

## Digital Scoreboard 2016 and other information relevant for decisions about Digital Innovation Hubs

## Romania



#### **Accompanied by the WG1 Report on Digital Innovation Hubs:**

https://ec.europa.eu/futurium/en/content/report-wg1-digital-innovation-hubs-mainstreaming-digital-innovation-across-all-sectors-final



## European Commission

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### Manifesto for Digital Romania



- The manifesto was launched in November 2016 by Prime Minister Dacian Ciolos.
- It commits to a set of principles aligned with the vision for a digital future. It brings together decision-makers, the ITC and creative industries, communities of programmers and entrepreneurs, civic and professional associations.
- It will support projects, services and data that are open by default, agile, adaptable and flexible solutions, cutting-edge technology, and continuous innovation in the field of digital technologies.

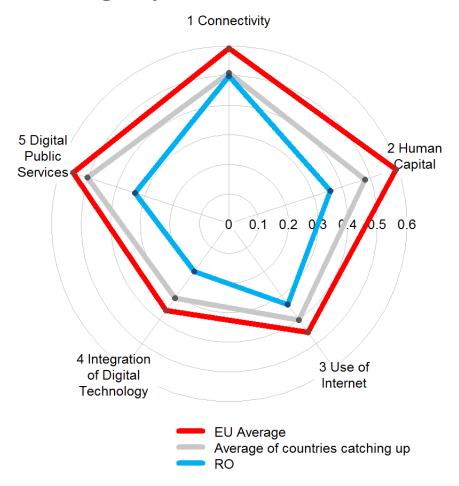
http://gov.ro/en/news/address-by-prime-minister-dacian-ciolos-at-the-international-digital-romania-4-0-industry-forum



### Romania's performance in the DESI 2016

Romania ranks 28 among EU countries.

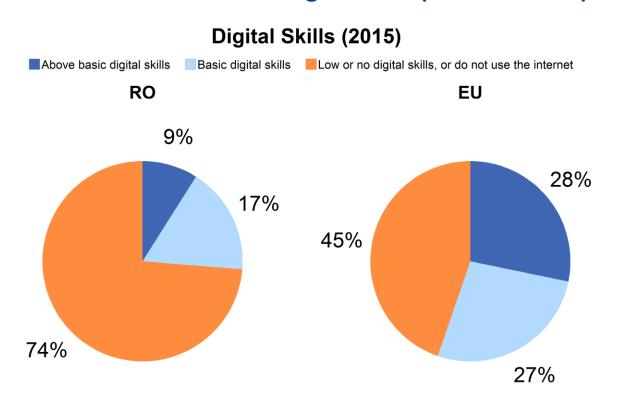
It is part of the group of countries that are catching up.





### Human Capital: Digital Skills

In Romania 17% of citizens have basic digital skills (27% in the EU) and 9% have above basic digital skills (28% in the EU).



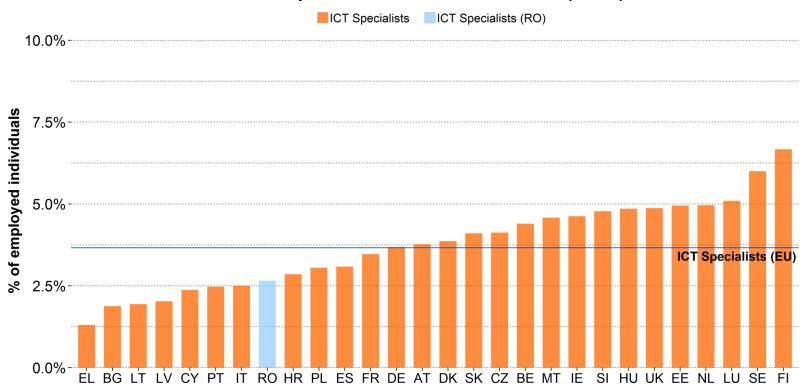
% of individuals



### Human Capital: ICT Specialists in the workforce

In Romania ICT Specialists account for 2.7% of the workforce (3.7% in the EU).

