Building High-Performance SME Clusters for American Competitiveness in the 21° Century

Dicember 5 2018

IMA SPA
Sustain Ability

Welcome to the IMA Group

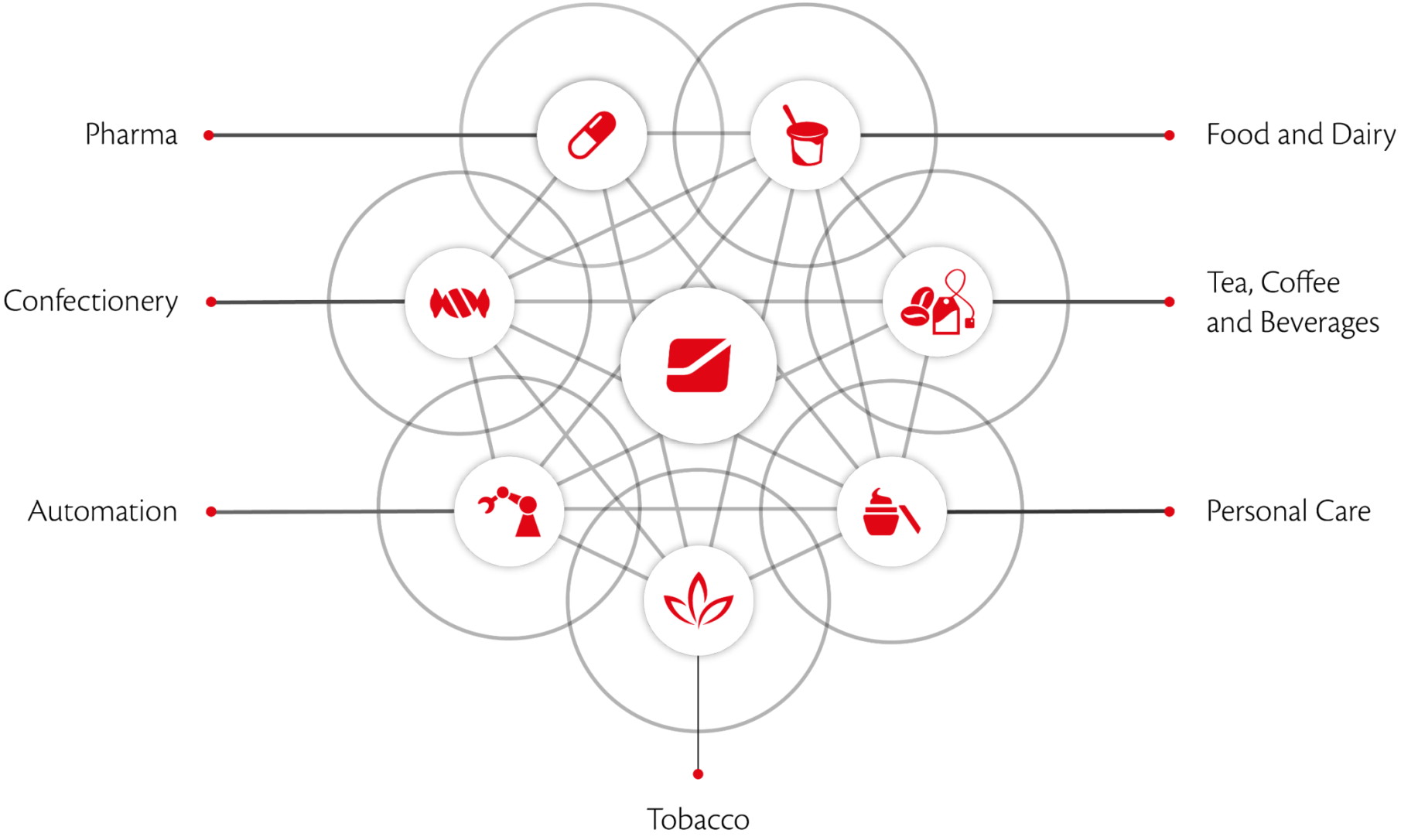
Index

IMA at a glance

Innovation, awareness, ability

- **Founded in 1961**, **IMA is world leader** in the design and manufacture of automatic machines for the processing and packaging of pharmaceuticals, cosmetics, food, tea and coffee.
- **Global pharmaceutical supplier** with the widest range of state-of-the-art processing and packaging systems.
- More than **5,600 employees**, about 2,800 of them based abroad.
- The IMA Group closed 2017 with **consolidated revenues of 1,444.7 million euros**, an increase of 10.2% on 2018.
- More than **88%** of turnover is destined for **export**.
- **Worldwide sales and service network.**
- Cutting-edge R&D laboratories and **continuous product innovation** with more than **1,600 patents and patent applications in the world.**
- **Listed on the Milan Stock Exchange** since 1995 and starting from 2001 on the **STAR segment**. The **Vacchi family** is the largest shareholder, who **holds 57% stake of IMA.**

