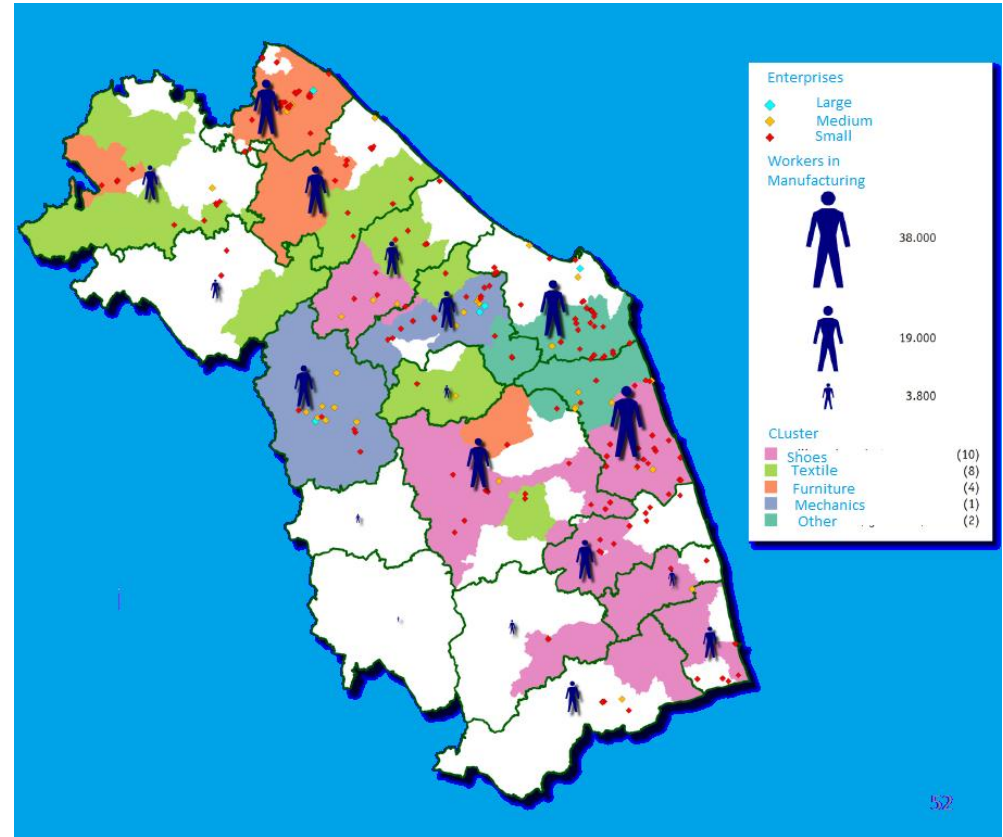# Marche
Towards a RIS3 strategy

Palma de Mallorca, February 2013
Patrizia Sopranzi
Anna Torelli
Alessandro Valenza,

# Expectations from the Peer-Review Workshop

- The Peer – Review exercise has already helped us to shape the process

- Our main expectations from the peer review are focussed on the following topics:

  - How to enhance the international partnership
  - Policy delivery tools (the definition of which is still in process) especially on:
    - The financial leverage
    - The involvement of bank system
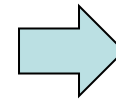
The regional evolution toward the RIS3

- **2000-2006,** Innovation has been promoted adopting a sectorial approach.

- **2007-2013**, Innovation has been supported by clustering groups of SMEs and Universities.

- The on going evaluation 2007-2013 and the ex ante conditionality provided the opportunity to define a more articulated "smart" strategy.
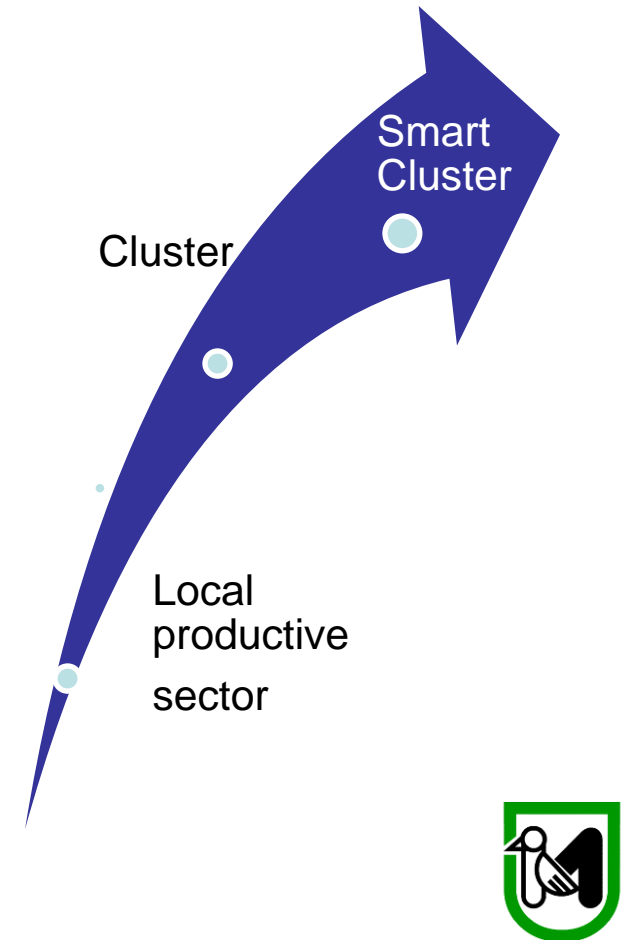
Strategic Vision

Evolution of the regional specialisations towards an **Innovative Cluster structure**

to support the upper quality traditional productive vocations

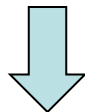To develop new activities in high tech and smart domains

