

March 2020

## Italian cooperatives in the ICT sector

Information and Communication Technologies (ICT) are all the devices, applications and networking elements that allow for the transmission, reception, processing and display of data and information digitally.

Since the end of the 1990s, the OECD has been paving the way for the ongoing and difficult work of establishing the perimeters and defining the ICT sector, undergoing a constant and rapid evolution. The last classification (OECD 2009<sup>1</sup>) is still accepted today as the recognised standard for the ICT sector globally, and is generally used by the Italian institutions in the area of studies and in defining sector policies.

The solution adopted by the OECD has been to differentiate the ICT sector in its strictest sense, encompassing all the area of information and communication technologies. Based on the international classification, ISIC Rev.4, three layers are identified – ICT manufacturing, ICT trade and ICT services. It should be underlined that this classification, within the ICT sphere, also encompasses companies supplying services generally considered “traditional”, although handled and provided through the use of “new technologies” (taxation services, wages and social contributions, accounting, etc.) and, on the other hand, an analysis regarding the adaptation of groups of companies to a common internationally recognised standard, to also enable following comparisons with all available companies.

Therefore, this note intends to map, for the first time, and then monitor, the cooperatives and cooperative consortiums working in the ICT sector. This is also, and above all, in consideration of the important role that these technologies have played and continue to play in the different phases to counteract the spread of the present pandemic and in simplifying the digital transformation which our productive systems are looking to in the immediate future.

In an attempt to establish the perimeters concerning the main economic and employment aspects, the cooperative ICT sector<sup>2</sup> has, therefore, chosen to adopt the 2009 OECD classification based on the ATECO codes provided by the enterprises and available on the Aida Bureau Van Dijk databank. The bridging table between the *ISIC Rev. 4* and 2007 ATECO classifications can be found in the Annex.

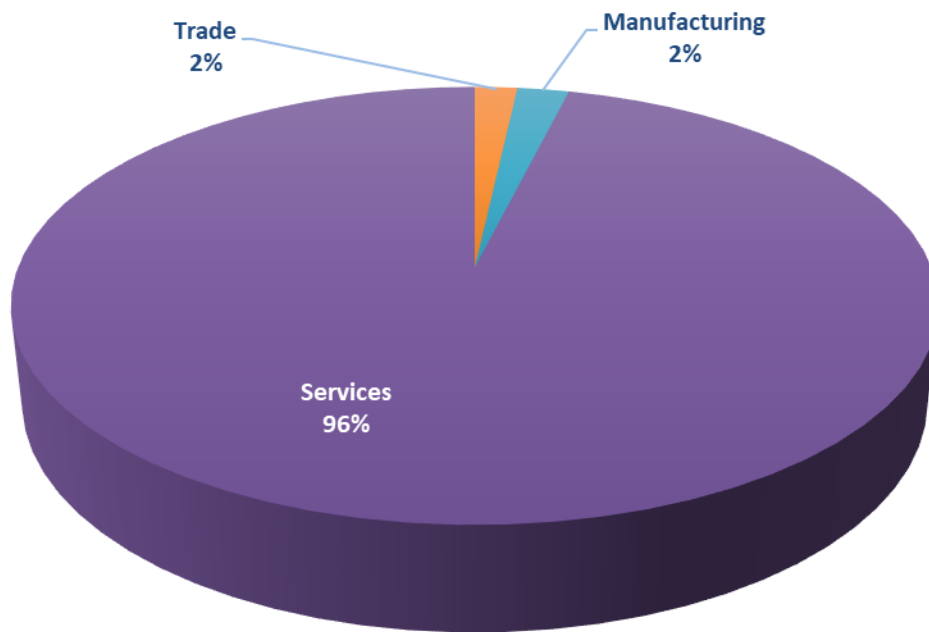
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<sup>1</sup> <http://www.oecd.org/science/inno/42978297.pdf>

<sup>2</sup> Only cooperatives and cooperative consortiums have been considered which as of 3 July 2020 (except for companies set up after 31/12/2016) had lodged a balance with the Chamber of Commerce for the 2-year period 2017-2018.

Based on the samples selected, there are currently 1,597 active cooperatives and Italian consortiums working in the ICT sector (Fig.1). Almost all the companies – 1,535 (96%) – can be found in the services layer, while the remainder of the sample is equally distributed between the trade and manufacturing layers.

