



Big Data Innovation & Research Excellence

COMPETENCE CENTER INDUSTRY 4.0

2ND ANNUAL CANADA-ITALY
BUSINESS FORUM ON
ARTIFICIAL INTELLIGENCE

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THE ITALIAN *INDUSTRIA 4.0* NATIONAL PLAN: GUIDELINES & MEASURES

Italian Industrial Sector peculiarities



- ✓ Limited number of large industry champions able to lead Italian Manufacturing transformation
- ✓ Deeply based on SMEs
- ✓ Key role of universities and research centers in development/innovation
- ✓ Strong cultural traits of finished products

Government Measures



- ✓ Skills on I 4.0:
 - ✓ Specific school programs
 - ✓ Academic & research paths
 - ✓ Competence Centers & DIH
- ✓ Innovative investment
 - ✓ Private Investment
 - ✓ Venture capital
 - ✓ Start-up
- ✓ Enabling Infrastructures
- ✓ Public Support Instruments

The Italian government earmarked ≈ €20 billion for the period of 2017-2020.

THE 8 COMPETENCE CENTERS



4 Universities + 1 Public Body
+ 39 Companies

**DEMONSTRATION ISLANDS ON
KEY ENABLING TECHNOLOGIES**

+ CIM4.0

2 Universities + 23
Companies

MANUFACTURING 4.0

4 Public Bodies + 33 Companies

**STRATEGIC INFRASTRUCTURE
SECURITY and OPTIMIZATION**



127 Members including 35 Founders,
13 Research Bodies, 97 Companies, etc.

**ADVANCED ROBOTICS and
ENABLING DIGITAL TECHNOLOGIES**



SMACT

8 Universities + 4 Public Bodies
+ 30 Companies

SOCIAL, MOBILE, ANALYTICS, CLOUD, IOT



5 Universities + 7 Public Bodies
+ 45 Companies

BIG-DATA and ADDITIVE MANUFACTURING



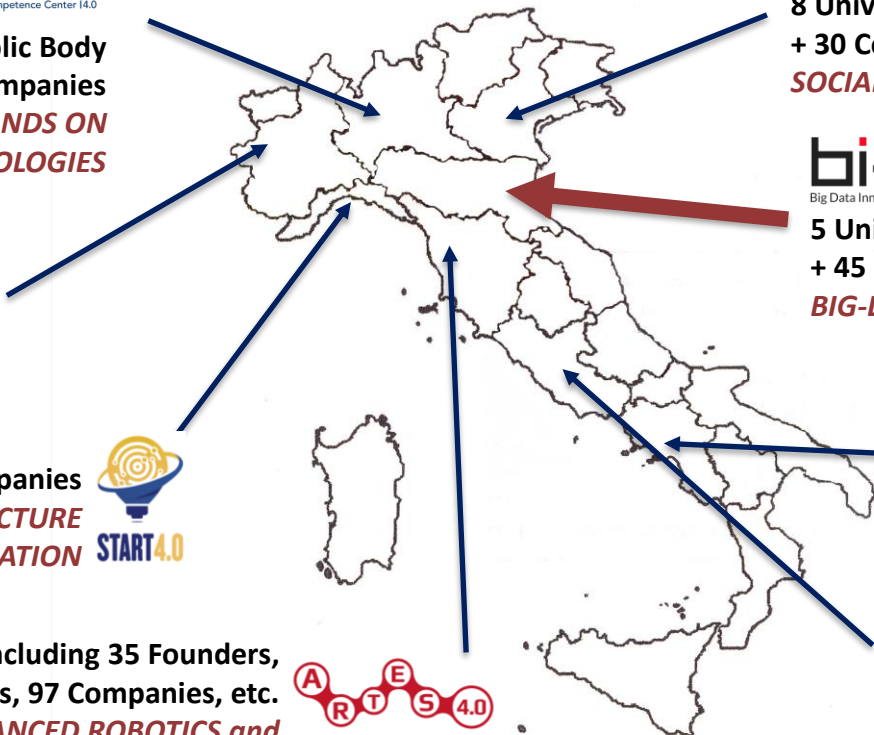
8 Universities + 131 Companies
(including 109 SMEs)

