



World Manufacturing Forum

WMF

Annual Meeting 2018

PROGRAM





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WMF

Annual Meeting 2018

27-28 September 2018
Villa Erba, Cernobbio

Manufacturing Revolution to Promote Global Resilience

*How the Industrial Transformation Inspires Education,
Sustainable Development and Societal Impact*







VISION

The manufacturing sector is widely recognized as a key enabler of global prosperity and social advancement. In this respect, the relationship between manufacturing growth and the improvement in economic well-being is well understood since the first industrial revolution. In 2015, the manufacturing value added was the 16% of the total world GDP, with an annual growth of 2%. Industrialization, in fact, has the power to transform economies, spurring global innovation and competitiveness while creating widespread economic prosperity.

Moreover, the transformation of manufacturing in the next decade will take into account the fundamental changes that will be needed to adapt to future markets. The ability to respond to changing manufacturing requirements and support innovation through the adoption of the Key Enabling Technologies provides a foundation for answering to societal megatrends, for the creation of economic growth and social well-being, and for accelerating industrial development.

The next generation of manufacturing is stimulated through complex global and local integration, mass and one-off production, large and small-scale production lines, product longevity and expiration, intelligent automation and skill building, leading to the advancement of all sectors of society. The future of production will depend on the variety of digital technologies with consequences on productivity, skills, employment, trade and environment.

The World Manufacturing Forum is an open platform that aims to create and encourage innovative industrial culture worldwide in order to prompt economic prosperity and sustainable development. During the forthcoming edition of the WMF Annual Meeting, we will explore the direction the manufacturing industry is taking, the level of technological innovation and the skills the new workforce needs to acquire, in order to embrace the Sustainable Development Goals of the 2030 global industrial agenda.

With this goal in mind, our mission is to facilitate dialogue and activities towards a shared common vision to solve the global manufacturing challenges through cooperation and collaboration, considering the different perspectives of stakeholders from industry, academia, and government, with a worldwide vision. During the two-day annual meeting in Cernobbio, Italy, international leaders will highlight the role of manufacturing up to 2030, how digital transformation contributes to economic well-being and societal advancement and how the new industrial revolution will support sustainable development through education and technological changes.

27 September
2018

AGENDA

09:00 – 09:20

Welcome

- **Alberto Ribolla**, President, World Manufacturing Foundation
- **Marco Bonometti**, President, Confindustria Lombardia
- **Jack Harris**, President, IMS
- **Ferruccio Resta**, Rector, Politecnico di Milano
- **Attilio Fontana**, President, Regione Lombardia

09:20 – 09:40

2018 World Manufacturing Forum Report – Recommendations for the Future of Manufacturing

- **Marco Taisch**, Scientific Chairman, World Manufacturing Foundation

09:40 – 10:00

Opening Keynote

10:00 – 11:30

Innovation priorities by 2030 In the world

The manufacturing strategy development for 2020 highlights both short and long-term challenges. While current efforts focus on encouraging industrial growth and job creation, long-term considerations are needed to address the challenges of globalization, resource supply and aging populations.

Megatrends help to determine production challenges of the future that will impact manufacturing companies. These challenges must be faced by production through innovative processes, new products or services, and groundbreaking technologies. The fourth industrial revolution demonstrates how key enabling technologies help innovative ideas transform into new products and services that create growth, highly skilled value-added jobs, and help to address societal challenges around the globe.

This session will explore how the worldwide industry is answering to these megatrends in order to satisfy the 2030 manufacturing global goals.

- **Signe Ratso**, Deputy Director General, European Commission, DG Research and Innovation
- **Mike Lackey**, Global VP Solution Management, SAP
- **Francisco Betti**, Lead, Future of Production, World Economic Forum
- **Ildefonso Guajardo Villarreal**, Minister, Mexican Ministry of Economy
- **Maximiliano Salvadori Martinhão**, Secretary for Technological Development and Innovation Brazilian Ministry of Science, Technology, Innovation and Communication

11:30 – 12:00

Coffee Break

12:00 – 13:30

Manufacturing Industry as Value Added for Society

Well-being and societal prosperity are shaped by the following key dimensions that should be taken into account simultaneously: health, education, personal activities including work, political voice and governance, social connections and relationships, and environment conditions. As the global economy continues to transform, many potentially disruptive production technologies are emerging and some of them are already drivers of the fourth industrial revolution. At the same time, various barriers might hinder the potential impact of the next production revolution on productivity, growth, jobs and well-being.

