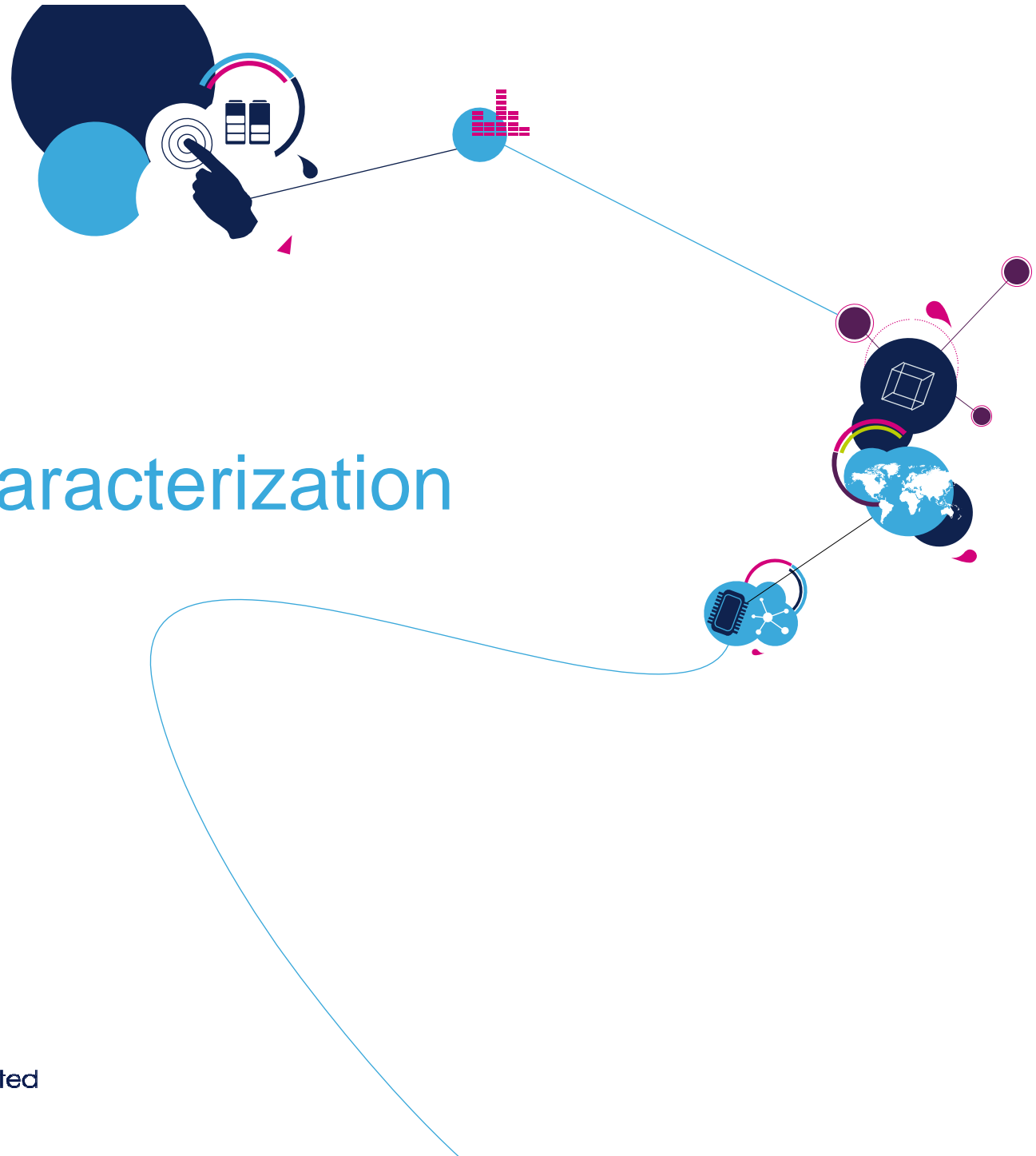


ST MEMS characterization

Camilla Irine Mura

March 11th, 2014



Who we are

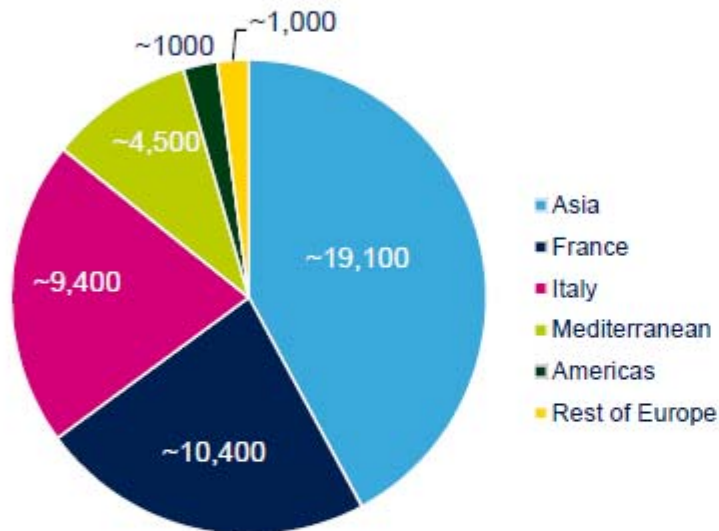


- A global semiconductor leader
- The largest European semiconductor company
- 2013 revenues of **\$8.08B**
- Approx. **45,000** employees worldwide
- Approx. **9,000** people working in R&D
- **12** manufacturing sites
- Listed on New York Stock Exchange, Euronext Paris and Borsa Italiana, Milano



People are our Foundation...

