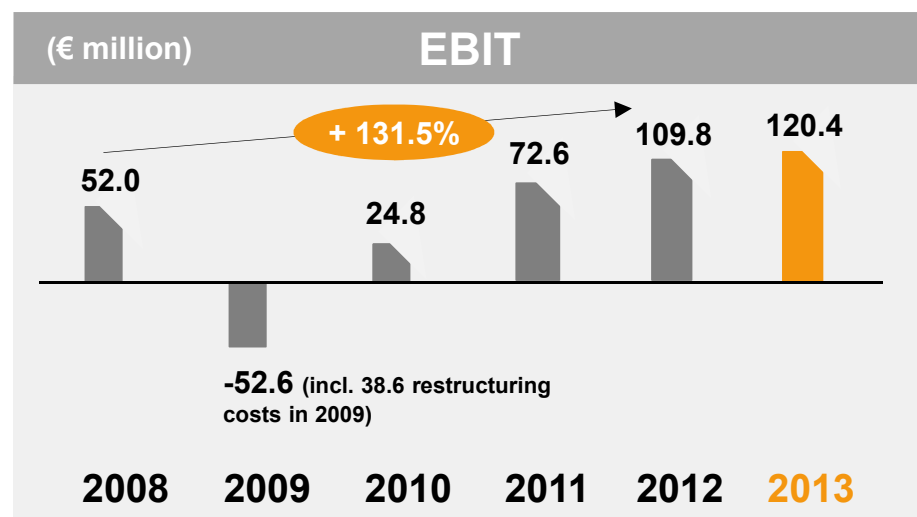
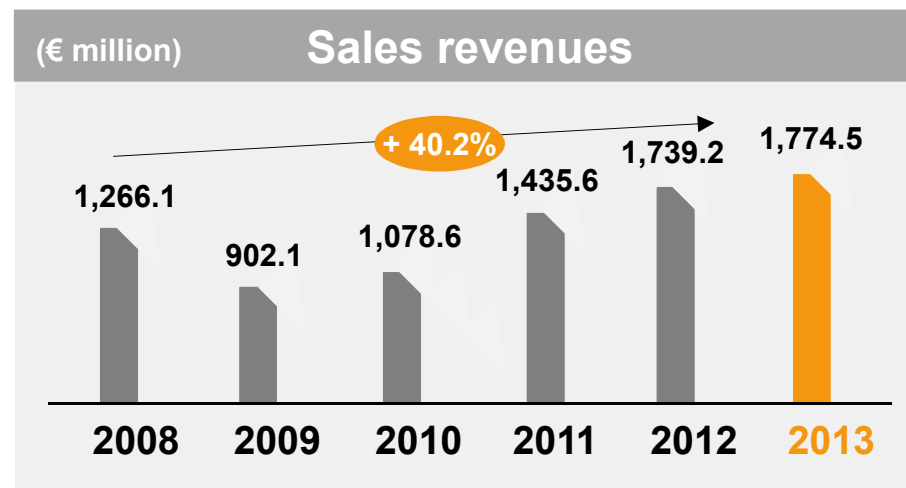
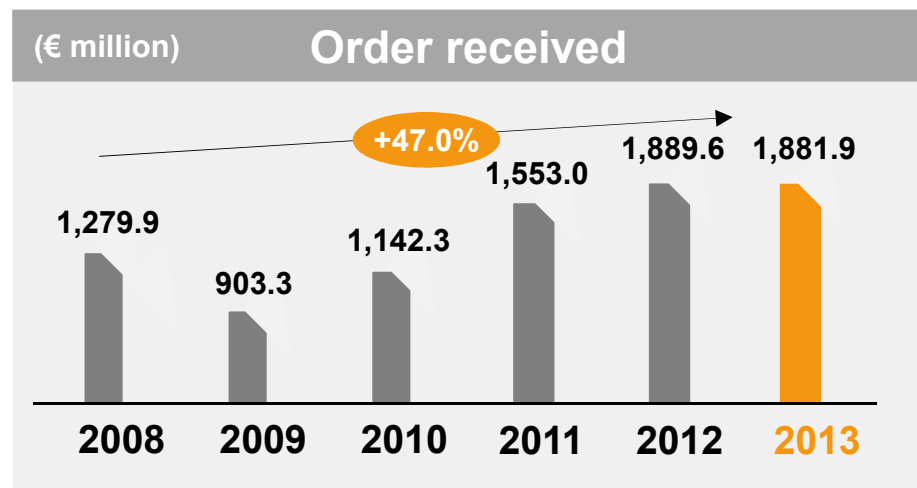
KUKA group – development III