The session aims at debating about the relationship between economic growth, human well-being, and manufacturing development.

- **Marco Lavazza**, Vice President, Luigi Lavazza (**Keynote**)
- **Luc Triangle**, Secretary-General, IndustriAll Europe
- **Annamaria Simonazzi**, Professor of Economics, Università La Sapienza di Roma
- **Stefano Firpo**, Director General, Italian Ministry of Economic Development
- **Julien Tognola**, Director of the Industry Department, General directorate for enterprise, French ministry of economy and finance



13:30 – 14:30

Networking Lunch

14:30 – 16:30

International Policies Advancing Manufacturing development and Global Cooperation

Global challenges in industrial development and a balanced transformation of the international economic landscape will drive diverse domestic and international policies.

Within the new industrial era, economic, societal and environmental transformations along with technological breakthroughs in areas such as robotics, the Internet of Things and Artificial Intelligence are accelerated. Automation, enabled by information technology, is transforming traditional manufacturing processes and the nature of work itself, promoting new business models.

The session will discuss how to harness the full potential of the fourth industrial revolution to boost competitiveness in the global manufacturing industry by reinforcing international cooperation, promoting investment, and advancing the proper application of technology.

- **Antti Peltomäki**, Deputy Director General, European Commission, DG Growth
- **Ralf Michael**, Wagner, Chief Operation Officer Cloud Applications Solutions, Siemens
- **Zhao Qing**, Senior Vice President, Tus Holdings
- **Ilknur Inam**, Director General, Turkish Ministry of Science, Industry and Technology
- **Shinji Tokumasu** Director, Manufacturing Industries Policy Office, Manufacturing Industries Bureau Ministry of Economy, Trade and Industry (METI)

16:30 – 17:00

Coffee Break

17:00 – 18:30

Solving the Manufacturing Skill Challenges: Creating a Skills Marketplace

The confluence of rapid technological change, globalization and aging populations is transforming manufacturing with unprecedented speed. Workforce requirements are evolving, new types of job are emerging, but, at the same time, skill shortage, mismatch and obsolescence represent a key challenge for industries and societies worldwide. How can we ensure education and evergreen learning for manufacturing workers and managers? Furthermore, how can we shape novel opportunities for effective skill utilization in smart, inclusive and sustainable Industry 4.0 workplaces, in order to strengthen economic and social growth, without leaving anyone behind?

The session aims to assess how information on job evolution and skill requirements are used by countries to review and renew and develop their education and training systems. Moreover, it will identify and discuss development of national and international frameworks that support coordination between education and training, skilled workers, and the labor market to create a skills marketplace.

- **Diego Andreis**, President, Ceemet
- **Jayson Myers**, CEO, Next Generation Manufacturing Canada
- **Jorge Ramos**, CEO EMEA, Embraer
- **Valérie Ferret**, Vice President of Learning Experience (Education), Dassault Systèmes

18:30 – 18:50

Keynote

- **Kathleen Mitford**, Executive Vice President, PTC

19:00

Gala Cocktail and WMF Video Contest Prize Giving

- **Fabrizio Sala**, Vice President and Regional Minister for Innovation, University, Export and Internationalization, Regione Lombardia

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AGENDA

09:10 – 09:30

Keynote: Enabling social integration through economic growth derived by manufacturing

- **Antonio Tajani**, President, European Parliament (TBC)

09:30 – 11:00

Manufacturing as a powerhouse of emerging countries

How will manufacturing affect the development of emerging countries? The role of the manufacturing sector in emerging countries is to create employment and wealth, even if it has also been observed that there are gaps in human skills, education and technology. That represent an obstacle in adequately address the manufacturing sector's ever-changing skill and technology needs.