Present in **over 35** countries



Manufacturing ~ 65%

Research & Development ~ 20%

Marketing & Sales, Divisional Functions, Administration & General services ~ 15%

...working everyday to increase the quality and experience of life for all



Flexible and Independent Manufacturing

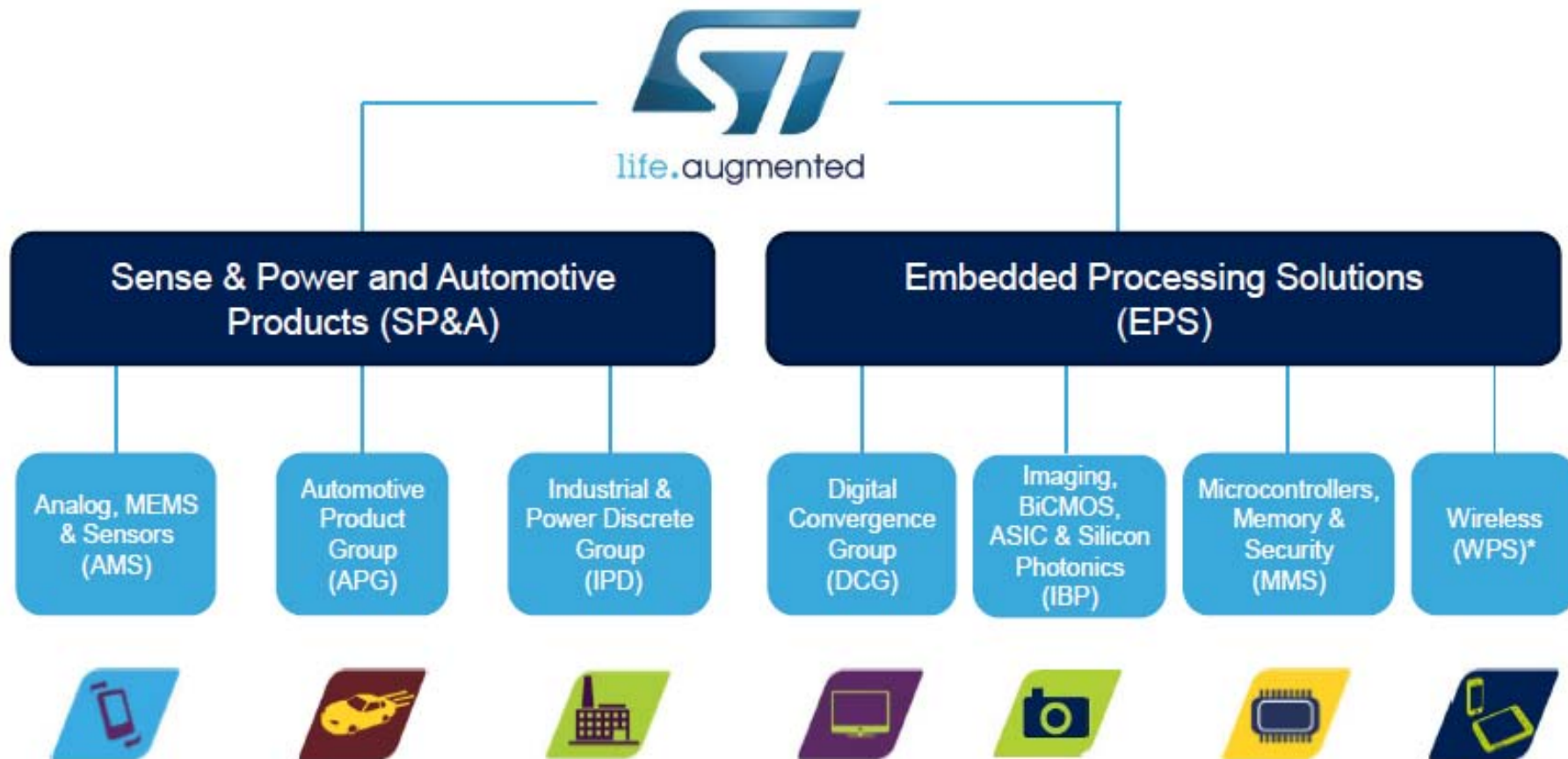


technology R&D centers around the world
Approx. **9,000** people working in R&D and product design

Partners with our Customers worldwide



Product Segments



WHAT'S MEMS?