## Sunrise software opens up new markets for KUKA



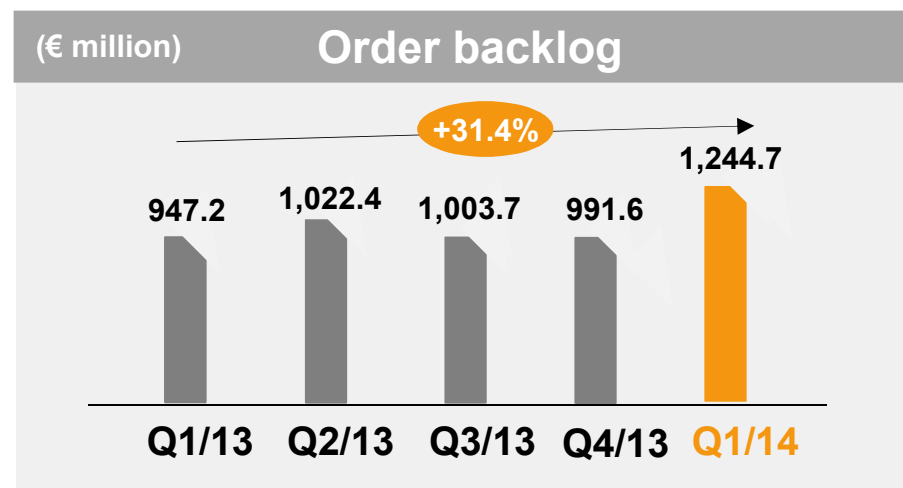