*Fig. 1 The layer share for Italian cooperatives in the ICT sector – 2009 OECD Classification*



The balance data is available for 1,476 companies, while there are 111 cooperatives, set up from 2017, which had still not lodged a balance with the Chamber of Commerce.

From the data available, the cooperatives active in the ICT sector generate a total turnover of € 724 million (Tab. 1), employing 14,700 workers. All the cooperatives in the sample, except for one large company, working in electronic data processing, can be classified as SMEs.

Almost all the companies and a great part of the total turnover is concentrated in the area of data processing and in software publishing production. The total operating income amounted to about € 15 million while the total added value was € 420 million. The main losses were seen in the wholesale trade of computers, software and equipment, in the production of telecommunications equipment, and in telecommunications and database management. Instead, more than 80% of profits resulted from companies involved in data processing, in software production and in consultancy services for information technologies. Moreover, the importance of the data processing area can also be confirmed by the fact that the companies in this sector account for about 68% of total employment.

Tab.2 Sectoral distribution of Italian cooperatives active in the ICT sector – 2009 OECD Classification

Layer-Sector	No.	Employees	Production Value	Operating Income	Added Value
<b>Trade</b>	<b>25</b>	<b>63</b>	<b>7,986,518</b>	<b>- 99,007</b>	<b>1,885,032</b>
Wholesale of telephony sets and equipment	1	1	32,123	- 506	14,916
Wholesale of computers, computer and peripheral equipment and software	21	59	6,012,714	- 106,181	1,799,798
Wholesale of other telecommunications electronic equipment and parts	3	3	1,941,681	7,680	70,318
<b>Manufacturing</b>	<b>31</b>	<b>454</b>	<b>24,665,834</b>	<b>671,201</b>	<b>11,061,586</b>
Manufacture of computers and peripheral units	15	34	3,263,520	88,618	810,319
Manufacture of loaded electronic boards	3	62	4,238,842	157,336	2,690,503
Manufacture of magnetic and optical media equipment	1	2	63,505	977	27,356
Manufacture of other telecommunications electronic equipment	3	23	450,947	- 84,949	371,218
Manufacture of other electronic components	9	333	16,649,020	509,219	7,162,190
<b>Services</b>	<b>1,420</b>	<b>14,183</b>	<b>691,381,703</b>	<b>14,675,504</b>	<b>406,489,076</b>
Publishing of other software, packaged (excluding games)	4	3	271,611	3,238	51,733
Publishing of computer games	1	1	27,190	6,278	19,679
Software publishing	4	33	4,689,467	216,131	1,602,223
Data processing	336	2,226	115,395,480	- 67,538	67,261,084
Data processing, hosting and related activities	1	3	73,585	- 1,455	51,102
Electronic accounting data processing (ex. CAF)	563	3,626	206,659,176	730,168	125,578,596
Other electronic data processing	93	4,210	146,085,736	5,621,268	88,418,444
Database management (databanks)	14	81	2,444,749	- 131,121	1,690,986
Computer hardware and facilities management	5	12	644,580	43,716	424,090
Hosting and Application Service Providers (ASP)	3	5	575,327	- 24,699	99,863
Web Portals	26	33	2,922,905	- 44,959	850,223
Internet Service Providers (ISP)	7	19	1,605,708	112,473	597,548
Public payphones & Internet Points	1	1	229,427	5,717	39,854
Software production unrelated to publishing	143	2,398	100,048,604	3,123,502	70,226,573
Personal computer configuration	1	6	114,152	843	77,975
IT consultancy	82	589	48,284,403	3,833,812	22,447,992
Other related IT activities	81	621	28,705,755	279,503	16,095,597
Repair and maintenance of computers and peripheral equipment	31	219	10,192,846	57,436	6,249,691
Telecommunications	7	21	1,223,307	- 140,699	245,258
Intermediation for telecommunications & data transmission services	6	15	6,775,478	367,048	1,100,663
Other related telecommunication activities	11	61	14,412,217	684,842	3,359,902
<b>Total</b>	<b>1,476</b>	<b>14,700</b>	<b>724,034,055</b>	<b>15,247,698</b>	<b>419,435,694</b>