#### ICT Specialists in the workforce (2014)

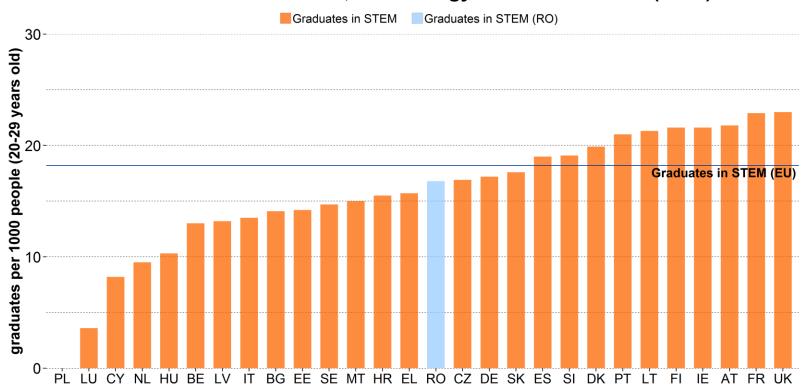




## Human Capital: Graduates in STEM (Science, Technology and Mathematics)

## Romania has 17 graduates in STEM per each 1000 people aged 20-29 years old (18 in the EU).

#### Graduates in Science, Technology and Mathematics (2013)

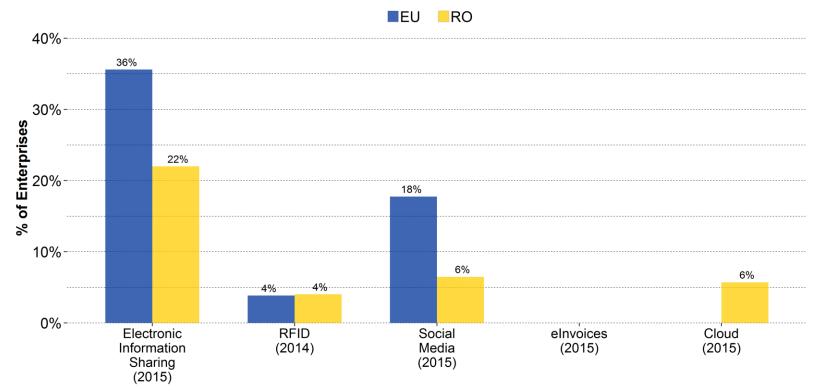




## Integration of Digital Technology: **Business digitization**

Businesses in Romania are adopting different digital technologies to enhance productivity, such as sharing internal information electronically or using RFID, elnvoicing, Social Media and Cloud.

#### **Adoption of Digital Technology by Businesses**



**Digital Scoreboard 2016** 

Source: Eurostat - Community survey on ICT usage and eCommerce in Enterprises

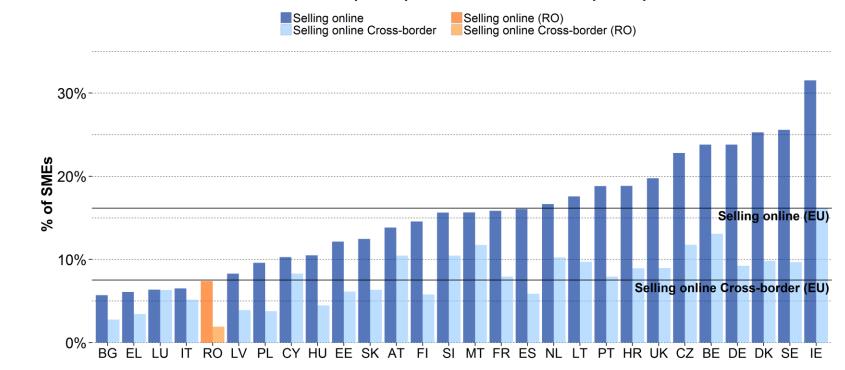


### Integration of Digital Technology: SMEs selling online

In Romania 7.4% of SMEs sell online (16% in the EU).