Furthermore, as reported in the IMD Policy Paper of 2017, public investment has broadly increased in developing countries over the last 15 years. Despite this, the investment in infrastructures remain considerably lower than in other countries. Infrastructure services are primarily provided by the public sector and private participation is largely channeled through PPPs, which are mostly concentrated in the energy sector.

The session aims to explore the current situation of manufacturing development in emerging countries and the importance of embracing the digital revolution.

- **Li Yong**, Director General, UNIDO (**Keynote**)
- **Prasidh Cham**, Senior Minister, Cambodian Ministry of Industry & Handicraft
- **Pichet Durongkaveroj**, Minister, Thailand Ministry of Digital Economy and Society
- **Carlos Magariños**, Ambassador of Argentina in Brazil, Argentinian Government

11:00 – 11:15

Keynote

- **Vincenzo Boccia**, President, Confindustria

11:15 – 11:45

Coffee Break

11:45 – 13:15

The role of financial investment on manufacturing development

Businesses cannot develop without adequate financial resources. A fast-changing scenario such as that of the fourth industrial revolution should be accompanied by a modernization of relations between banks and businesses, implemented at regional, national and international level.

Moreover, bank credit is no longer sufficient to meet the financial needs of businesses, therefore it is becoming necessary to mobilize private sources of long term financing for the real economy, with particular attention to SMEs.

This session aims at discussing the role of both traditional and alternative credit instruments to finance the activities of manufacturing companies.

- **Gordon Bajnai**, Chairman, Global Advisory Board of Campbell Lutyens (**Keynote**)
- **Carlo Ferro**, Executive Vice President, STMicroelectronics
- **Peter Lawler**, Executive Vice President, BDC Advisory Services Business Development Bank of Canada
- **Adiari Vazquez**, Investment Manager, Caixa Capital

13:15 – 14:15

Networking Lunch



14:15 – 15:45

Resource aware manufacturing: a circular economy to satisfy the sustainable development goals

The circular economy represents an answer of industry to a series of challenges such as waste generation, resource scarcity and sustaining economic benefits. Industries, some years ago, began to implement strategies for sustainable development. The circular economy represents the most recent strategy able to integrate the economic activity and environmental issues in a sustainable way.

The session will present case studies and environmental strategies to demonstrate how a circular economy could benefit the environment while boosting competitiveness and resilience and will also show how the manufacturing sector can achieve the UN Sustainable Development Goals (SDGs).

- **Flemming Besenbacher**, Chairman, Carlsberg
- **Peter Droell**, Director of Industrial Technologies, European Commission, DG Research and Innovation
- **Jay Rogers**, CEO, Local Motors
- **Carlos Alvarez-Pereira**, Founder and President, Innaxis Foundation & Research Institute

15:45 – 17:30

Cyber industrial revolution: shaping the future factory

Nowadays, one of the features of the Industry 4.0 is the emergence of digital factories that are characterized by a living network of machines, people and products enabling the real-time optimization of the entire manufacturing flow. It promises higher production efficiency not only of factory floors but also of the entire value chain of manufacturing, supplier and distribution.

The session focuses first on how the fourth industrial revolution shapes the future factory. It presents the emerging technologies that could enable and define future 5G mobile communication standards and cellular networks and remark the applied digital technologies such as additive manufacturing, robotics and augmented reality. Secondly, the session will investigate the challenges of the digital industrial revolution about standardization and cyber security, sharing the opinions of the representatives of some of the main actors playing in this field.

- **Ilijana Vavan**, General Manager Europe, Kaspersky Lab
- **Bryan Tantzen**, Senior Director, Industry Solutions, Cisco Systems
- **Martina Koederitz**, Global Industry Managing Director, IBM
- **Kenneth Budka**, Senior Partner, Nokia - Bell Labs
- **Lucilla Sioli**, Head of Unit, European Commission, DG Communications Networks, Content and Technology
- **Fabio Barsotti**, EVP Manufacturing and Program Management Optimization, Leonardo

17:30

Closing Cocktail

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