Digital Economy and Society Index[1] 2016[2]

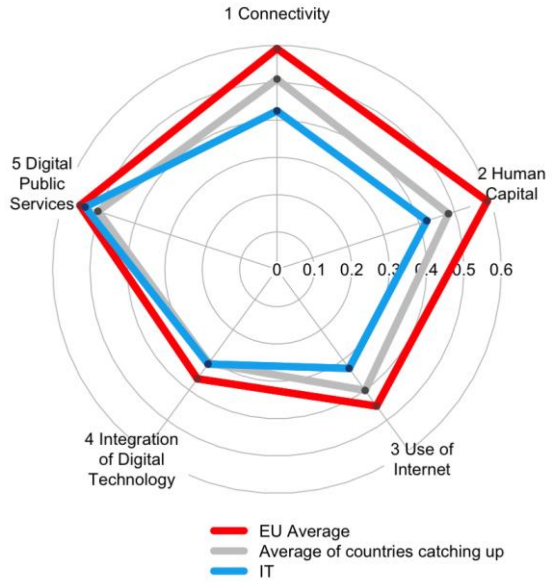
Country Profile

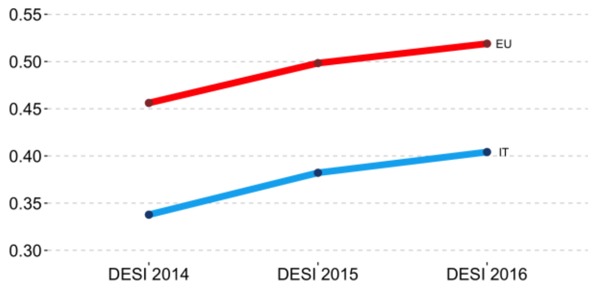
Italy

Italy has an overall score[3] of **0.4** and ranks **25th** out of the 28 EU Member States. In the past year, Italy has made little progress in most of the indicators. One of the exceptions is an increased role of eCommerce in SMEs turnover (8.2% of the total) although the Italian economy could benefit from a more diffused use of eBusiness solutions. NGA coverage has increased from 36% of households in 2014 to 44% in 2015, but adoption of fast broadband connections is only 5.4% of the total (which is capped at 53% of households). The main cause for low adoption of fixed broadband is the lack of basic digital skills. Indeed, 37% of the population doesn't regularly use the Internet. Italy scores close to the EU average in Digital Public Services, driven by increased availability.

Italy is part of the **catching up**[4] cluster of countries because, although it still performs worse than the EU as a whole, it has developed fast over the last year and got closer to the EU average. Italy still performs below the cluster average.

	Italy		Cluster	EU
	rank	score	score	score
DESI 2016	**25**	**0.4**	**0.45**	**0.52**
DESI 2015	24	0.38[5]	0.41	0.5





[1] The Digital Economy and Society Index (DESI) is a composite index developed by the European Commission (DG CNECT) to assess the development of EU countries towards a digital economy and society. It aggregates a set of relevant indicators structured around 5 dimensions: Connectivity, Human Capital, Use of Internet, Integration of Digital Technology and Digital Public Services. For more information about the DESI please refer to http://ec.europa.eu/digital-agenda/en/digital-agenda-scoreboard

[2] The DESI 2016 is constructed from indicators referring mostly to the calendar year 2015 (except when data is not available for that calendar year, in which case the latest prior data was used).

[3] DESI scores range from 0 to 1, the higher the score the better the country performance.

[4] In the DESI 2016, Italy is part of the catching up cluster of countries: countries who score below the EU average but whose score grew faster than that of the EU as a whole (in comparison to the DESI 2015). Other catching up countries are Croatia, Latvia, Romania, Slovenia and Spain.

[5] The DESI 2015 was re-calculated for all countries to reflect updates and corrections to the underlying indicator data (which took place between May 2015 and January 2016). As such, country scores and rankings may have changed from the previous publication. For further information please consult the DESI methodological note.

1 Connectivity

1 Connectivity	Italy		Cluster	EU
	rank	score	score	score
DESI 2016	**27**	**0.42**	**0.51**	**0.59**
DESI 2015	27	0.4	0.48	0.57

With an overall Connectivity score of 0.42, Italy ranks 27th among EU countries. Broadband is widely available, but not fast broadband whose coverage progresses but not fast enough. The take-up of mobile broadband is more widespread.