Strategic Vision

Evolution of the regional specialisation towards an **Innovative Cluster structure,**

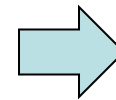to support the upper quality traditional productive vocations
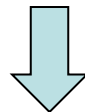
To develop new activities in high tech and smart domains

In order to:
- exploit the related variety of the regional industrial system
- strenghten the regional competitiveness in global markets

MAIN STEPS to identify smart specialization

Top Down: identify assets → Productive → Commercial → Scientific

Evaluation → Counterfactual → Case study

Bottom up: Mapping knowledge → analysis based on the projects and technologies assisted by regional policy calls
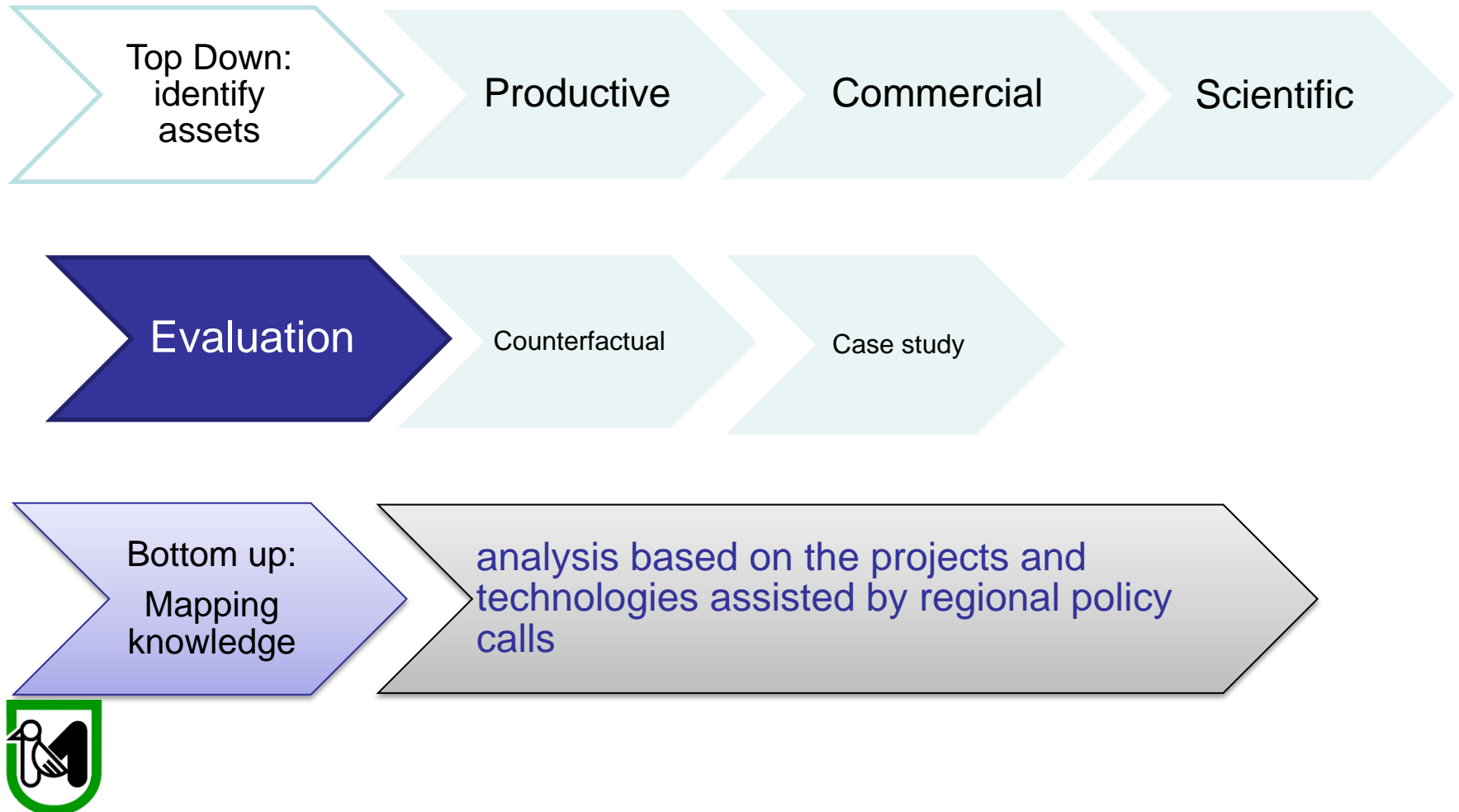
MAIN STEPS:
Knowledge Mapping

Business:

- DBASE implementation of financed projects at the regional level with national and EU resources

- Analysis by sector (ATECO code)

- Analysis of technology areas (IPC codes)

- Analysis of the innovation degree by independent experts (classification item)

- Correlation between business and technological environments with a focus on home automation

Academic

- Identification of scientific and academic asset (infrastructures, human resources, cutting edges technologies excellences and projects).

- Focus group with Universities

Creating http://www.marcheinnovazione.it/ Internet portal to facilitate the matching of supply and demand

Main competitive advantages

- high concentration of manufacturing and entrepreneurial activity, mainly organised in districts

- high export capacity, also in emerging markets

- 4 Universities and a share of graduated higher than the national level

Key challenges

Vulnerability (ESPON TIGER)