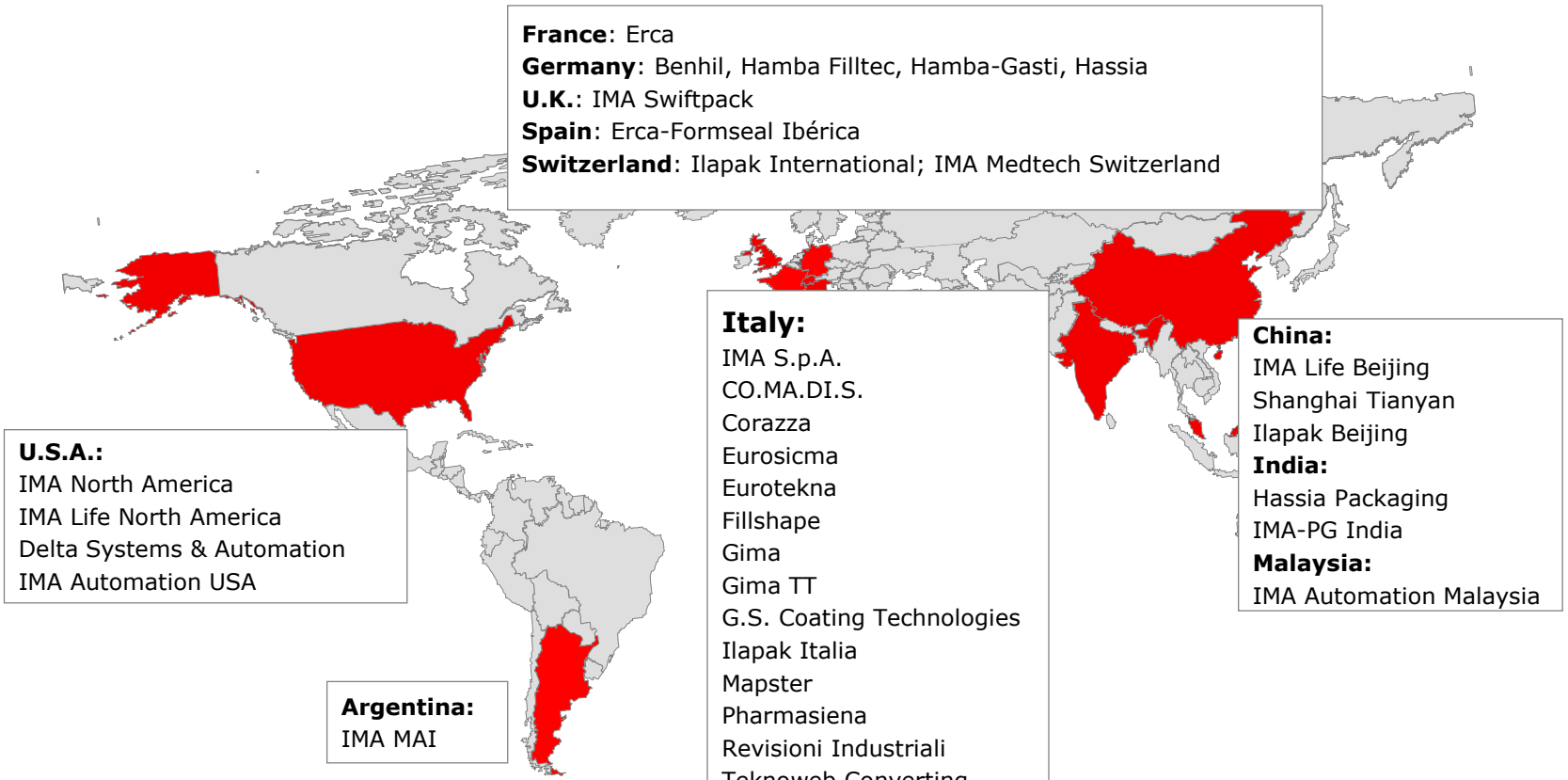
The IMA Group: an integrated ecosystem



IMA: a synthesis of industrial experiences from all over the world

Production Plants

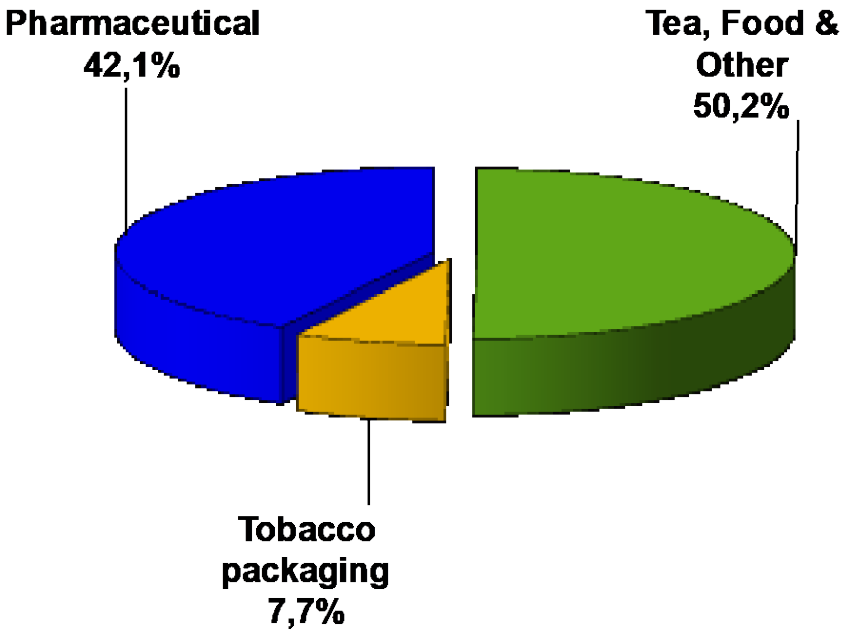
IMA manufactures equipment in 41 production plants located in Italy, Germany, France, Switzerland, Spain, UK, USA, India, Malaysia, China and Argentina.