	Italy					EU
	DESI 2016			DESI 2015		DESI 2016
	value		rank	value	rank	value
1a1 Fixed BB Coverage % households	99% (June 2015)	→	10	99% (December 2014)	11	97% (June 2015)
1a2 Fixed BB Take-up % households	53% (2015)	↑	28	51% (2014)	28	72% (2015)
1b1 Mobile BB Take-up Subscribers per 100 people	75 (June 2015)	↑	10	71 (December 2014)	10	75 (June 2015)
1b2 Spectrum % of the target for spectrum to be harmonised at EU level	65% (December 2015)	↓	20	67% (December 2014)	20	69% (December 2015)
1c1 NGA Coverage % households, out of all households	44% (June 2015)	↑	27	36% (December 2014)	27	71% (June 2015)
1c2 Subscriptions to Fast BB % of subscriptions >= 30Mbps, out of fixed BB subscriptions	5.4% (June 2015)	↑	25	3.8% (December 2014)	26	30% (June 2015)
1d1 Fixed BB Price % individual gross income spent for the cheapest standalone Fixed Broadband subscription (lower values are better)	1.8% (Access cost: 2015; Income: 2014)	→	19	1.8% (Access cost: 2014; Income: 2014)	21	1.3% (Access cost: 2015; Income: 2014)

Challenges indicated in last year's report remain: fixed broadband subscriptions remain low, at only 53% of households (confirming as the lowest percentage in the EU). On the contrary Italian citizens seem to prefer mobile broadband connections, with 75 subscriptions per each 100 individuals (10th highest value in the EU).

The other major challenge for Connectivity in Italy is the low availability of Next Generation Access networks, which has improved since last year (from 36% to 44%) but not more than in other EU countries (keeping its 27th place).

2 Human Capital

2 Human Capital	Italy rank	Italy score	Cluster score	EU score
DESI 2016	**24**	**0.42**	**0.48**	**0.59**
DESI 2015	25	0.38	0.44	0.58

With a Human Capital score of 0.42, Italy ranks 24th among EU countries. The country has improved its score and ranking in comparison to the previous year (0.38), but Human Capital endowment is still an issue for Italy.

	Italy				EU
	DESI 2016		DESI 2015		DESI 2016
	Value	rank	value	rank	value
2a1 Internet Users % individuals (aged 16-74)	63% (2015) ↑	25	59% (2014)	25	76% (2015)
2a2 Basic Digital Skills % individuals (aged 16-74)	43% (2015)	24	n.a.	–	55% (2015)
2b1 ICT Specialists % employed individuals	2.5% (2014) →	22	2.5% (2013)	21	3.7% (2014)
2b2 STEM Graduates Graduates in STEM per 1000 individuals (aged 20 to 29)	14 (2013) ↑	22	13 (2012)	22	18 (2013)

Italy cannot hope to fully grasp the benefits of the digital economy as long as one third of its population refrains from using the Internet regularly. On the positive side, the share of regular Internet users has grown by 4 percentage points. But a substantial percentage (at least 31%) of those regular Internet users still lacks basic digital skills, constituting a further drag to the well-functioning of the Italian digital economy. The major cause of this lack of digital skills is to be found in the low level of education (the two are highly correlated) of the Italian population (only 42% of the population has an education level above lower secondary - ISCED 2 - the fourth lowest value in the EU28), and in the important share of aged population.

The education performance also explains the low level of STEM graduates among the population in their 20's, a statistic which has barely improved in the last year. Also the share of the ICT specialists in the economy is quite below the EU average and it has remained stable in the last year. Given the low share of STEM graduates and the slow integration of digital technology, the percentage of ICT specialists is unlikely to increase in the near future for reasons of both demand and supply.

3 Use of Internet

3 Use of Internet	Italy		Cluster	EU
	Rank	score	score	score
DESI 2016	**28**	**0.33**	**0.4**	**0.45**
DESI 2015	26	0.34	0.39	0.43

In terms of the propensity of individuals to use Internet services, Italy scores 0.33 a slight decrease with respect to last year, putting Italy to the lowest rank among EU countries. Italians appear to refrain most from using the Internet when they need to make transactions, interact with others and read the news. Only in fruition of digital content Italy performs slightly better. Italians are also becoming more familiar with the online channel for shopping (+4 p.p.), in line with the increase experienced on the enterprise side.

	Italy					EU
	DESI 2016			DESI 2015		DESI 2016
	Value		rank	value	rank	value
3a1 News % individuals who used Internet in the last 3 months (aged 16-74)	57% (2015)	↓	26	60% (2014)	26	68% (2015)
3a2 Music, Videos and Games % individuals who used Internet in the last 3 months (aged 16-74)	52% (2014)		12	52% (2014)	12	49% (2014)
3a3 Video on Demand % households that have a TV	19% (2014)		19	19% (2014)	19	41% (2014)
3b1 Video Calls % individuals who used Internet in the last 3 months (aged 16-74)	34% (2015)	↓	22	38% (2014)	18	37% (2015)
3b2 Social Networks % individuals who used Internet in the last 3 months (aged 16-74)	58% (2015)	→	24	58% (2014)	22	63% (2015)
3c1 Banking % individuals who used Internet in the last 3 months (aged 16-74)	43% (2015)	↑	23	42% (2014)	21	57% (2015)
3c2 Shopping % individuals who used Internet in the last year (aged 16-74)	39% (2015)	↑	25	35% (2014)	26	65% (2015)

Italian Internet users engage in online activities less than the EU average does. Only digital content fruition, like playing music, videos and games (52%) is performed by more Italian Internet surfers than the EU average. On the contrary, complex transactions like eBanking (43%) and shopping online (39%) are less common. The reading of online news is less diffused (57%) than in the almost totality of other EU states and is even decreasing. Reasons for that decrease that has been observed in the last two years could include the further diffusion of paid content (which discourages casual readers) and the widening of the Internet users' population (which displays lower education skills on average).