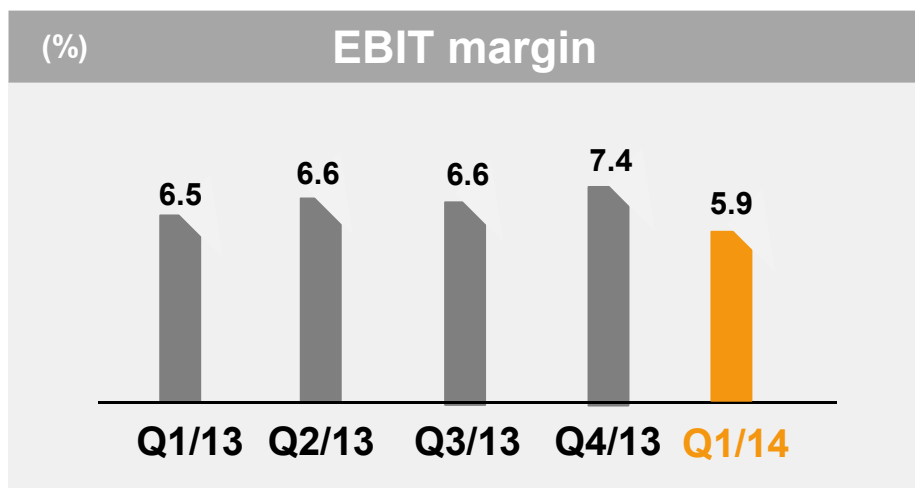
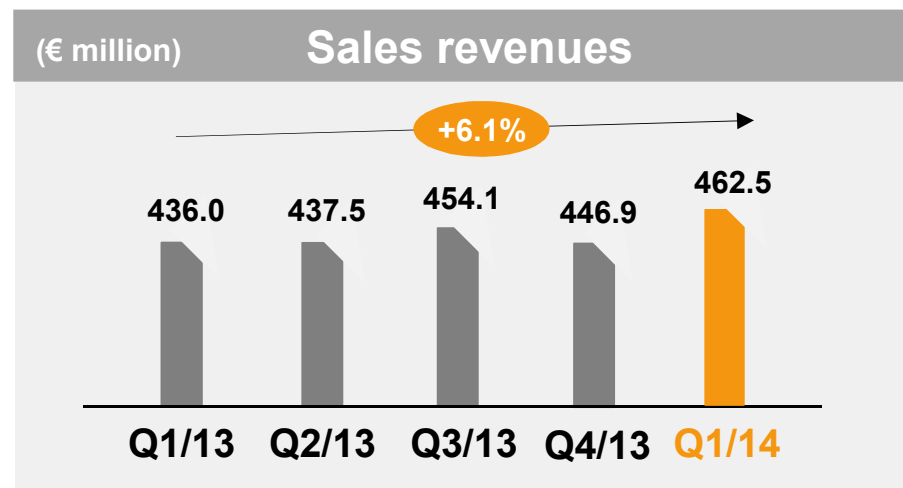
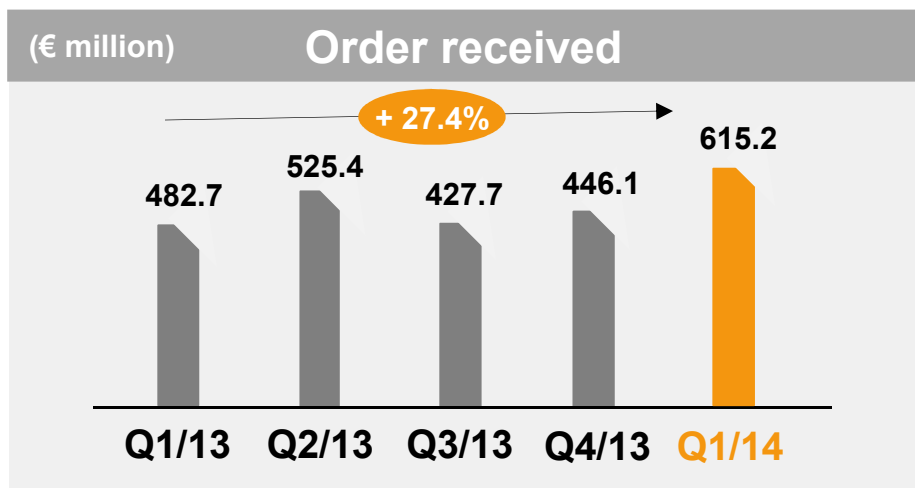
KUKA Group