1.9% of Romanian SMEs sell online to other EU countries (7.5% in the EU).

#### **SMEs selling online** Overall (2015) vs. Cross-border (2015)

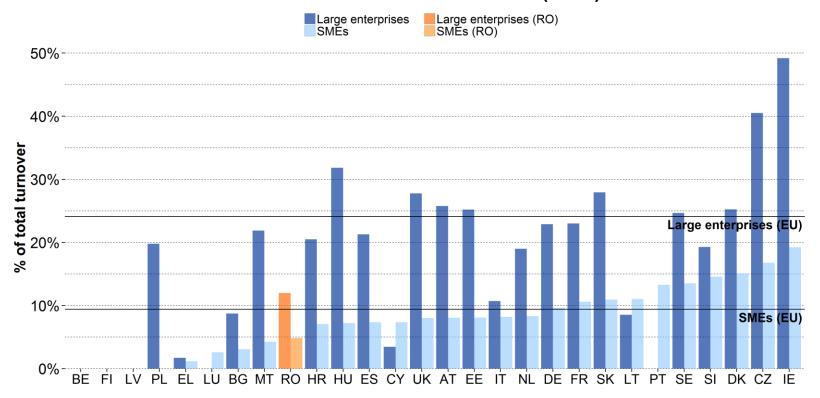




### Integration of Digital Technology: SME Turnover from eCommerce

SMEs in Romania obtain on average 4.9% of their turnover from eCommerce (9.4% in the EU). Large enterprises derive on average 12% of their turnover from eCommerce (24% in the EU).