Balanced Offer

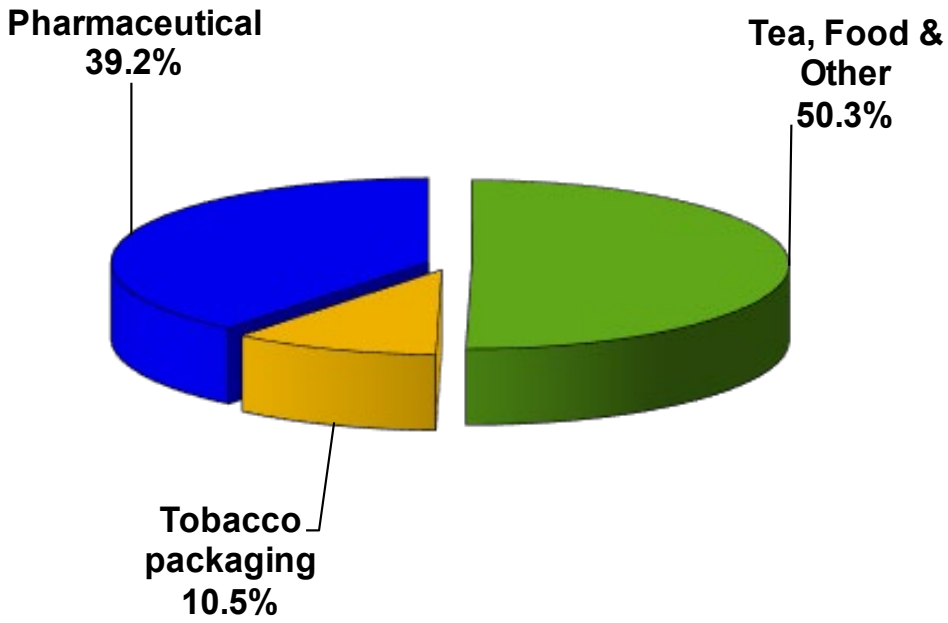
2016

Total sales: € 1,310.8 million

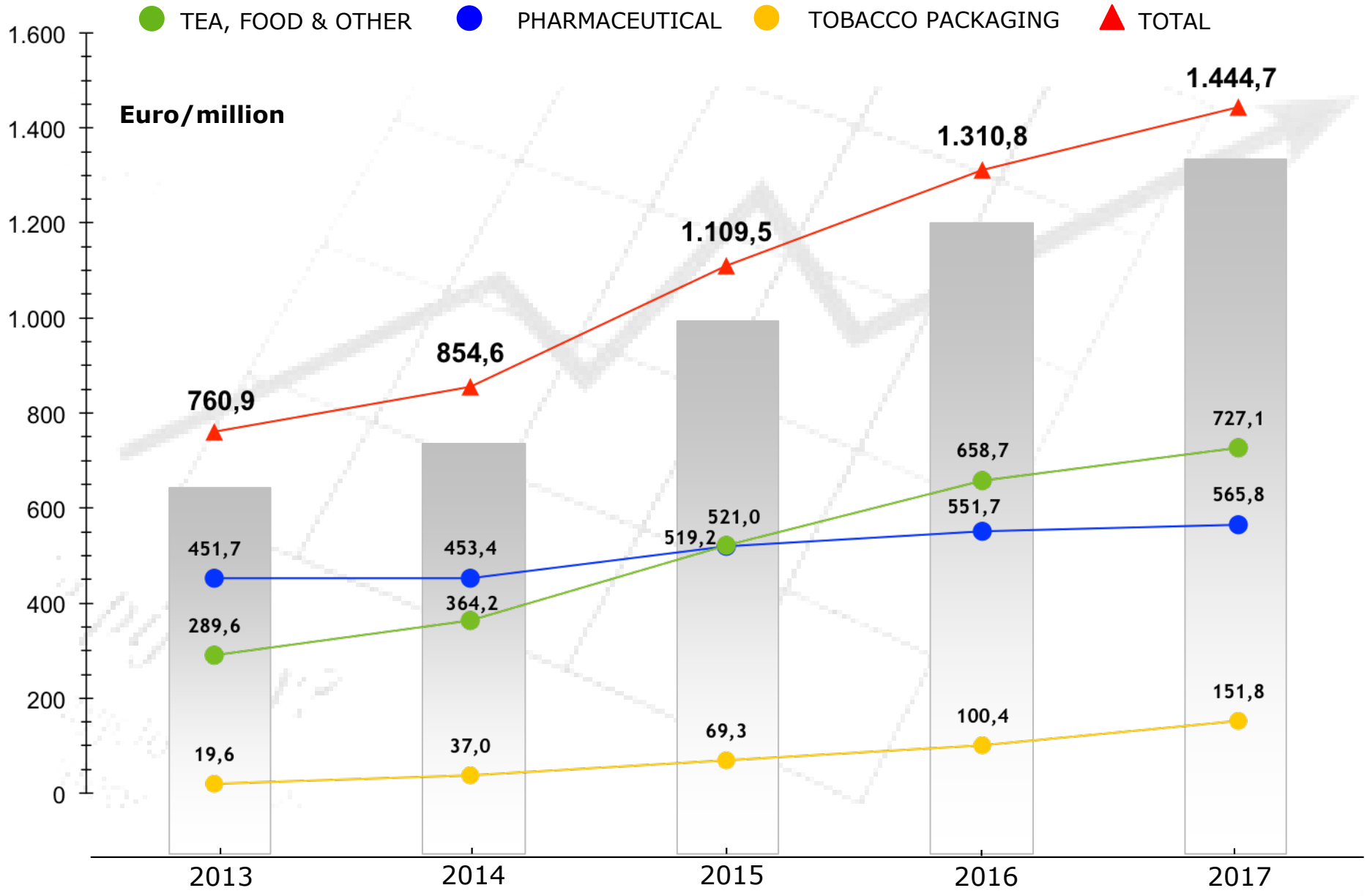


2017

Total sales: € 1,444.7 million



Trend of the sales



IMA Ecosystem

IMA Ecosystem: map

Employees: Internal Training

TOTAL NUMBER OF EMPLOYEES BROKEN DOWN BY TYPE OF CONTRACT AND GENDER OF THE IMA GROUP
(on 31 December 2017)

	MEN	WOMEN	TOTAL
Permanent contract	4,155	755	4,910
Fixed-term contract	104	49	153
Apprenticeship contract	106	25	131
TOTAL	4,365	829	5,194

TOTAL NUMBER OF EMPLOYEES BRO CONTRACT AND GEOGRAPHICAL AI
(on 31 December 2017)

	AMERICAS	ASIA			
Permanent contract	468	811			
Fixed-term contract	7	40			
Apprenticeship contract	0	4	29	98	131
TOTAL	475	855	1,026	2,838	5,194

AVERAGE NUMBER OF HOURS PER PERSON BY GENDER IN THE IMA GROUP *(in 2017)*

Schools & Universities