## Key financial figures



KUKA Group

## Key financial figures<sup>1</sup>



1) Incl. Reis Group and Alema since Q1/14

KUKA in China

## Strong footprint in China



### KUKA in China

- Market entry: 1997
- Employees of KUKA Group: 646<sup>1</sup>
- Market share robotics 2013: 15-20%
- Installed robot base by Robotics: ~10,000
- Assembly capacity of 5,000 robots p.a.
- Strategy Automotive and General Industry:
  - Increase local presence by additional regional offices (Shanghai, Beijing, Guangzhou, Chongqing, Changchun)
  - Expansion of system partner network

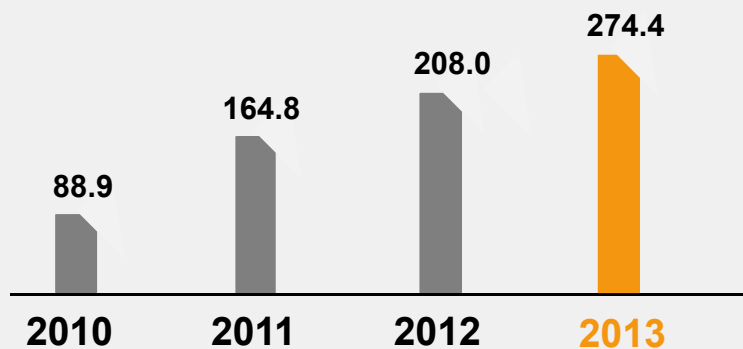
1) Q1/14



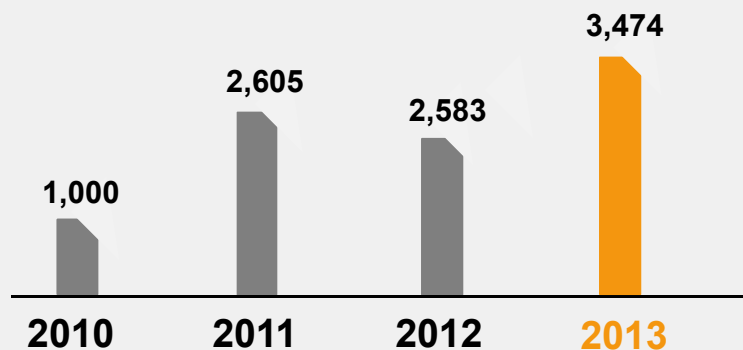
KUKA in China

## Strong growth in China

(€ million) KUKA Group Order received in China



(number of robots) KUKA Robotics Order received in China



### Market drivers in China

- Market conditions are changing:
  - Increase of labor costs
  - Reduced availability of skilled labor
  - Productivity improvements
  - Increase of quality demand (Export)
  - Worker safety
  
- Expansion in other industries:
  - Automotive was first industry to implement robots, followed by Tier1, metal industry etc.



KUKA in China

## Selection of local customers in China

Automotive				General Industry			
 上海大众汽车有限公司 SHANGHAI VOLKSWAGEN	 GAC	 中国重汽 SINOTRUK		 FOXCONN 富士康科技集团	 XCMG 徐工集团	 怡寶 Cestbon	
	 一汽-大众 FAWER • VOLKSWAGEN		 SAIC MOTOR 上海汽车	 福耀集团 FUYAO GROUP	 模塑科技 JIANGNAN MPT CO., LTD.	 TSINGTAO 青岛啤酒	
 Brilliance Auto 华晨汽车	 JAC 江淮汽车	 CHANA		 BAOSTEEL			
 VOLVO	 长安福特 ChanganFord	 CHERY	 JMC 江铃汽车	 红塔集团 HONGTA GROUP	 CSR 中国南车		
 BMW		 DFM	 吉利汽车 GEELY AUTOMOBILE	 Budweiser 百威啤酒	 SANY	 SNOW 雪花啤酒	 YONGE YONG JI ELECTRIC
				 DEC 东方电气 DONGFANG ELECTRIC	 CNR 中国北车股份有限公司 China CNR Corporation Limited		