- Low capitalisation and small size of firms,
- Low productivity
- Low development of innovation and research activity
- Increasing vulnerability in the manufacturing sectors of specialisation
- Brain drain
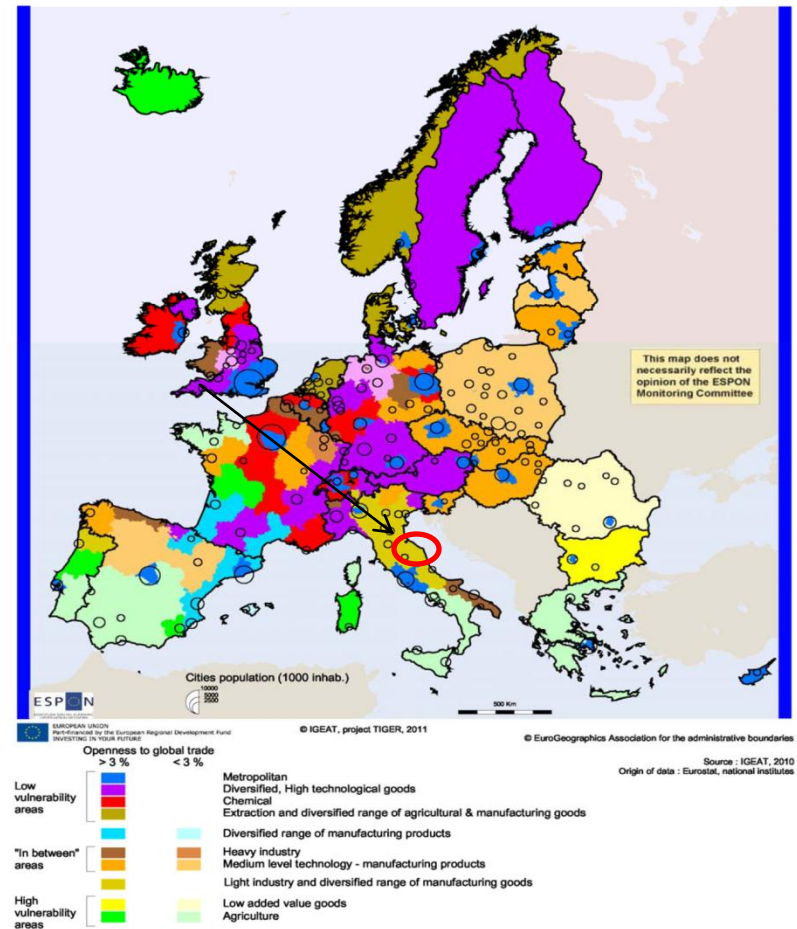
Main opportunities

Development Patterns

ESPON: KIT

Imitative innovation area
Smart and creative diversification area
Smart technological application area
Applied science area
European science-based area
No data
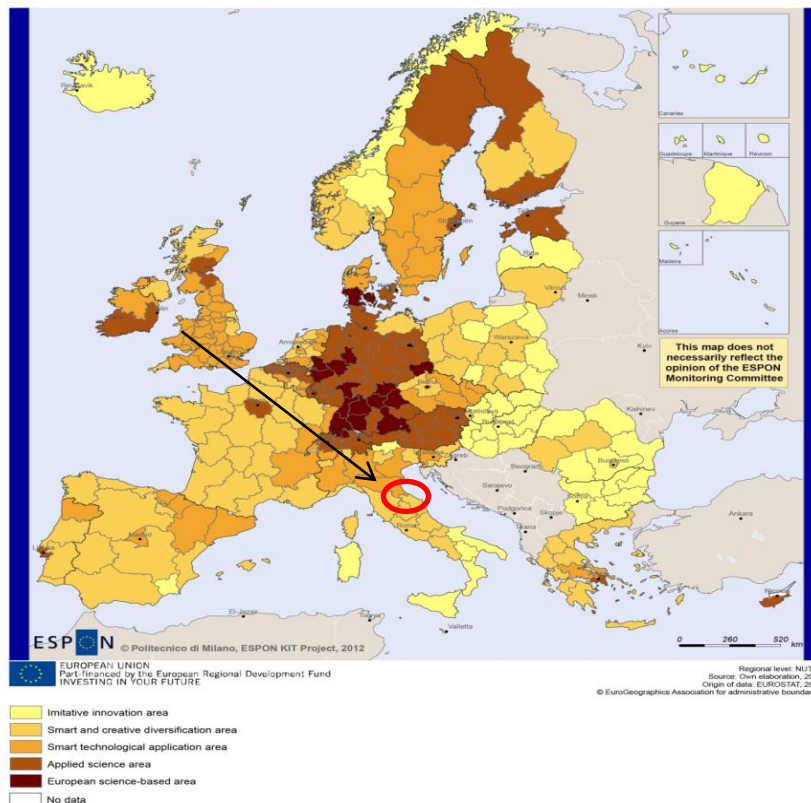
Regional Pattern of development shaped by:

- Increasing global request for high quality production
- Behaviour change in the key regional actors
- New Firms active in emerging high tech field
- National clusters:
  - A) Smart factory
  - B) Smart tech. for public environment and domestic ambient

Entrepreneurial dynamics

Assessing entrepreneurial dynamics

Weakness	Strenghts
Scarce interest in European Calls	Growing number of patents and licences
Weak role of the credit system as an alley for change	Attitude to creativity
Dimension	Territorial network of innovators
family business model and generational cliff make changes difficult	

Strategy of involvement

– Business community is involved through various thematic focus groups and workshop

– In order to enhance the involvement of stakeholders, an a open forum discussion and a prize for the best idea on innovation will be launched

– continuous dialogue with all the quadruple helix actors will be promoted trough personal interview.