The **hiring rate** (calculated as the number of employees hired in the period compared with the workforce at the end of the period) comes to 11.9% for men and 13.6% for women. In the period being analysed, **636** new workers were hired by the Company (523 men and 113 [illegible] while **435** employees left the Company (362 m[illegible] women).

More than 200 new employed in 2017

ITS MAKER
ISTITUTO TECNICO SUPERIORE
Meccanica - Meccatronica - Motoristica e Packaging

Supplier: IMA Network

In 2009 IMA Group introduced and supported the team collaboration strategy to reduce and optimize costs and to increase capacity and efficiency.
The Network of Affiliated Companies, now called SINERMATIC, is composed by:

Why does IMA Group need to create a network?

IMA decided to invest in the development of a business network through the purchase of shareholdings because IMA wants:

- To increase the direct control of Suppliers considered as how and for the reputation of their products / services.

Credit from the bank

- To help small / medium companies to obtain credit from banks, creating the conditions for new investments thanks to the financial guarantee of the Industrial Group.

- To simplify the integration of very small sub-suppliers through the companies affiliated to the network, in order to guarantee continuity even in critical situations of generational change and consequently contributing to their survival and their development.

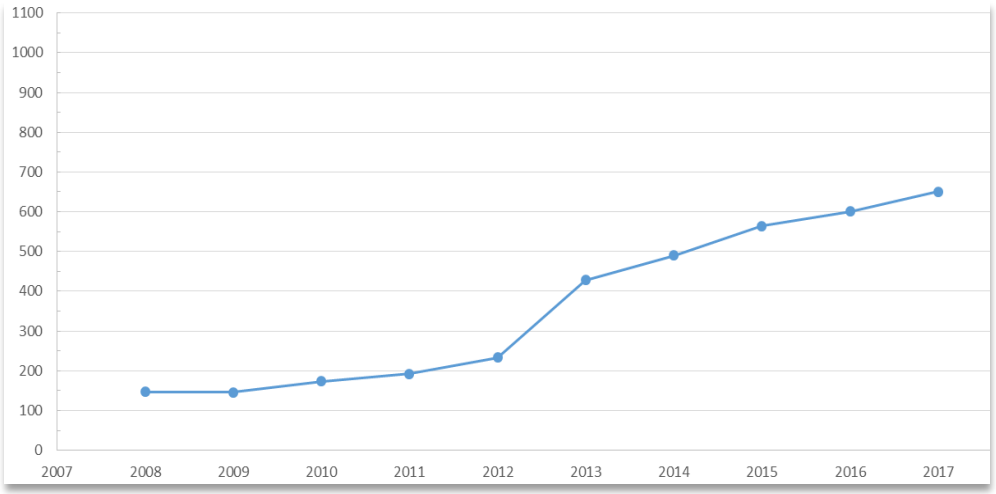
- To help each company in the network to maintain a high degree of specialization in their core business by delegating non-core activities to other network entities (i.e. Structure of Support and Structure of Sale, the central warehouse of catalog components ships to the r… …ppliers, allowing them high savings by exploiting the best purchase conditions of IMA Group.