Also the use of the Internet to interact with others does not display high take-up in Italy: only 34% of Internet users make video calls over the Internet and 58% use regularly social networks. Only online shopping has improved significantly in percentage (from 35% to 39%) and in ranking (from 26th to 25th) while all the other activities have stagnated or slightly decreased, resulting in slipping positions in the EU ranking as the majority of other countries has made some improvement.

4 Integration of Digital Technology

4 Integration of Digital Technology	Italy rank	Italy score	Cluster score	EU score
DESI 2016	**20**	**0.31**	**0.31**	**0.36**
DESI 2015	20	0.29	0.27	0.33

Integration of Digital Technology by businesses is the dimension where Italy ranks second best of all DESI 2016 dimensions: with a score of 0.31 (substantially unchanged from last year), Italy ranks 20th among EU countries. Italy's enterprises are not making much progress in the take up of eBusiness solutions but the eCommerce sales channel is gaining importance.

	Italy					EU
	DESI 2016			DESI 2015		DESI 2016
	value		Rank	value	rank	value
4a1 Electronic Information Sharing % enterprises (no financial sector, 10+ employees)	36% (2015)	↓	14	37% (2014)	10	36% (2015)
4a2 RFID % enterprises (no financial sector, 10+ employees)	4.6% (2014)		12	4.6% (2014)	12	3.8% (2014)
4a3 Social Media % enterprises (no financial sector, 10+ employees)	14% (2015)	↑	18	12% (2014)	17	18% (2015)
4a4 eInvoices % enterprises (no financial sector, 10+ employees)	n.a.		–	5.4% (2014)	24	n.a.
4a5 Cloud % enterprises (no financial sector, 10+ employees)	n.a.		–	20% (2014)	5	n.a.
4b1 SMEs Selling Online % SMEs (no financial sector, 10+ employees)	6.5% (2015)	↑	25	5.1% (2014)	28	16% (2015)
4b2 eCommerce Turnover % turnover of SMEs (no financial sector, 10-249 employees)	8.2% (2015)	↑	14	4.9% (2014)	22	9.4% (2015)
4b3 Selling Online Cross-border % SMEs (no financial sector, 10+ employees)	5.2% (2015)	↑	22	4% (2013)	24	7.5% (2015)

A true digital economy is one where businesses take full advantage of the possibilities and benefits offered by digital technologies, both to improve their efficiency and productivity, as well as to reach costumers and realise sales.

It looks like Italian SMEs have been slowly realising that the eCommerce sales channel can be an important instrument for expanding their markets and fighting the consequences of the economic crisis. The more marked progress has been made by the share of turnover coming from eCommerce: it rose from 4.9% in 2014 to 8.2% this year (and consequently the rank went from 22nd to 14th). The increase in the percentage of SMEs selling online (6.5%) and cross-border online (5.2%), however, has been less spectacular.

The adoption of eBusiness solutions hasn't witnessed the same progress, with the proportion of enterprises using Electronic Information Sharing (36%) substantially stable (indeed, slightly decreasing) and the use of social media only barely improving (from 12% to 14%). Instead, EU competitors were not standing still and this has resulted in a loss of positions in the EU ranking.

5 Digital Public Services

5 Digital Public Services	Italy		Cluster	EU
	rank	score	score	score
DESI 2016	**17**	**0.54**	**0.5**	**0.55**
DESI 2015	16	0.53	0.45	0.54

Digital Public Services is the dimension of DESI 2016 where Italy ranks best, ranking 17th among EU countries with a score of 0.54. However, use of eGovernment is still the main drag to this sub-score performance. The availability of online public services has progressed but there is room for improvement in re-using information across administrations to make life easier for citizens.

	Italy					EU
	DESI 2016			DESI 2015		DESI 2016
	value		rank	value	rank	value
5a1 eGovernment Users % individuals returning filled forms, out of Internet users in the last year (aged 16-74)	18% (2015)	→	24	18% (2014)	25	32% (2015)
5a2 Pre-filled Forms Score (0 to 100)	37 (2015)	↓	16	41 (2014)	15	49 (2015)
5a3 Online Service Completion Score (0 to 100)	85 (2015)	↑	14	78 (2014)	14	81 (2015)
5a4 Open Data Score (0 to 700)	485 (2015)	→	6	485 (2014)	9	351 (2015)

Italy's efforts in improving the supply of eGovernment services (with online service completion going from 78 to 85) have still to pay up in terms of take-up. Indeed use of eGovernment services remains the Achilles' heel of the Digital Public Services sub-score, with only 18% of Internet users returning filled forms online. Root causes of this low take up are, of course digital skills (see section 2 on Human Capital) but the Italian public authorities could do better to improve usability of their online services. Indeed, only in 37% of the cases, information already in possession of public services is re-used to pre-fill forms presented to the user.

Activities around the re-use of public sector's open data abound in Italy and contribute to the good performance in the field of open data.