**SOCIAL TECHNOLOGIES and
BLOCKCHAIN**



7 Universities + 2 Public Bodies
+ 37 Companies

CYBER-SECURITY



OVERVIEW ON BI-REX

Who we are

BI-REX is one of the 8 Italian Competence Centers funded by the Italian Ministry of the Economic Development, within the Industry 4.0 National Plan.

Our **public-private Consortium**, born in 2018, has its headquarter in Bologna (Italy) and **gathers in partnership 57 players** among Universities, Research Centers and Companies of excellence: ***our main focus is on Big Data.***

Our Mission

- ❑ To collect the know-how of the Emilia Romagna High Technology network with a national and international road map.
- ❑ To support companies in their digitalization and innovation processes and in the adoption of enabling technologies with a view to Industry 4.0.
- ❑ To facilitate the exchange of best practices on Technology Transfer

OUR PARTNERS

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Institutions

Università di Bologna, Università di Ferrara, Università di Modena e Reggio Emilia, Università di Parma, Università Cattolica del Sacro Cuore, Consiglio Nazionale delle Ricerche, Istituto Nazionale di Fisica Nucleare, Istituto Ortopedico Rizzoli, CINECA, Bologna Business School, Fondazione Golinelli (Host CC Headquarter), ART-ER

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End User Companies

Philip Morris International, IMA, Samp, Bonfiglioli Riduttori, Sacmi, Ferrara Bio, Poggipolini, Aetna, Rekeep, CNS, Modis, UPMC, Marposs, Conad, Hera, ENI, Ducati, Rem-Tec, Camst, Link Italia, Circle, Marposs Italia, CRIF, Lincotek Medical, Filippetti, Alascom, Service

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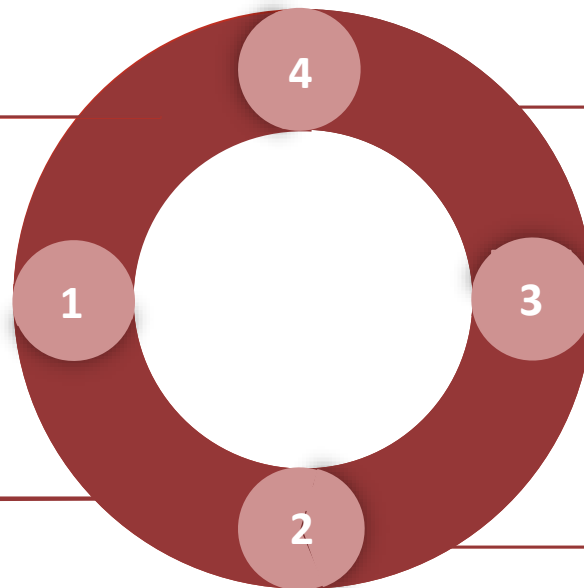
Provider Companies

Intesa Sanpaolo, Altair, PTC, Manz, TIM, Siemens, Eascon, IBM, Data River, Juno Design, Flash Battery, Nier, DVP, Nextema, Energy Group, Etna Biotech, Fancy Pixel

OUR STRENGTHS AND SERVICES

An **orientation, training and consultancy** system for companies, closely integrated with the Digital Innovation Hubs