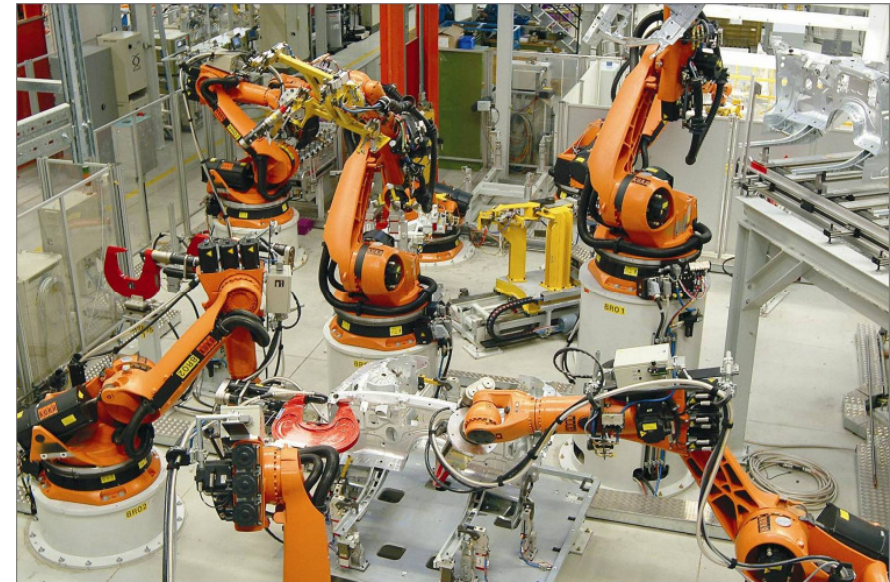
Outlook 2014

## Expected revenue and EBIT margin



**€1.9 – 2.0 billion**

**Sales revenue**