From tech. and sectors to Smart Specialisation

S3 SMART SPECIALISATION PLATFORM

Enabling tech. and sciences

| New Materials | ICT and electronics | Meccanics and energetics | Bio tecnology | Aging and social Science |

Meccanics

Home electtric appliance

Furniture

Shoes

Home automation

Mechatronics

Sustainible Manufacturing

Health and Well being

Smart specialisation versus regional challenges

Enabling tech. and sciences

New Materials	ICT and electronics	Meccanics and energetics	Bio tecnology	Aging and social Science
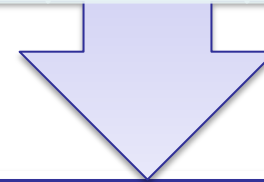
Home automation

Mechatronics

Green Manufacturing

Health and Well being

Demographic change

Decline of manufacture

Environmental Challenge

Smart specialisation toward smart clusters

Smart specialisation toward smart clusters

Home and building automation
"Smart objects" and "Smart appliances"
Comfort Tech. Energy efficiency, safety

Mechatronics and robotics
Assistive technologies for independent living
Sensor networks

Electronic systems for data acquisition and communication, Embedded control systems
Ambient intelligence & Multimedia technologies
Virtual prototype, Intelligent user interface

Home automation

Mechatronics

Sustainable Manufacturing

Health and Well being

Regional Digital Agenda

Key process steps

Infrastructures and Services

Analyzes the context, the potential and needs of ICT

Define the key priorities

Integrate with regional S3

- Broad band high speed even in rural areas (EARDF)

- Regional cloud infrastucture

- E.governament (es. Government Open Data for local Public Administrations initiative and TEO: Tender Opportunities for SMEs)

- ICT services for SMEs (Es. G2B Services, MCUBE ecommerce - Marketplace for Mobile apps)

Looking beyond our Region's boundaries by….

- being involved in number of EU projects to share insights and information: IKTIMED (www.iktimed.eu) JADE (www.jadeproject.eu), INNOVAGE (http://www.innovage-project.eu) , NEXT,

- Carrying out the analysis of scientific and technological and economic(productive and commercial) specialization comparing the regional position with European and Italian level,

- Assessing the vulnerability of each sector against the emerging economies,

- Taking part into the National clusters (Public enviroment and private ambient / Smart Factory),

- Addressing Horizon 2020.

Priorities setting

Process of priority setting

Revision

Analysis of regional asset

Political validation

Stakeholder Consultation
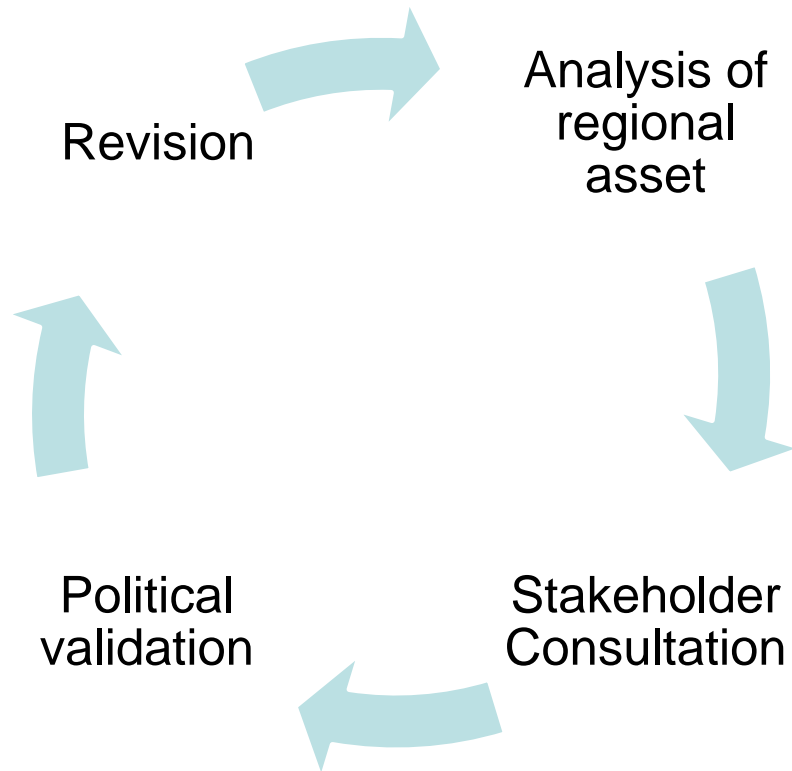
An on going and continuous process….

1. The main regional assets and challenges are identified
2. Criteria are set out: regional strengths, competitiveness, internal social challenges
3. Key priorities go under consultation
4. Policy maker take responsibilities on their choice
5. Revision