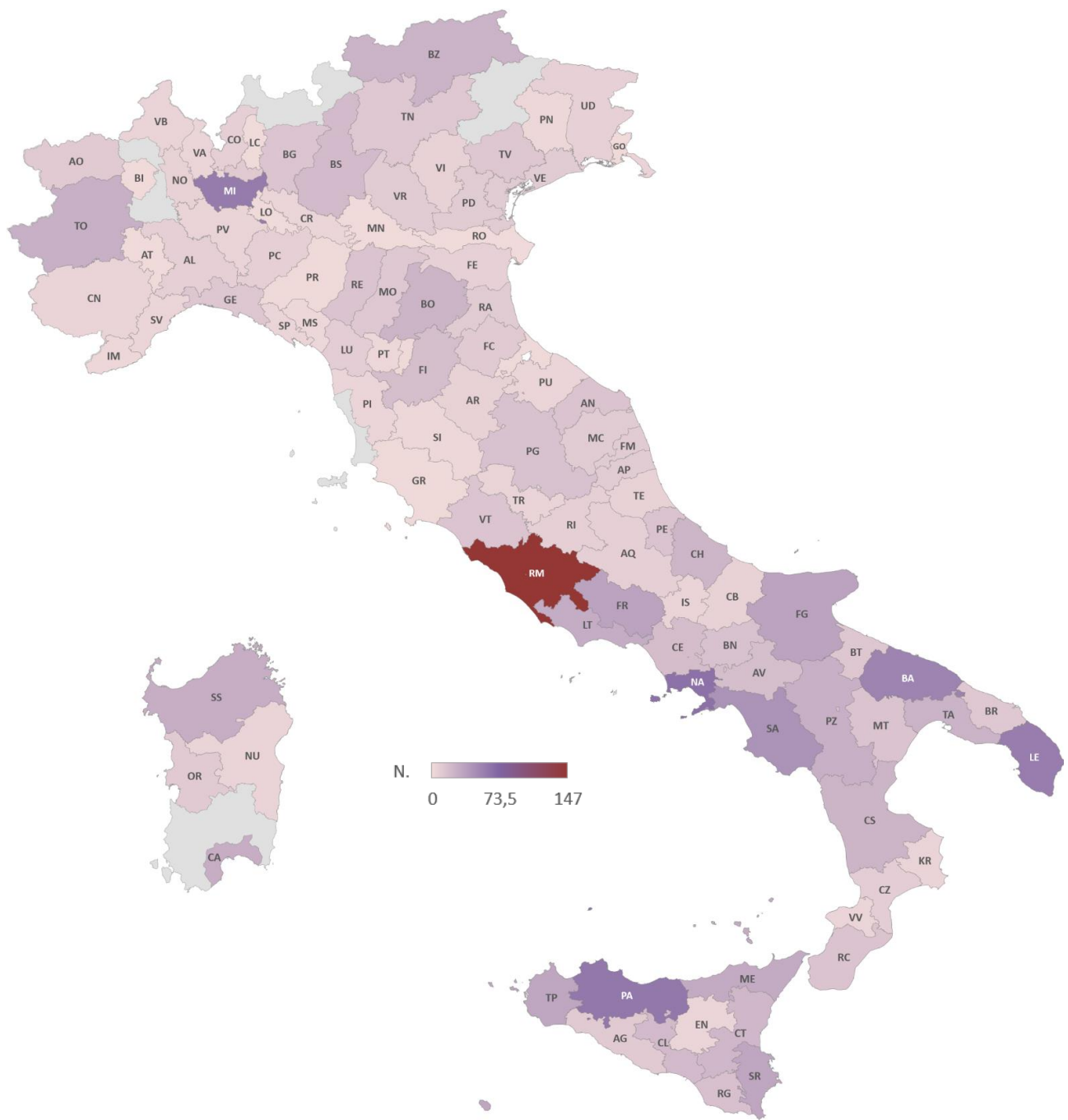
From a geographical point of view, 52% of the company sample is located in the southern and the island regions, even if the production volume registered in the southern regions only accounts for 18% of the total. Lazio and Sicily register 216 companies, the regions with the highest numbers. Specifically, where production is concerned, 35% of the production volume is generated by companies with head offices registered in the central regions, while Emilia-Romagna leads with a total turnover of 17%. Where employment is concerned, central Italy also leads with the highest number of employees at 40%, led by Lazio accounting for 19% of the total. Companies with head offices in Lombardy generate about 39% of total profits.

