



POLITECNICO
MILANO 1863

Master of Science in Management Engineering Stream Supply Chain Management

Academic Year 2019-2020

Scenario and Market Needs



Increasingly **global** contexts



Increasingly **complex networks** of stakeholders (fragmented and distributed supply chains) and consequent need to be covered from multiple risks



Need for multiple performance **optimization** (effectiveness, efficiency, sustainability)



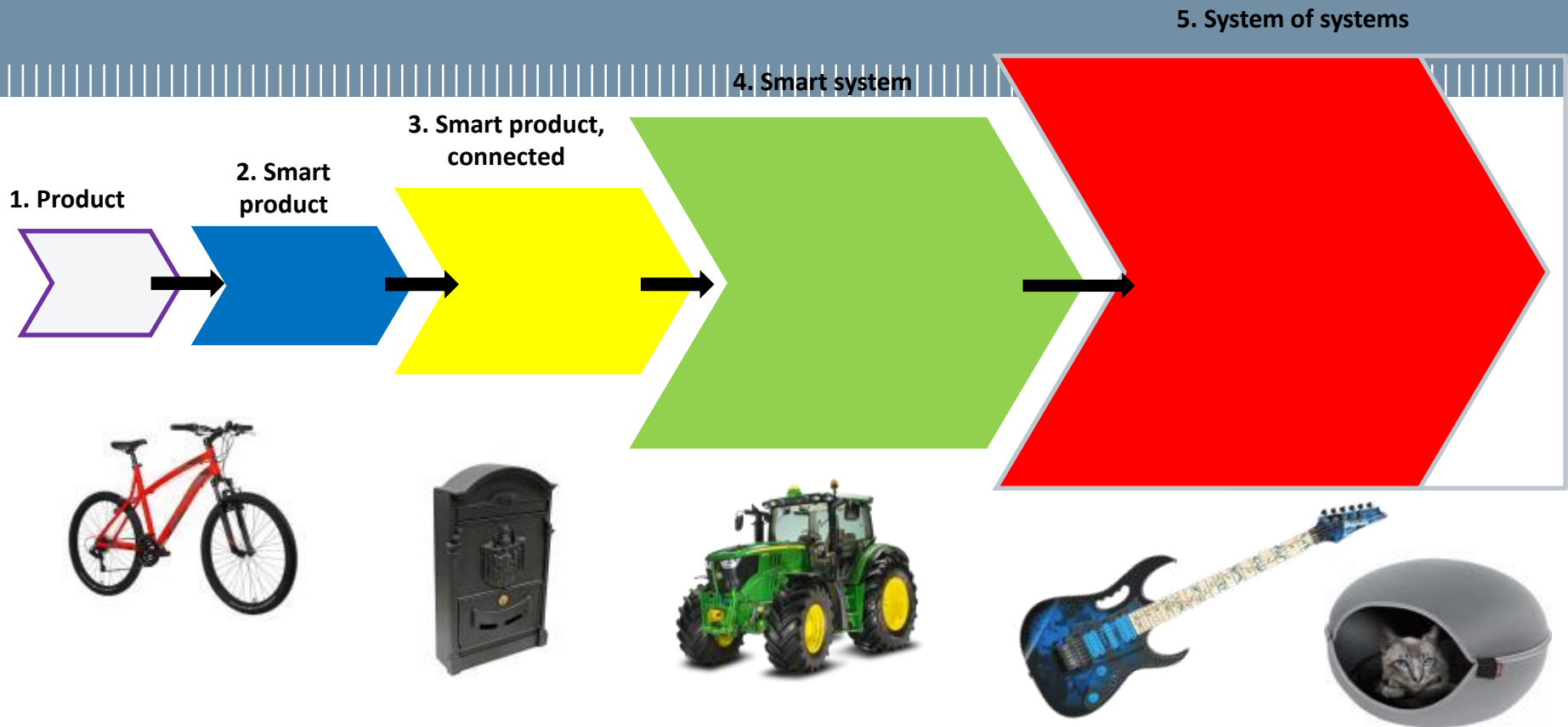
Overwhelming role of **new technologies** that change the management of processes and that become actors capable of making decisions



"I think having a great idea is vastly overrated. .. I don't think it matters what the idea is, almost. You need great execution."

Felix Dennis

Scenario and Market Needs



"Now IT is becoming an integral part of the product itself. Embedded sensors, processors, software, and connectivity ... coupled with a **product cloud** ... are driving dramatic improvements in product functionality and performance. ... this **will reshape the value chain yet again**, by changing product design, marketing, manufacturing, and after-sale service and by creating the need for new activities...."

Porter M. E., Heppelmann J.E., "How Smart Connected Products Are Transforming Competition, HBR, November 2014

Learning Outcomes



- ✓ Understand which changes in terms of SCM strategies must be performed to react to a continuously changing competitive landscape
- ✓ Design solutions applying a scientific and engineering approach: (make or buy decisions, localization decisions, capacity sizing decisions...)
- ✓ Analyse the impact of ICT over Supply Chain decisions
- ✓ Develop new ideas and solutions for Supply Chain
- ✓ Interact in a working environment, also motivating other members of the team in developing Supply Chain Projects

Stream Architecture

2° year curriculum

Courses	Sem	ECTS	ECTS
Supplier Relationship Management Lab	2	10	10
Advanced Supply Chain Planning Lab	2	10	10
Supply Chain Management	1	10	10
Digital Business Innovation	2	5	5
Operations Risk Management and Resilience	1	5	
Quality Management	1	5	
International Distribution	2	5	
Free FREELM	1-2	5-10	10
Final Project (Thesis)	1-2	15	15



PURCHASING AND SUPPLY MANAGEMENT

Buyers determine the purchasing needs of the organization. They negotiate with vendors to get the best possible pricing and payment options. They also do cost analysis to identify areas of potential cost reduction and analyze the impact of pricing changes for goods and services.



SUPPLY CHAIN PLANNING

A supply chain planner must have the ability to look at the chain from upstream to downstream with both short- and long-term planning. Planners develop demand forecasts at multiple levels of aggregation for multiple time horizons. They look at current processes and determine methods for improvement with regard to cutting costs, controlling and replenishing inventory, and shipping products.



LOGISTICS MANAGEMENT

Logistics managers oversee the movement, distribution and storage of materials in an organization. Managers control the flow of incoming materials and outgoing finished products to ensure customers receive products on time. Logistics managers oversee warehouse, inventory control, material handling, customer service, transportation and planning workers.



Prof. Andrea Sianesi

Tel. 02.2399.4806

andrea.sianesi@polimi.it

Prof.ssa Antonella Moretto

Tel. 02.2399.3976

antonella.moretto@polimi.it

Prof. Giovanni Miragliotta

Tel. 02.2399.2785

giovanni.miragliotta@polimi.it