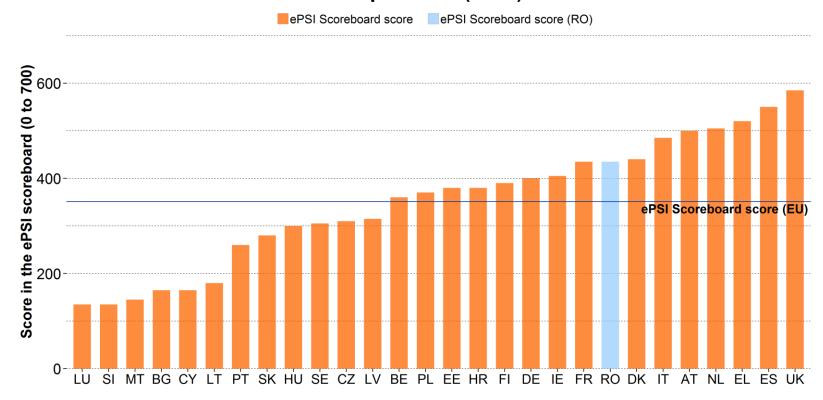
#### **Turnover from eCommerce (2015)**





### Digital Public Services: Open Data

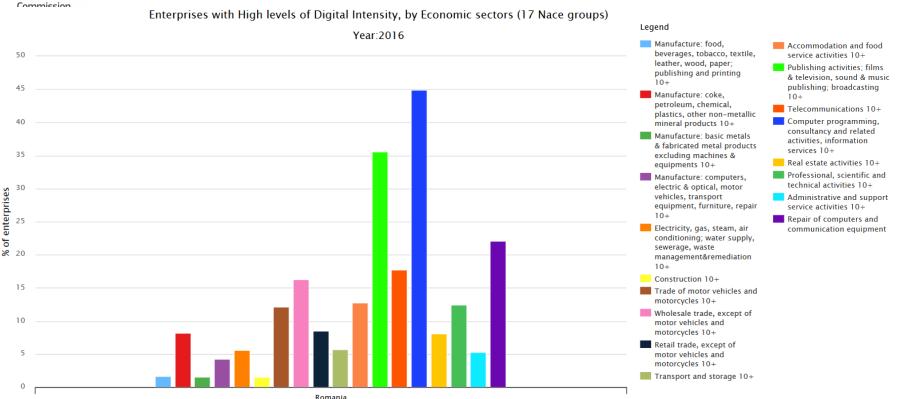
#### **Open Data (2015)**



#### **Digital Scoreboard 2016**



## Enterprises with high level of Digital Intensity by economic sectors in Romania



#### Sectors where less than 30% of the companies have a high level of digital intensity

- Manufacture: food, beverages, tobacco, textile, leather, wood, paper; publishing and printing 10+
- Manufacture: coke, petroleum, chemical, plastics, other non-metallic mineral products 10+
- Manufacture: basic metals & fabricated metal products excluding machines & equipment 10+
- Manufacture: computers, electric & optical, motor vehicles, transport equipment, furniture, repair 10+
- Electricity, gas, steam, air conditioning; water supply, sewerage, waste management & remediation
- Construction 10+
  - Retail trade, except of motor vehicles and motorcycles 10+
- Transport and storage 10+
  - Administrative and support service activities 10+
- Trade of motor vehicles and motorcycles 10+
- Wholesale trade, except of motor vehicles and motorcycles 10+
- Accommodation and food service activities 10+
- Real estate activities 10+
- Professional, scientific and technical activities 10+
  - Repair of computers and communication equipment

#### Sectors where more than 30% of the companies have a high level of digital intensity:

- Publishing activities; films & television, sound & music publishing; broadcasting 10+
- Computing programming. Consultancy and related activities, information services 10+

http://digital-agenda-data.eu/charts/analyse-one-indicator-and-compare-breakdowns#chart={%22indicator-

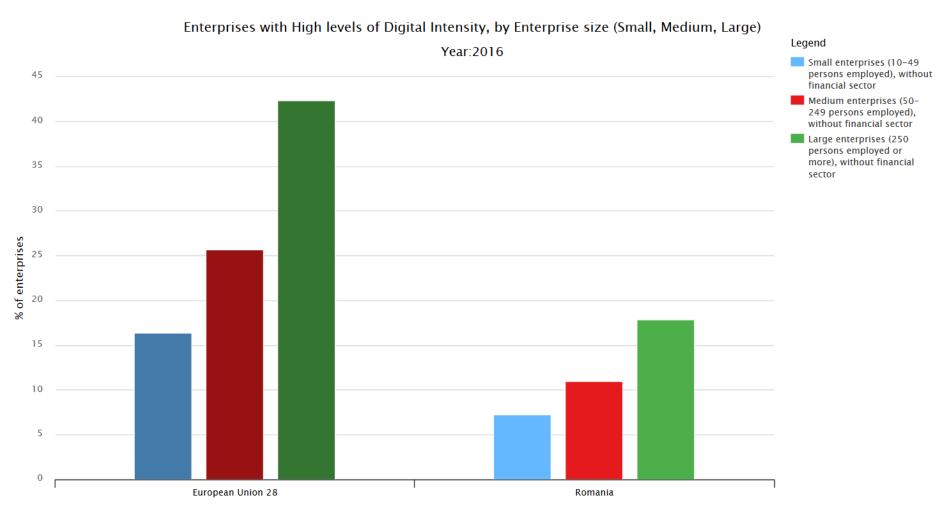
group%22:%22ebusiness%22,%22indicator%22:%22e\_di\_hivhi%22,%22breakdown-group%22:%22econsector%22,%22unit-

measure%22:%22pc ent%22,%22time-period%22:%222016%22,%22ref-

area%22:[%22RO%22]}



## Enterprises with high levels of digital intensity, by Enterprise size



http://digital-agenda-data.eu/charts/analyse-one-indicator-and-compare-breakdowns#chart={%22indicator-group%22:%22ebusiness%22,%22indicator%22:%22e\_di\_hivhi%22,%22breakdown-group%22:%22byENTsize\_s\_m\_l%22,%22unit-measure%22:%22pc\_ent%22,%22time-period%22:%222016%22,%22ref-area%22:[%22EU28%22,%22RO%22]}