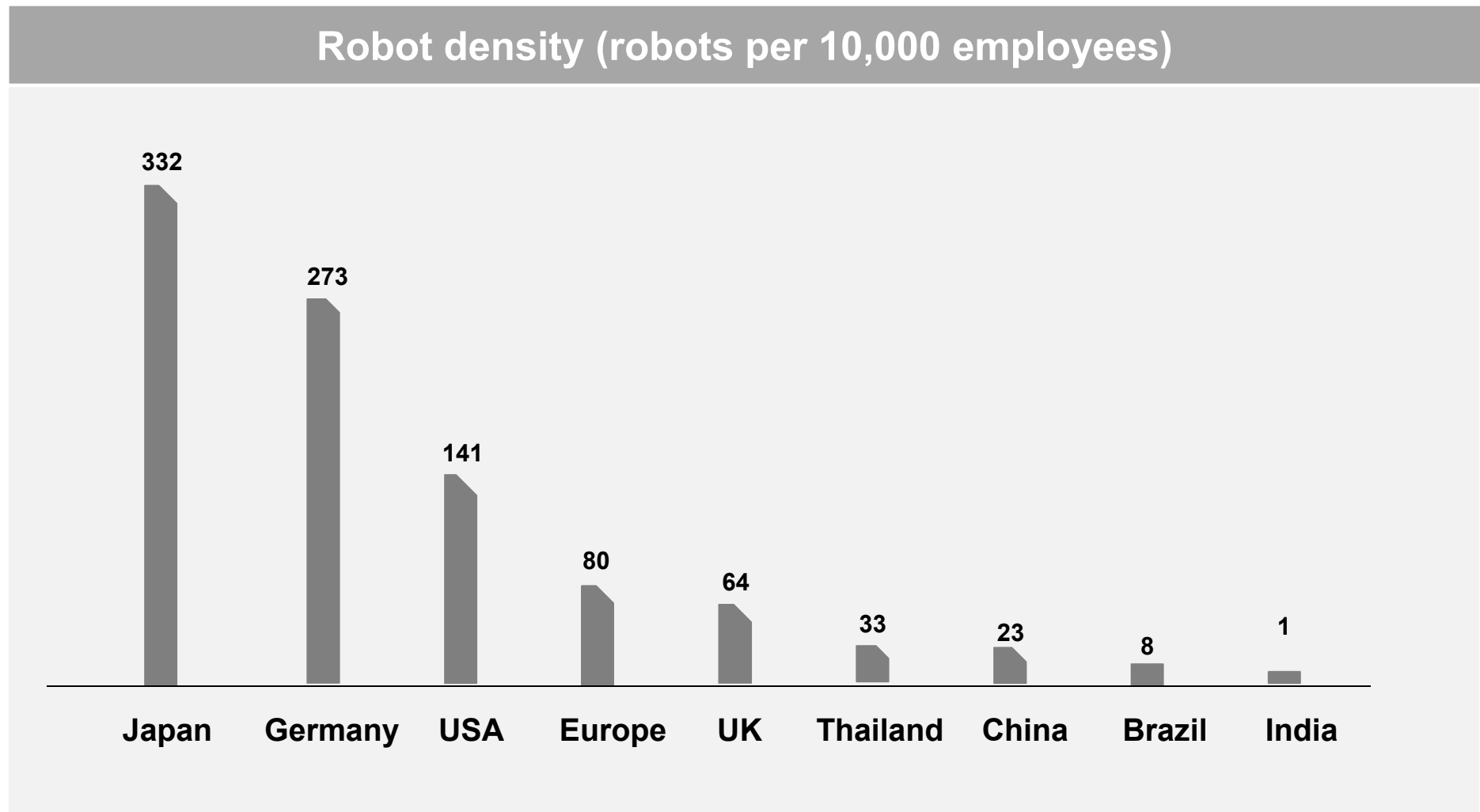


**~6.0%**

**EBIT margin**

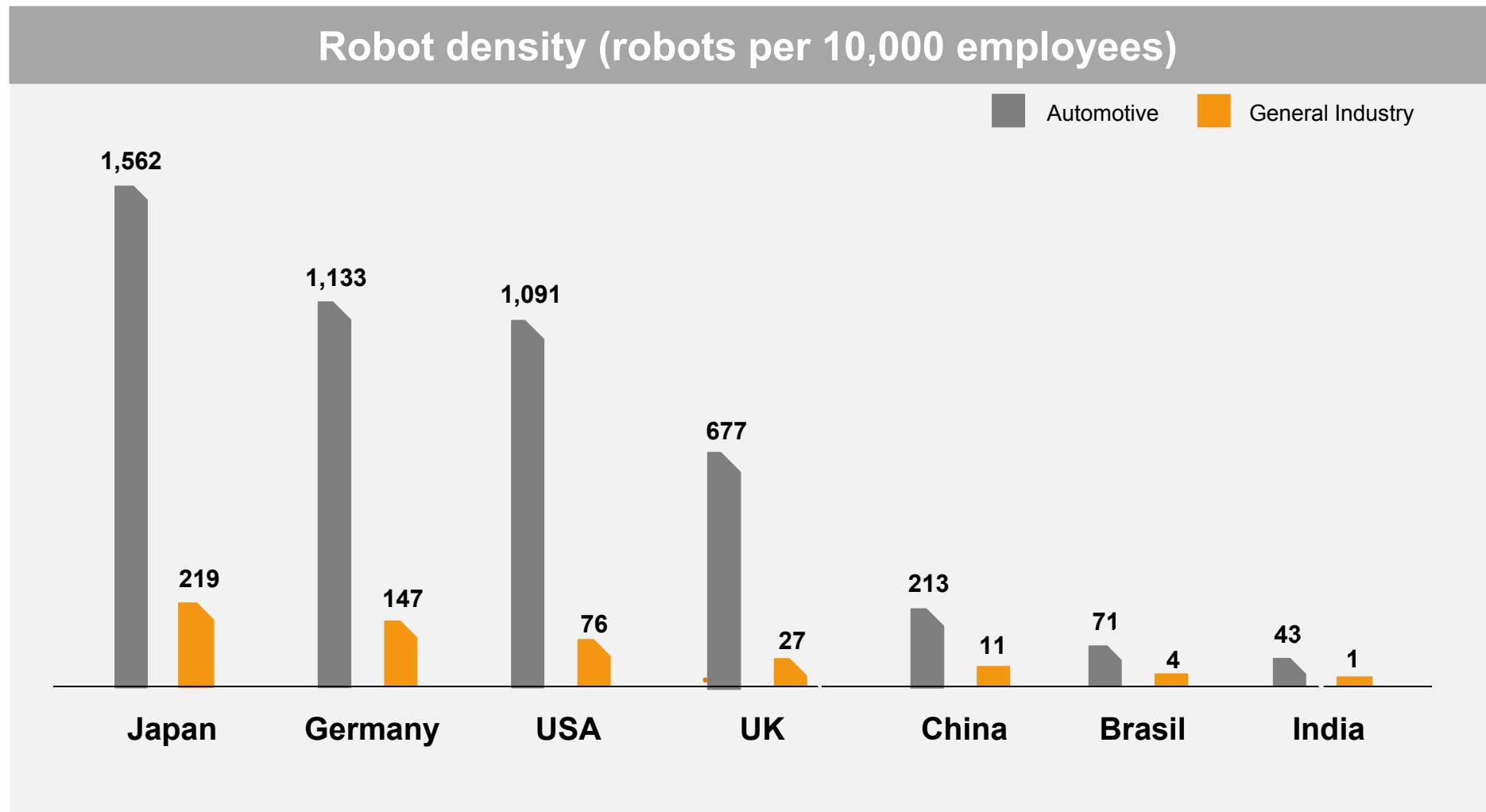
Long term growth trends in robot based automation