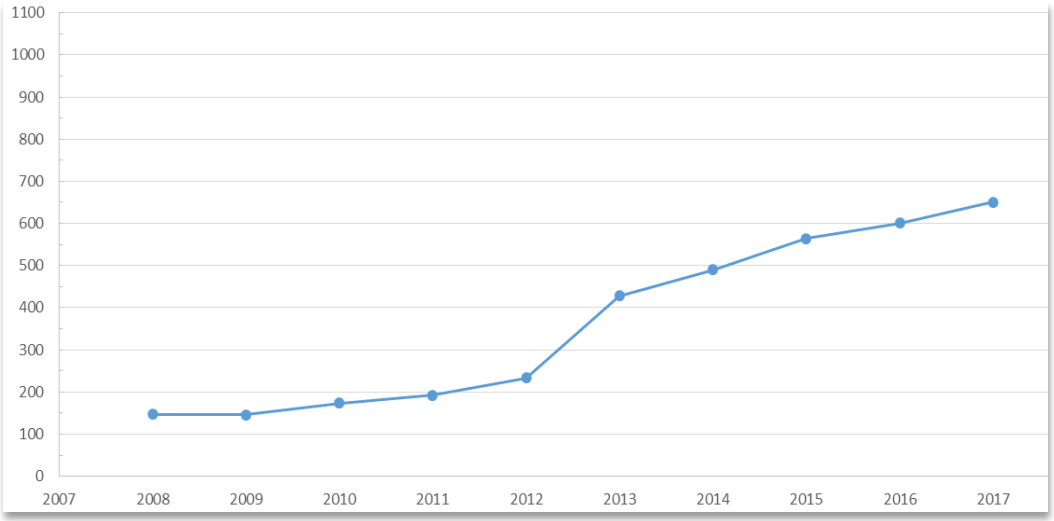
Partnerships

- To create partnerships and not classic customer/supplier relationship with the Companies of the network in order to simplify the industrial, technical and economic growth, according to IMA Group development.

Supplier growing

Turnover: from 20 M€ to 190 M€





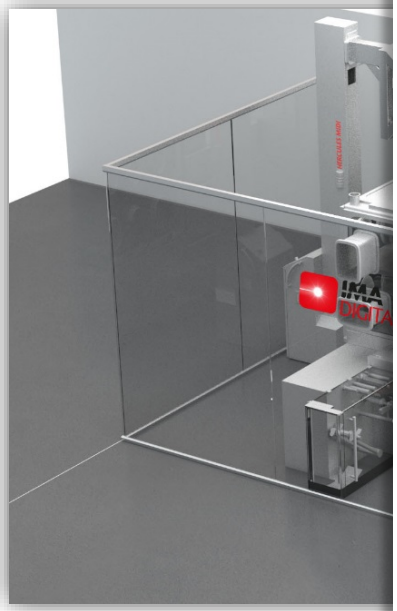
Employees: from 150 to 600

Digital Transformation

Customer Needs

1. Increase efficiency, reduce wastage and energy consumption:
   - Self adapting machines
   - Reduce unplanned stoppages
   - Maintenance: predictive and prescriptive
2. Reduction manpower on manufacturing plant:
   - Reduce low skill tasks
   - React to the expected lack of manpower in countries with high labor costs