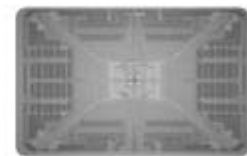
- MEMS = Micro Electrical Mechanical System
- MEMS uses mechanical structures in standard integrated circuit technology to create additional functionalities
- Movement of mechanical parts is detected by changes in capacitance/resistance
- MEMS component is always a set of MEMS sensor + ASIC for processing the signal



ADC + Signal Processing

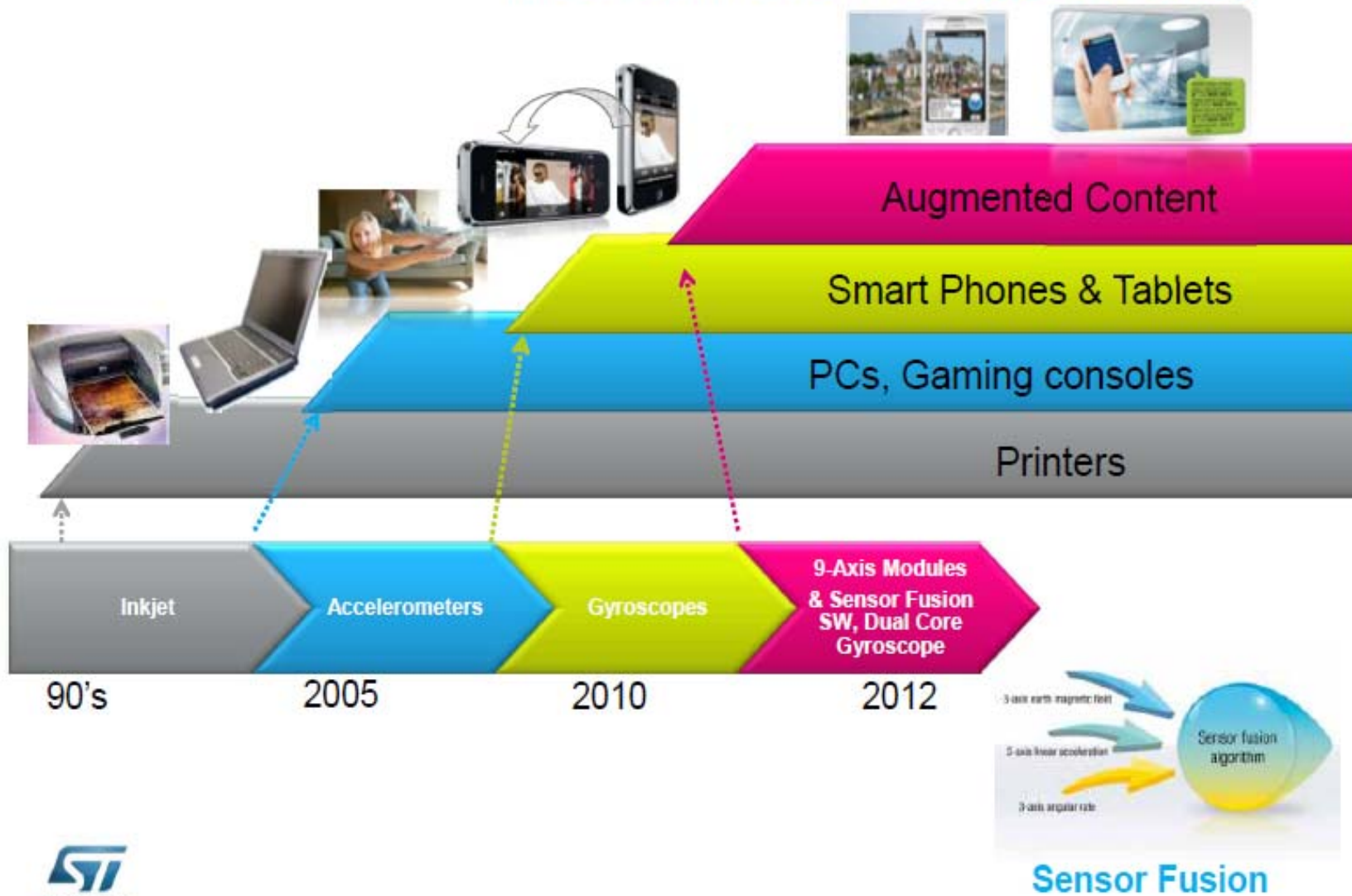


MEMS



Mechanical MEMS

MEMS in ST: A Success Story



Characterization team tasks

Lab development		Product development		Q&R support	Marketing support	
Hardware	Software	ASIC Debug	Standard Measurement			Handle customer sampling
New equipment spec def.	Bench test program design and implementation	Design-driven measurement		Support to Failure analysis team		Preparing report to customer
Designing and realizing HW for new equipment		Support in automatic test program development and certification		Support to reliability team with exotic setup		Support to Application Team with setup/measurements using app board
				Support to Q&R in data analysis during ramp-up		



Thank you!