From Vision to Actions
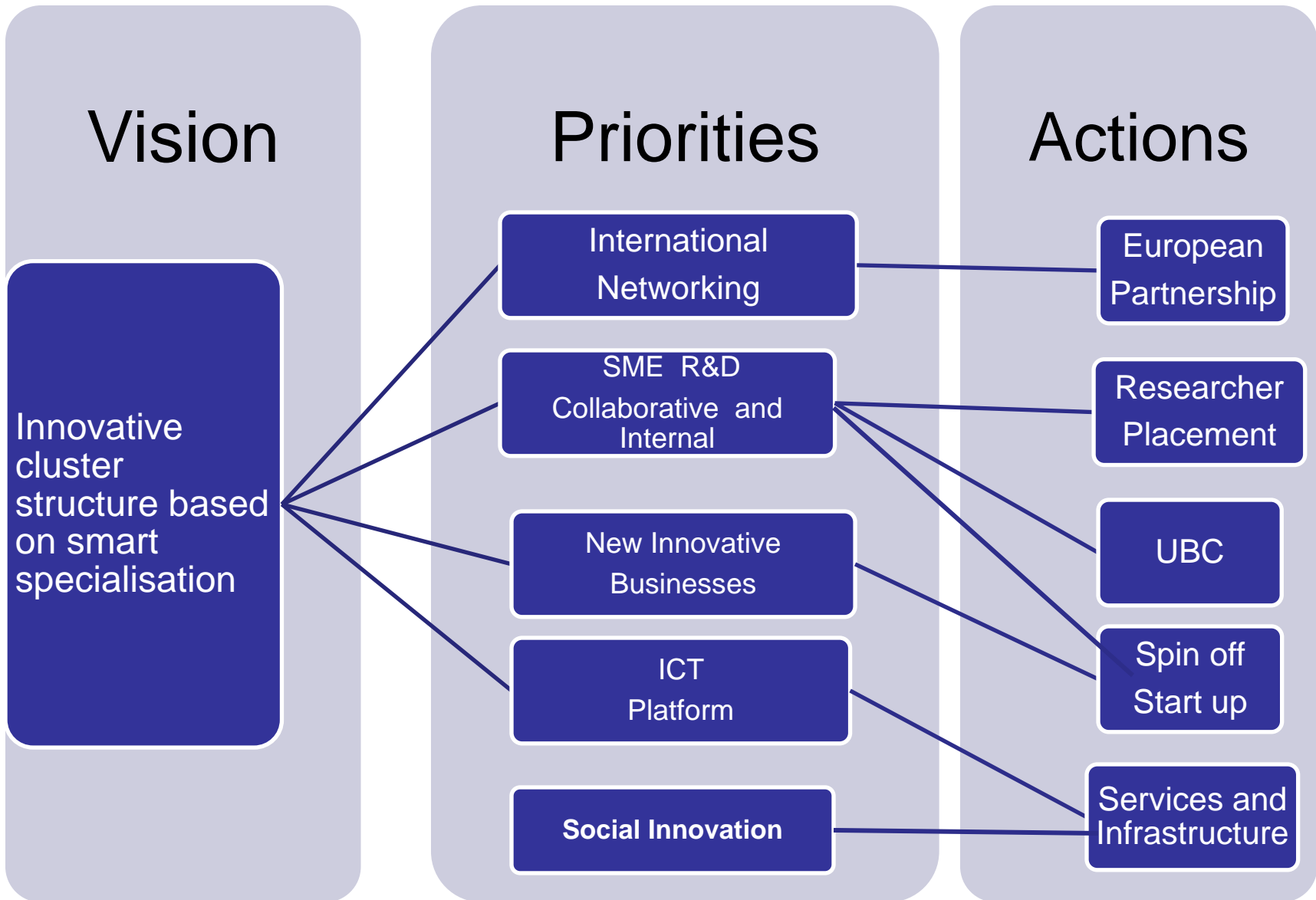
From actions to tools and sources

	ERDF	ESF	EAFRD	National and Regional
UBC	Grant , and loans	Incentive		Grants and loans for National Cluster
RESEARCHER PLACEMENT	Venture capital	JOINT PHD		
START UP - SPINOFF	Grant and ICT services for SME			
ICT	PCP	Grow UP Assistance	Rural ICT Infrastructures	Grants for e-health and "smart objects"
INFRASTRUCTURE - SERVICES				
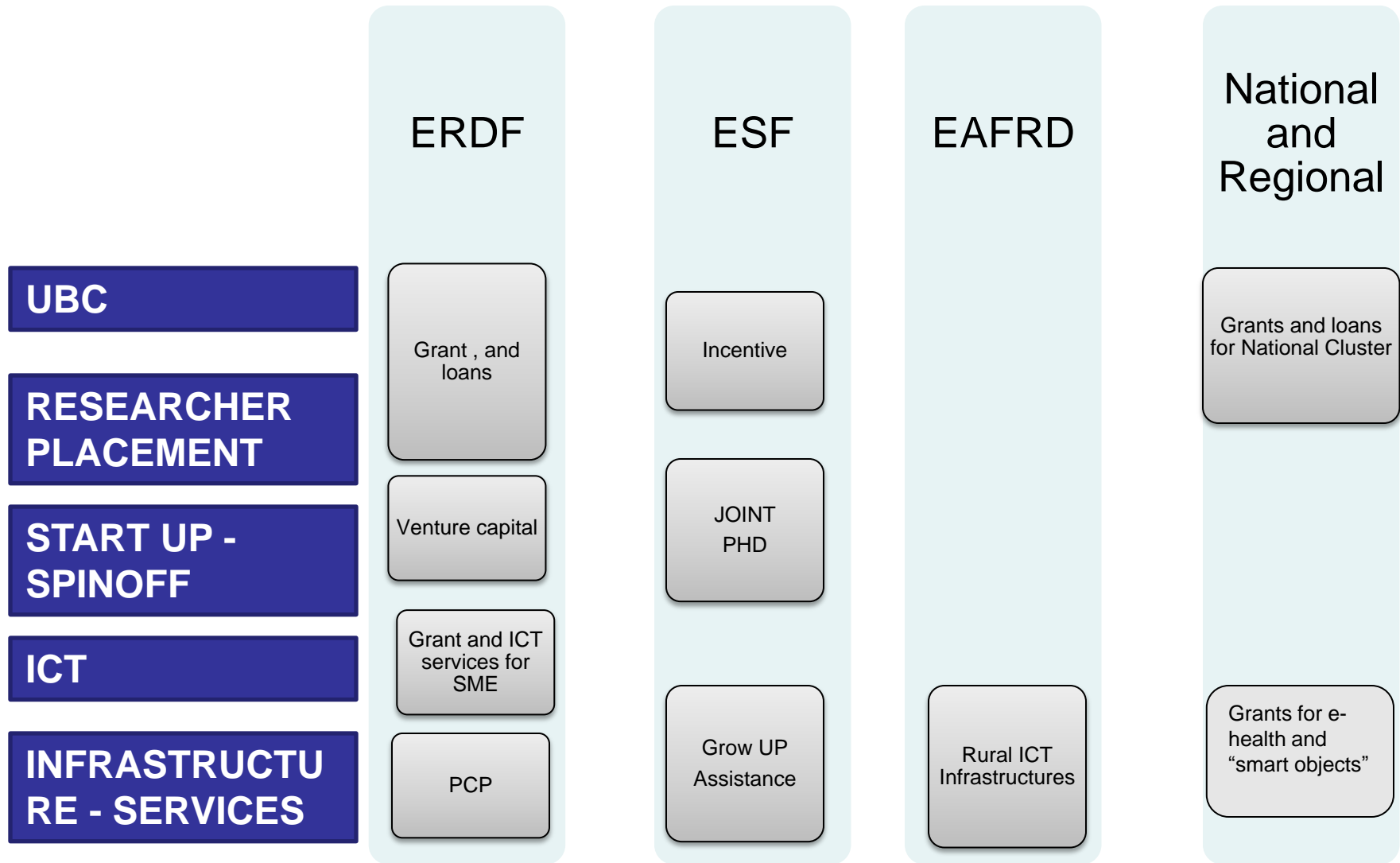
Other potential resources