As well, Figure 2 shows the distribution by province of the ICT cooperatives and cooperative consortiums. It clearly emerges that there is a major concentration of sample companies in the province of Rome (9%), followed by Naples (4%), Palermo (3%), Milan (3%), Lecce (3%) and Bari (3%).

Tab. 2 Regional distribution of Italian cooperatives in the ICT sector

Area/Region	No.	%	Employees	Production Value	Operating Income
<b>North-west</b>	<b>201</b>	<b>14%</b>	<b>2,444</b>	<b>136,264,694</b>	<b>5,941,704</b>
Lombardy	119	8%	1,895	107,289,524	5,788,778
Piedmont	47	3%	272	17,451,973	963
Liguria	24	2%	236	8,762,269	112,794
Valle d'Aosta	11	1%	41	2,760,928	39,169
<b>North-east</b>	<b>179</b>	<b>12%</b>	<b>3,375</b>	<b>207,341,391</b>	<b>2,280,400</b>
Trentino-Alto Adige	37	3%	304	33,671,863	447,593
Friuli-Venezia Giulia	15	1%	74	3,284,089	- 42,717
Veneto	47	3%	1,275	49,466,012	1,084,919
Emilia-Romagna	80	5%	1,722	120,919,427	790,605
<b>Centre</b>	<b>328</b>	<b>22%</b>	<b>5,852</b>	<b>251,638,494</b>	<b>4,951,858</b>
Tuscany	46	3%	537	47,503,735	2,842,540
Marche	46	3%	523	29,196,465	141,590
Umbria	20	1%	2,050	72,728,840	394,770
Lazio	216	15%	2,742	102,209,454	1,572,958
<b>South</b>	<b>471</b>	<b>32%</b>	<b>2,046</b>	<b>88,895,291</b>	<b>1,906,832</b>
Abruzzo	50	3%	599	16,887,551	317,982
Basilicata	39	3%	194	13,820,331	1,295,579
Calabria	56	4%	249	9,694,234	- 1,244
Campania	138	9%	422	19,835,987	127,217
Molise	11	1%	65	2,277,223	- 36,443
Apulia	177	12%	517	26,379,965	203,741
<b>Islands</b>	<b>297</b>	<b>20%</b>	<b>983</b>	<b>39,894,185</b>	<b>166,904</b>
Sardinia	81	5%	381	13,532,298	- 105,646
Sicily	216	15%	602	26,361,887	272,550
<b>Total</b>	<b>1,476</b>	<b>100%</b>	<b>14,700</b>	<b>724,034,055</b>	<b>15,247,698</b>

Fig. 2 Provincial distribution of Italian cooperatives active in ICT



## Appendix

### *Classification of the ICT sector as proposed by the OECD – Bridging table between ISIC Rev. 4 classification and 2007 ATECO classification*

ISIC rev.4	NACE rev.2/ ATECO 2007	Description 2007 ATECO
		<b>ICT Manufacturing Layer</b>
2610	2611	Manufacture of electronic components
	2612	Manufacture of loaded electronic boards
2620	2620	Manufacture of computers and peripheral equipment
2630	2630	Manufacture of communications equipment
2640	2640	Manufacture of consumer audio/video electronics
2680	2680	Manufacture of magnetic and optical media
		<b>ICT Trade layer</b>
4651	4651	Wholesale of computers, peripheral equipment and software
4652	4652	Wholesale of telecommunications and electronic equipment and parts
		<b>ICT Services Layer</b>
5820	5821	Publishing of computer games
	5829	Other software publishing
6110	6110	Wired telecommunications activities
6120	6120	Wireless telecommunications activities
6130	6130	Satellite telecommunications activities
6190	6190	Other telecommunication activities
6201	6201	Non-software publishing production activities
6202	6202	Computer consultancy activities
	6203	Computer facilities management activities
6209	6209	Other information technology and computer service activities
6311	6311	Data processing, hosting and related activities
6312	6312	Web portals
9511	9511	Repair of computers and peripheral equipment
9512	9512	Repair of communication equipment