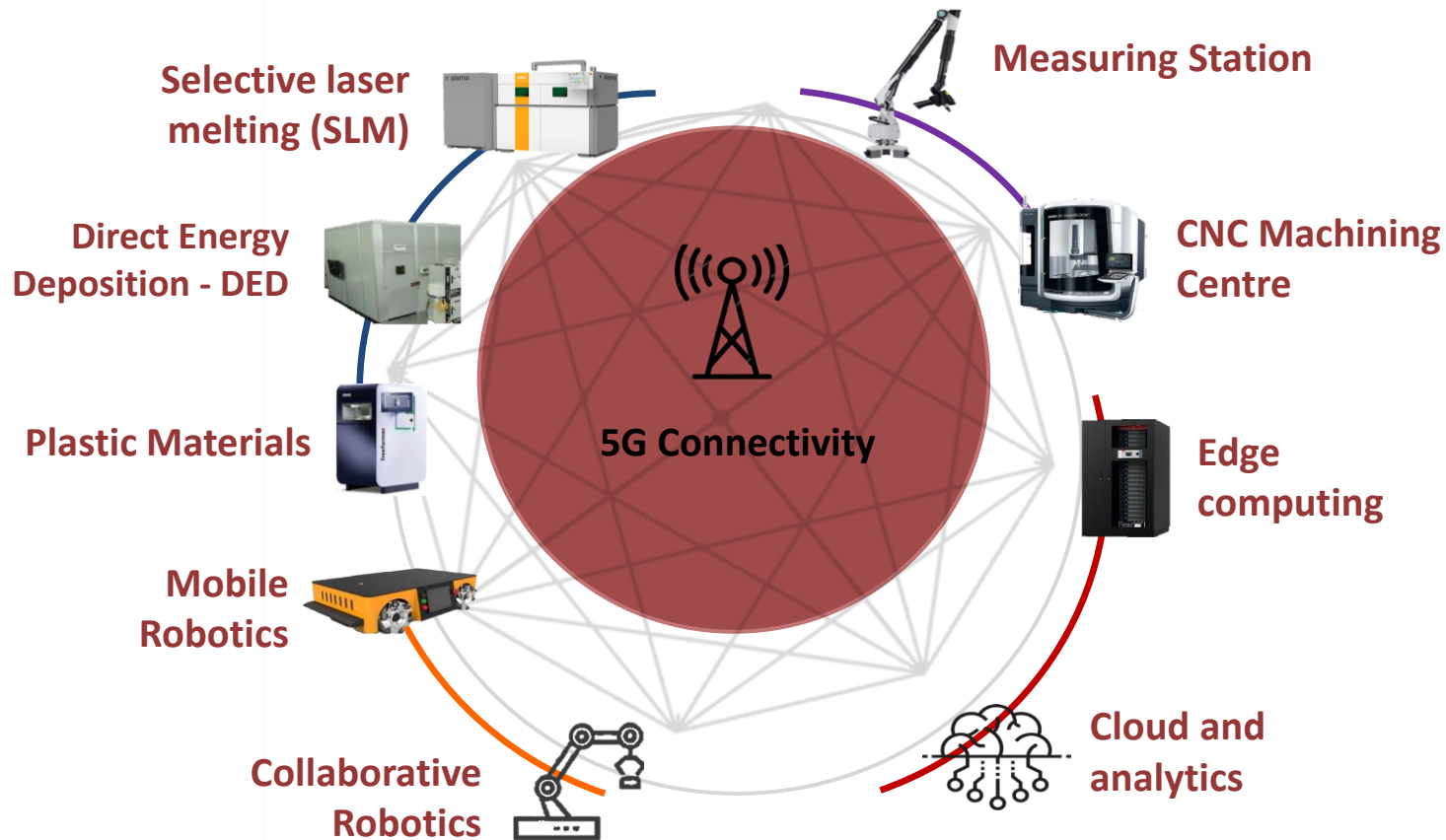
A wide ecosystem including **industrial innovation projects** and collaborative public-private industrial research projects



Dedicated areas within our structure where conferences, meetings, training and coworking activities can be implemented

A **demonstration production plant (Pilot Plant)** where Industry 4.0 enabling technologies can be implemented and optimized

OUR PILOT PLANT



OUR PILOT PLANT: A SHORT VIDEO



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