## 1 Low robot penetration in emerging markets



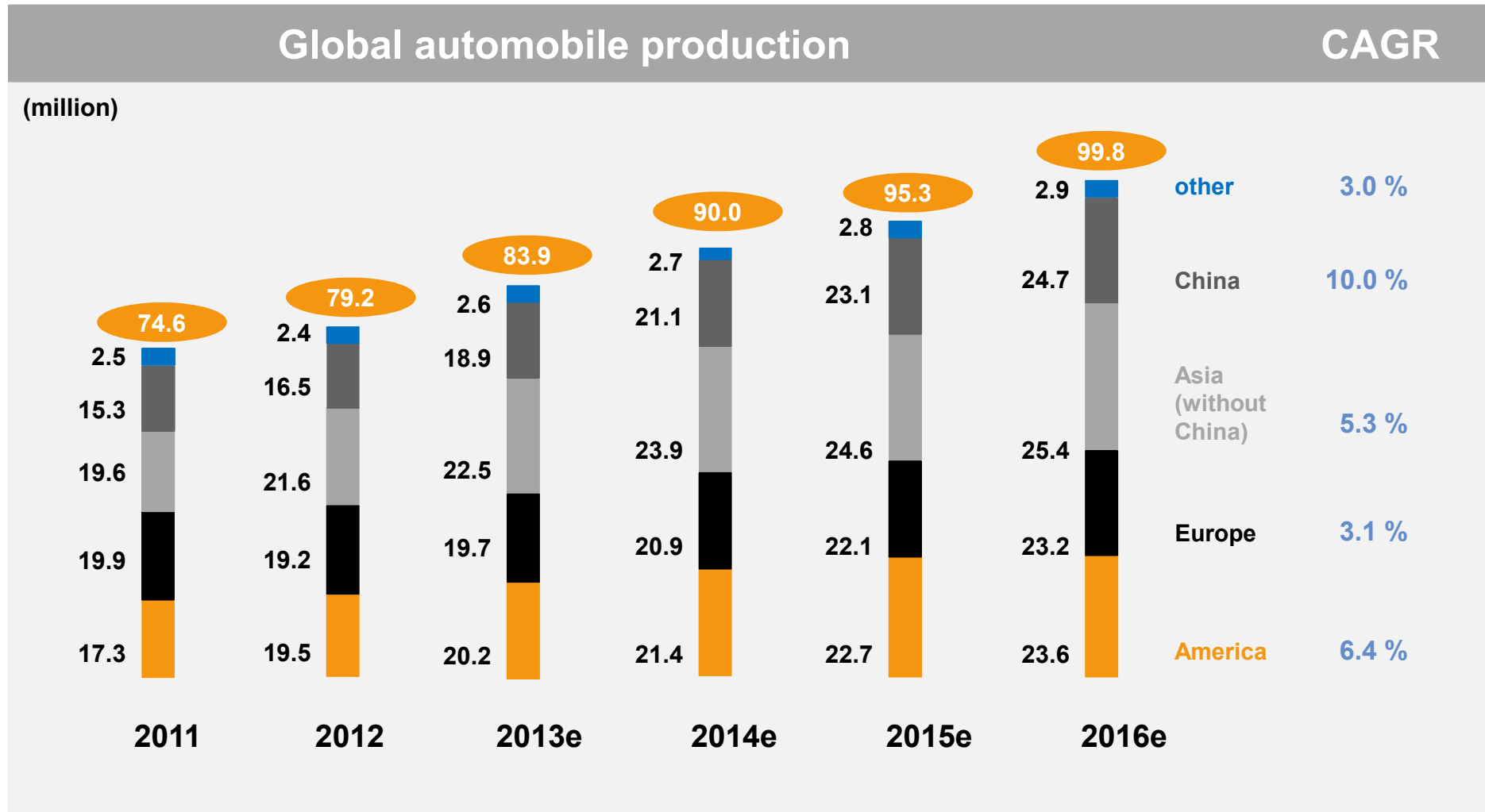
Long term growth trends in robot based automation

## 2 Low robot penetration in General Industry



Long term growth trends in robot based automation

## 3 Strong capacity increase in emerging markets



Long term growth trends in robot based automation

## 4 Expansion of service robotic market



## Disclaimer

---

This presentation contains forward-looking statements based on current assumptions and forecasts made by KUKA Group management. Any forward-looking statements contained in this presentation represent our best judgment as to what will occur in the future. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or development.

© Copyright 2014 – KUKA Aktiengesellschaft – All rights reserved.