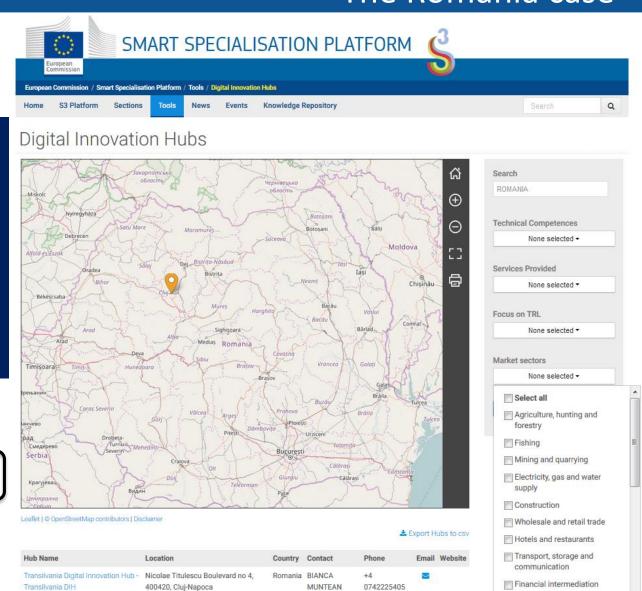
## Digital Innovation Hubs Catalogue The Romania case

## The version available presents:

- Fact-sheets with profile, contact data, service examples for regional, national, and EUsupported DIHs
- Map-based search tool by technical competences, market sector, services

http://s3platform.jrc.ec.europa. eu/digital-innovation-hubs-tool

JRC-B3-DIH@ec.europa.eu



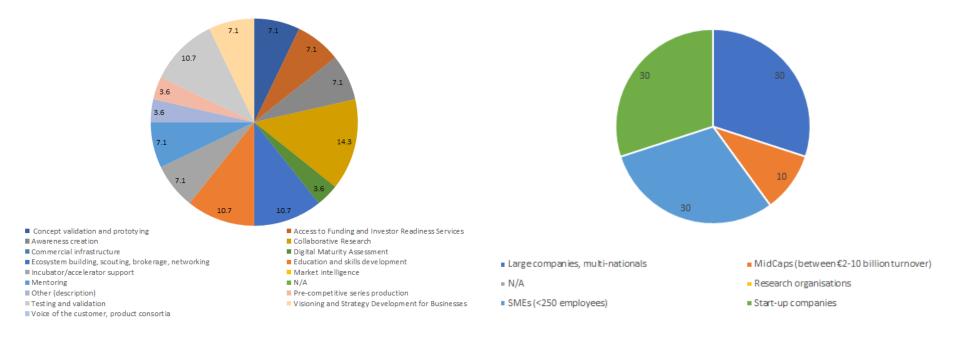
Real estate, renting and business activities



## Services provided and types of customers supported by DIHs in Romania - Analysis

## Types of services provided (%)

Types of customers supported (%)





## Competence centers/DIHs funded by EU projects in Romania in H2020

Project Topi Code	c Project Acronym	Project Duration	Project End Date	Participant Legal Name	Participant Role	Participant Short Name	Core Legal Entity Type	Research Organisation?
ICT-04-2017	TETRAMAX	48	31/08/2021	CONTROL DATA SYSTEMS SRL	PARTICIPANT	CDS	PRIVATE	No
FOF-12-2017	L4MS	42	31/03/2021	ASOCIATIA PRODUCATORILOR DE MOBILA DIN ROMANIA	PARTICIPANT	APMR	PRIVATE	No