- **HORIZON**
- LIFE LONG LEARNIG PROGRAMMES
- Other initiatives from the EU FLAGSHIP
- BEI
- EUROPEAN TERRITORIAL COOPERATION (IPA, ITALY-CROATIA, MED, SEE)
- PRIVATE FUNDS FROM:
  - PRIVATE & PUBLIC PARTNERSHIP
  - FOUNDATION

Governance

Management

Drafting strategy: regional manager , consultancy, academics

Consultation

Scientific committee: University and independent experts

Stakeholder round table

Business and social representative

Credit system

Knowledge system

Chamber of Commerce

Innovation and technology transfer centres

Information and comunication

Focus Group on key issues

Web contest

Open consultation (blog)

Measuring, evaluating, revising

SMART SPECIALISATION PLATFORM

Measuring	Evaluting	Revising (mid term and final)
Set of context indicator ➔	On going evaluation (3 years) (Up dating of Context analysis	➔ Peer review with other 4 regions
Set of Performing indicator ➔	qualitative - case study) ➔	
Set of result indicator ➔ a) Economic / financial b) intangible (linked to behavior's changes)	Final evalaution (2020) ➔ (Quantitative counterfactual)	Stakeholders regional table

Indicators

Result: main features

- Addressing the "change" in the **"additional "behaviour** Regional Innovation and Research system
- Few (4- 5)
- Qualitative and quantitative

Indicators

Result: main features	Result: what they measure

- Addressing the "change" in the **"additional behavior"** within Regional Innovation and Research system
- Few (4- 5)
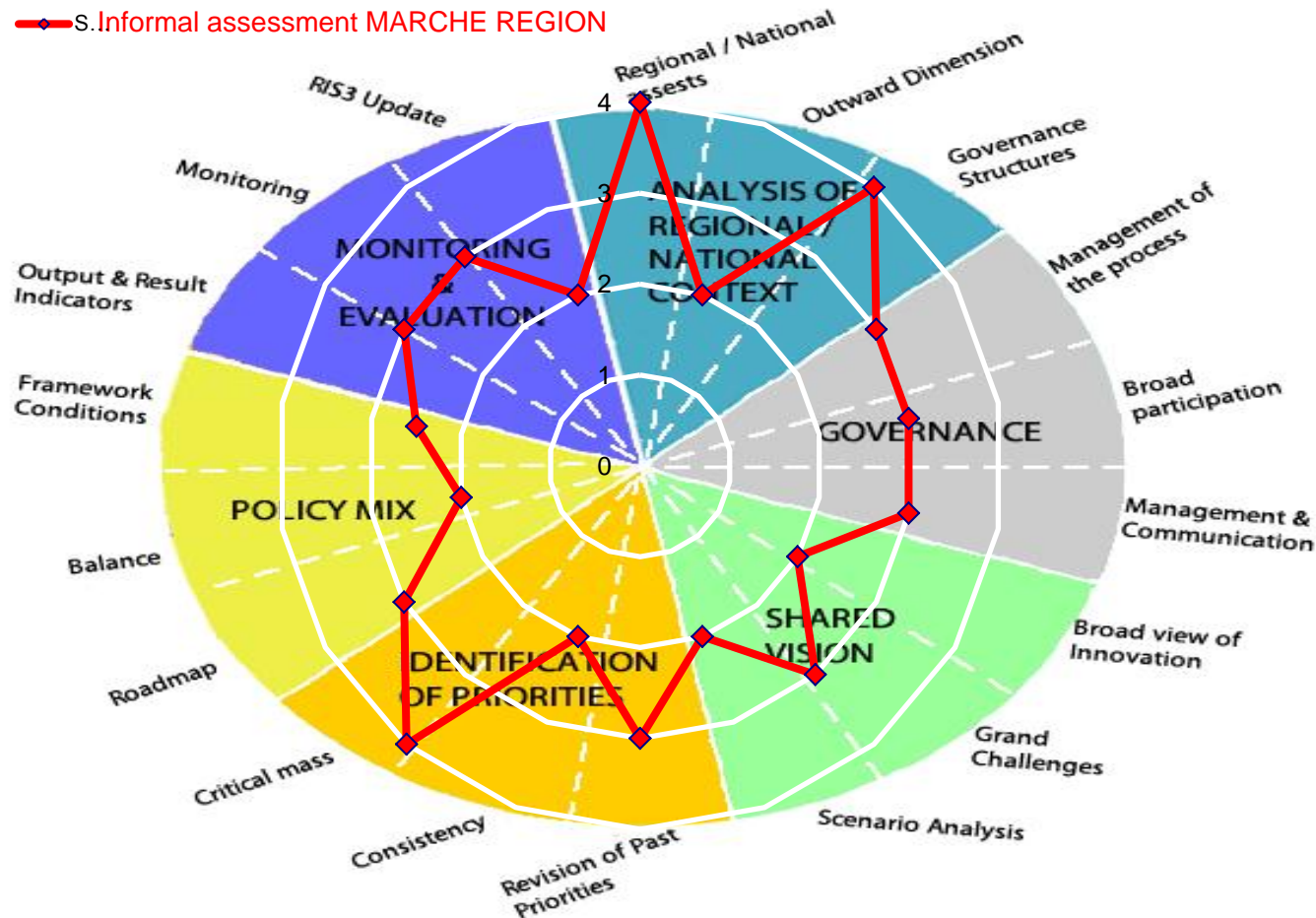- Qualitative and quantitative