Different point of View

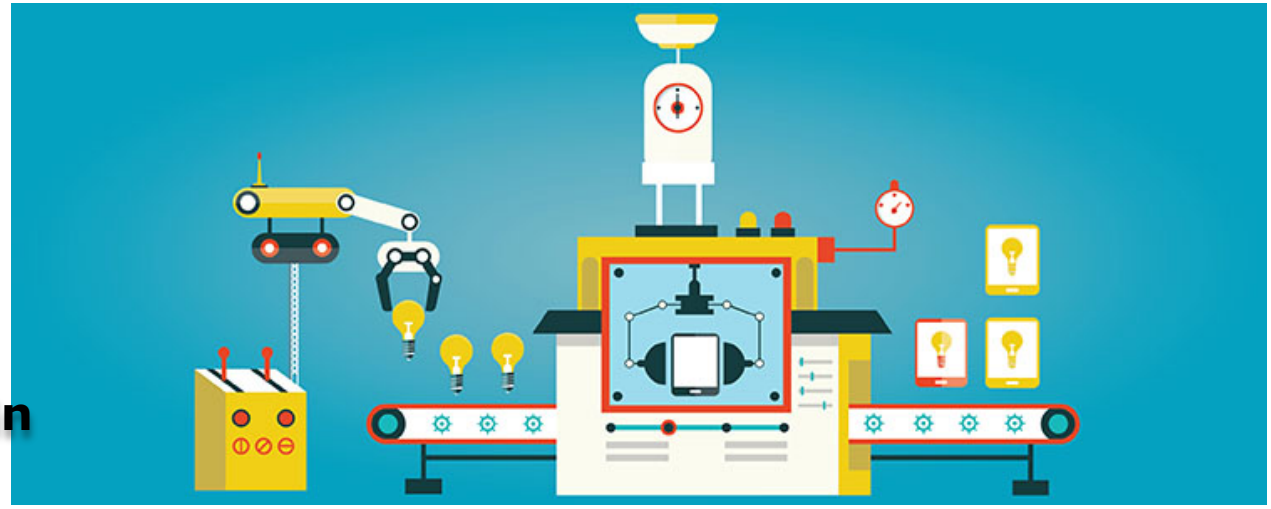


Which Data?