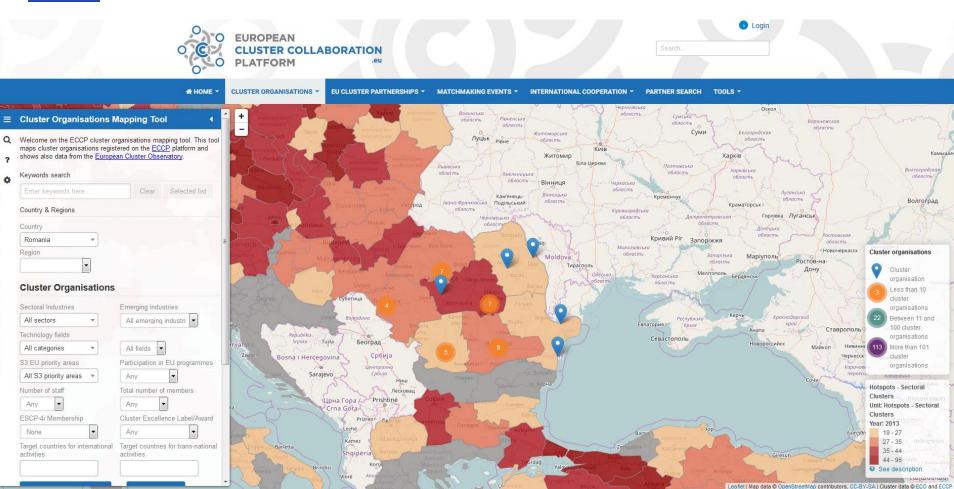


## Competence centers/DIHs funded by EU projects in Romania in FP7

Project Number	Project Acronym	Project Duration	Project Start Date	Project End Date	Project Number of Participants	Participant Short Name	Participant Legal Name	Participant Role	Organisation Type
608849	EuRoC	48	01-Jan-2014	31-Dec-2017	48	ICPE	INSTITUTUL DE CERCETARI ELECTROTEHNICE	Participant	PRC



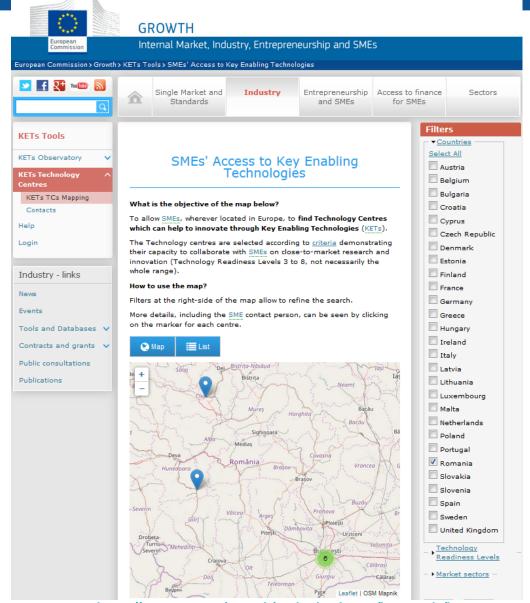
#### Clusters in Romania



https://www.clustercollaboration.eu/print/cluster-list?combine=&country\_code=ro



#### **KETs in Romania**



https://ec.europa.eu/growth/tools-databases/kets-tools/kets-tc/map?field\_postal\_address\_country%5B0%5D=RO



### eit Digital Co-Location Centres

**Co-Location Centres** are meeting places, melting pots, hubs, where planned, as well as ad hoc, meetings and events take place.

They bring together talents, ideas, technologies and investments that turn the Co-Location Centres into vibrant hot spots where students, researchers, engineers and business developers cross-pollinate to succeed in the market.

https://masterschool.eitdigital.eu/about-us/co-location-centres/

### No eit Digital Co-Location Centre in Romania



## Pilot Lines in Nanotechnology and Advanced Materials

Project Number	Project Acronym	Project Title	Project Start Date	Project End Date	Participant Legal Name	Participant Short Name	Sectors	Pilot line
686165	IZADI- NANO2INDUSTRY	Injection moulding, casting and coating PILOTS for the production of improved components with nano materials for automotive, construction and agricultural machinery.	01/11/2015		INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE PENTRU CHIMIE SI PETROCHIMIE ICECHIM	ICECHIM		



# Planned investments, allocated resources, in Romania, in relation to European Regional Development Funds in categories relevant for Digital Innovation Hubs