- The collaboration Business – University
- Networking among SMEs (cross fertilization)
- The R&D Human capital in the SME
- The technology transfer (from Univ. To SME)
- Classic Business performance indicators (secondary effect – counterfactual)

self-assessment

Driving economic change through smart specialisation/RIS3

s.Informal assessment MARCHE REGION

Summary and next steps

Vision
- Transition from sector to smart clusters

Smart cluster
- Sustainable Manufacturing
- Meccatronics
- Home automation
- Health and Well being

Priorities
- R&D SME Collaborative and Internal
- International networking
- Innovative new business
- Innovative services
- ICT Platform
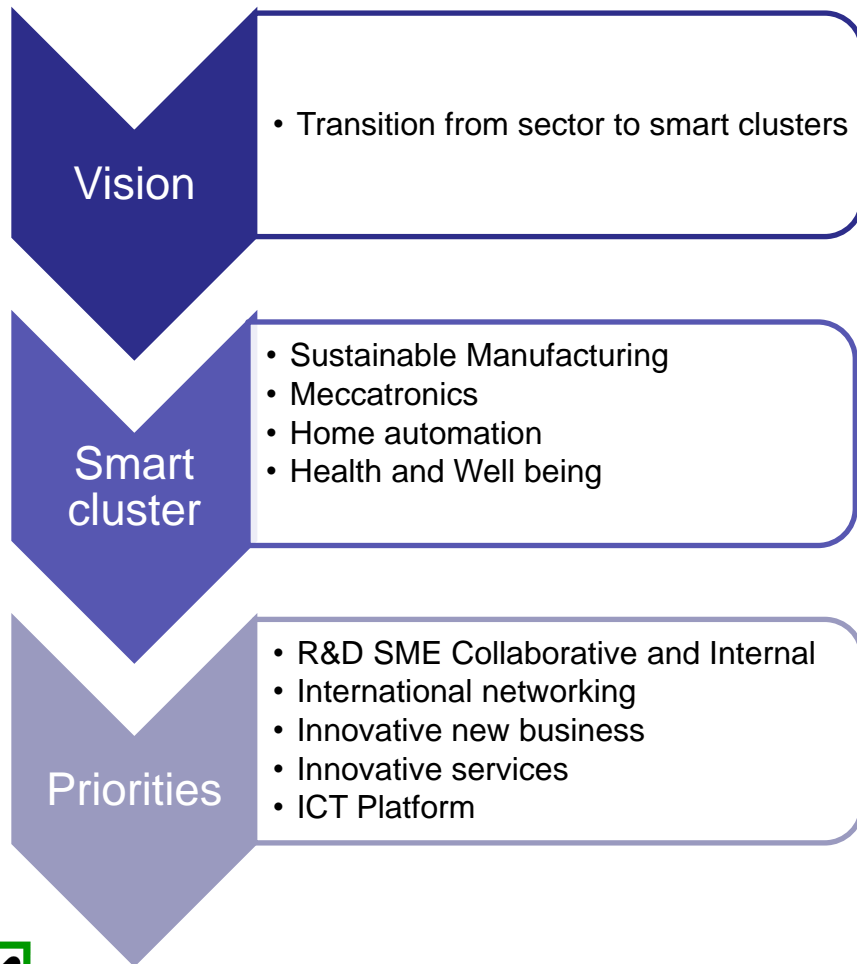
FUTURE MILESTONES
- Fine tuning of Action Plan (especially for the policy delivery tools)
- Shaping +2014 the ROPs (ERDF – ESF)
- Validate the strategy
- Political decision

Issues related to International dimension

- How can we support SMEs in building European Networking exploiting European Programs?

- How can we support Universities going beyond their regional status?

- How can we create links and connections beyond European level in a global value chain perspective ?

WHO	European dimension
SME	Horizon 2020 (and other programs) ETC Programmes – building Community (IKTIMED)
Cluster	Joint actions to adress Horizon 2020
University	Horizon 2020 Marie Curie (International mobility, Universities supported by specific technical assistance)
Project networks	Rewarding mechanism the best networking Projects funded by the Regions (through assistance vouchers) to compete for Horizon 2020

Other issues…..

- We intend to measure the change in behaviour (additionality), do you have some concrete examples of similar result indicator?

- How can we build consensus to "help" policy makers in taking responsibility in smart specialisation?

- Why don't figure out to establish a European Network which will allow a mid term peer reviewing exercise among similar regions?