Personal DATA

Manufacturing DATA

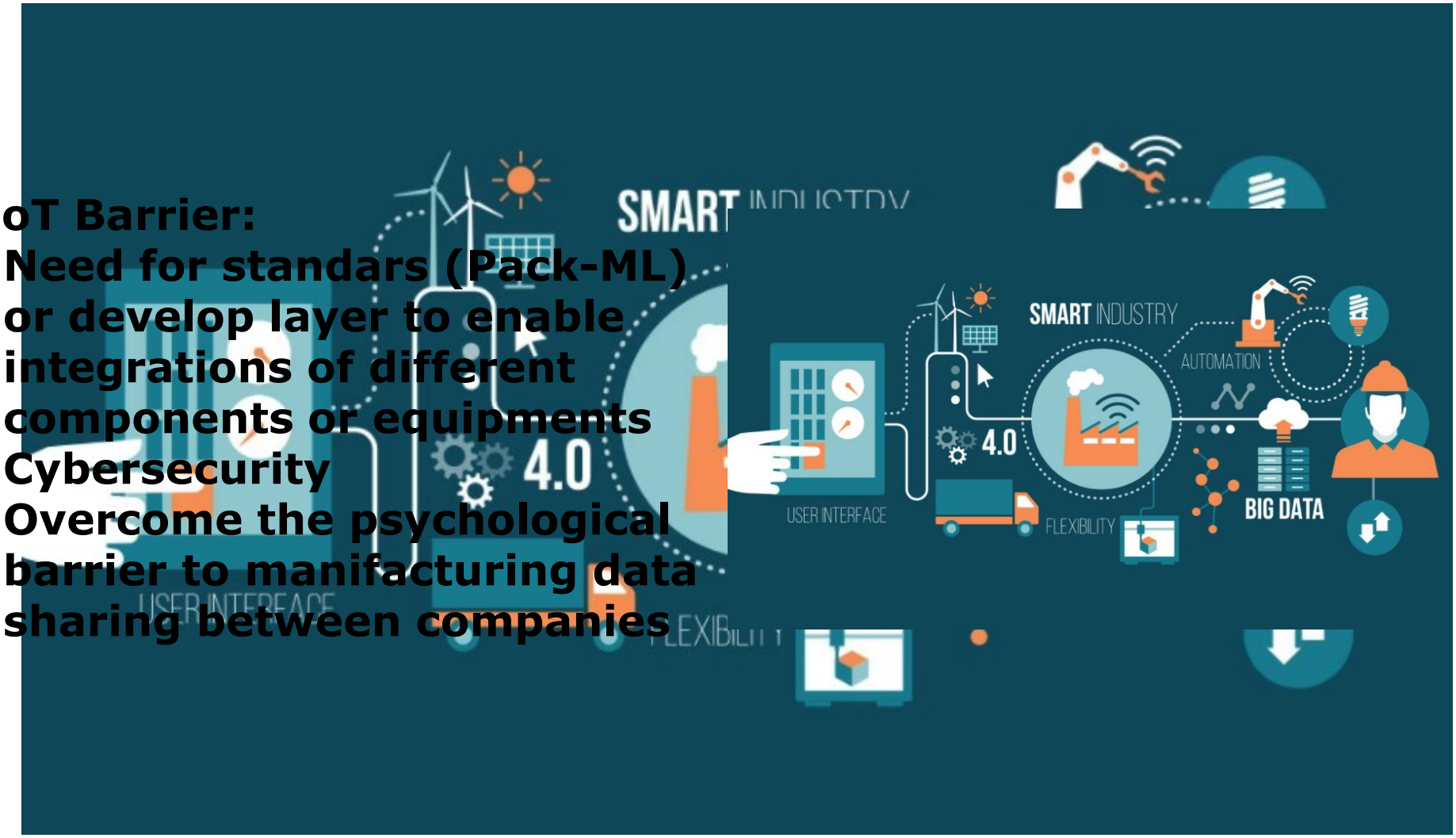
Who owns DATA generated in manufacturing processes?



Industrial Internet of Things: IIoT

IIoT Barrier:

- **Need for standars (Pack-ML) or develop layer to enable integrations of different components or equipments**
- **Cybersecurity**
- **Overcome the psychological barrier to manifacturing data sharing between companies**



Enable Data-Driv

Data is the resource which is shared between companies, subcontractors and customers and has the potential to deliver the ROI of Industry 4.0

Regulation on harmonised data prot … sure that data generated in EU flows freely within EU but re… …s processed in EU.

Factories of the future will see the convergence of sma… …hinery and products as Systems of Systems. So, work is required to determine who owns data generated … manufacturing processes and which should be the regulations in terms of control and access to such data. Data is the resource which is shared between companies, subcontractors and customers and has the potential to deliver the ROI of Industry 4.0. Smar… …re effective monetization of manufacturing industry data, free flow of da… …d by storing and processing data in Europe to allow regulation enforcem… …ee for the industrial domain, contractual approaches that will secure thi…

Smart legislation should enable data-driven innovation

Smart legislation should enable data-driven innovation, with appropriate rules on data protection striking the right balance between protecting EU citizens and enabling innovation. Smart legislation should not kill the big-data analysis and applications business case sustainability: as the proposals stand currently opportunities around big data will be severely curtailed. In ord… be required only when profiling significantly impacts the rights… objective criteria.

External Stakeholders Group Meeting

for the planned European Commission Communication on Digitising European Industry

Brussels, 23 November 2015

Synthesis of Stakeholder Inputs

Conclusion

Opportunities:

- Continuous improvement of our products
- Increase revenue by maintenance and after market support
- Enable new business model: Eaas or P4P
- Move from ‘connected’ machines to ‘smart’ or ‘autonomous’ machines

Challanges:

- Introduce new skills in our organization: STEM
- Use of AI and ML to control machines and processes
- Collect and analyse manufacturing data

Thank you for your attention