Statistical annex

Economic specialisation: manufacturing system structure

Share of manuf. sectors	Marche	Italy
% of the total employees (2000-07)	29.4%	16.8%
% GDP (2000-07)	23.0%	17.8%
% registered firms (2012)	13.5%	10.0%
% employees per 100 inhabitants	12.0%	7.1%
Firms up to 50 empl. (SMEs)	62%	57%
% employ. in ind. districts (2007)	79.7%	39%

→ **district industrial specialisation**

back

Source: Our elaborations from Istat, Eurostat , Espon, Marcheinnovazione

Economic specialisation: the local labour systems

Colour	Category
Yellow	Textile and clothing
Dark yellow	Leather and footwear
Orange/gold	Furniture
Red	Musical instrument and goldsmith
Grey-green	Food
Magenta	Mechanical equipment and machinery
Green	Primary metal industry
Cyan	Coke, oil refining industry
Blue	Transportation equipment
Brown	Paper, printing and publishing
White	Non-manufacturing areas

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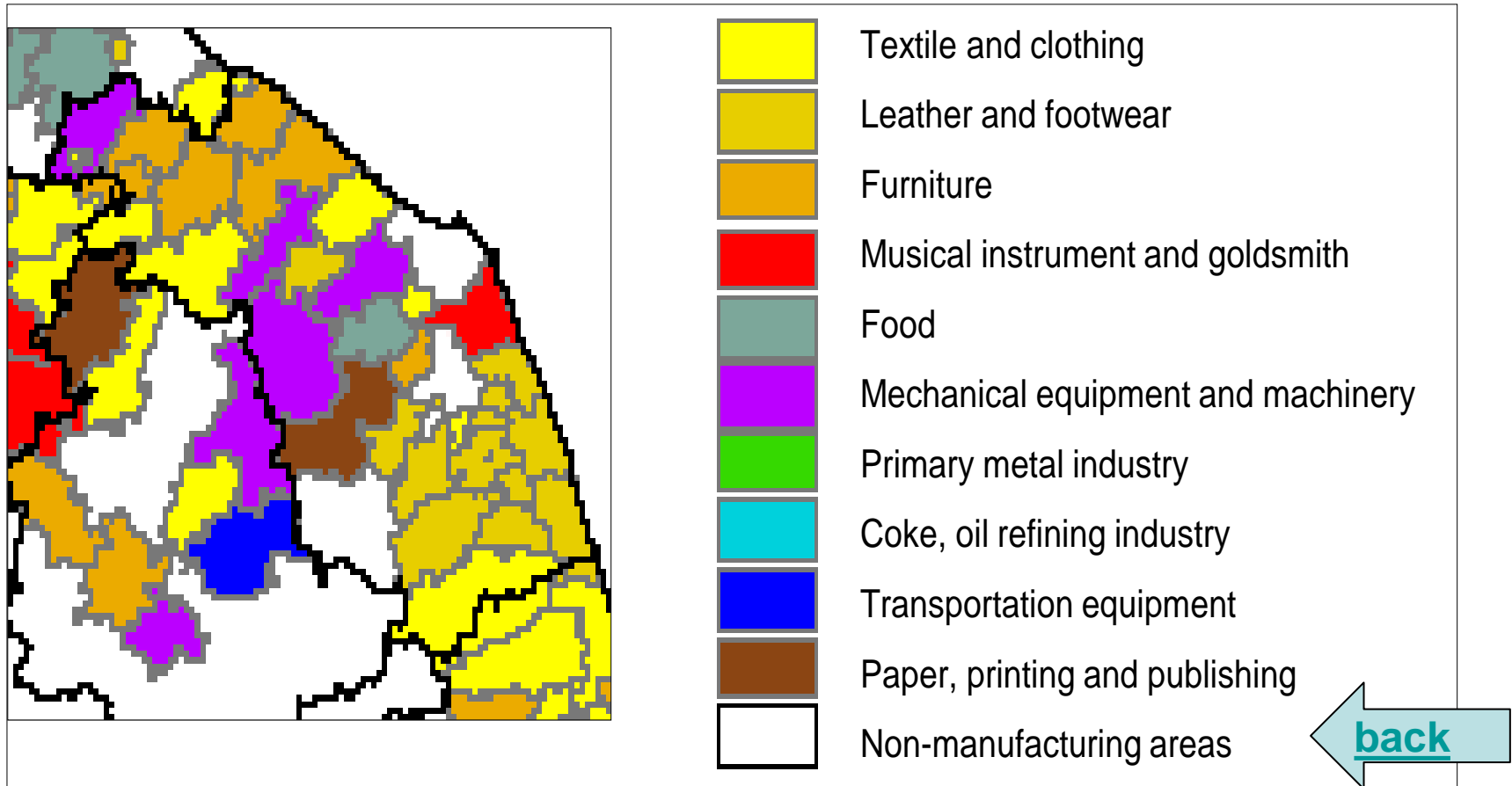
Source: Our elaborations from Istat

Economic specialisation: commercial performance

High propensity to export	1/3 of regional GDP is exported 2012 (II trimester): +4.8% in Marche and +3.5% in Italy
Export capacity	Exports towards emerging economies increased in last ten years (2000-10): 10.6%,
Specialisation of export	Common sectors with China: •7 out of 15 sectors of specialisation in 2000 (i.e. footwear, machinery, furniture, metal manufacture, various manufacturing products, clothing, leather) •10 out of 15 sectors of specialisation in 2010 (new sectors: industrial equipment, transport material, paper)

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Source: Our elaborations from Istat, Eurostat , Espon, Marcheinnovazione

Scientific and technologic specialisation: crucial role of Universities in the R&D Marche system

	Marche	Italia
R&D Expenditure on GDP	0.7 % (2009)	1.3% (2009)
% of the total employees	0.7% (out of the employees); 3.3 per 1,000 inhabitants	4.0 per 1,000 inhabitants

Scientific specialisation (share of University employees in scientific - technic domains)
•**> 80%** at the University employees in Politechnic University (Ancona) and of the University of Camerino
• **30-40%** at the University of Urbino
• **<10%** at the University of Macerata

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Source: Our elaborations from Istat, Eurostat , Espon, Marcheinnovazione

Scientific and technologic specialisation: human capital

	Marche	Italy
Graduated people in technic-scientific disciplines	13,10% (2008)	12,10% (2008)
Tertiary educated people between 25 and 64 years	15,2% (2011)	14,90% (2011)

Source: Our elaborations from Istat, Eurostat , Espon, Marcheinnovazione