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Regional Portrait of Lombardy

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NUTS 2 Regions in Italy

1 The NUTS nomenclature in Italy – background and current structure

The Republic of Italy is divided into regions (NUTS 2), which are in turn divided into provinces (NUTS 3) and again into communes (municiplities). The nomenclature of Territorial Unities for Europen Statistics (NUTS) subdivides Italy and other nations of the EU into various hierarchical levels.

The NUTS favours institutional divisions based on the subdivision of regional territories by two criteria: normative and analytical. On a regional level (without taking communes into account) the administrative structure of the member states generally includes two principal regional levels (Lander and Kreise in Germany, regions and departements in France, comunidades autonomas and provincias in Spain, regioni and province in Italy etc.).

The Italian state (NUTS 0) is subdivided into five macro-areas (NUTS I) which have no administrative function and are; North-West, North-East, Centre, South and Islands.

The regions (NUTS 2) are autonomous bodies, so with political, juridical, legislative and administrative independence, as established by the Constitution, and never to clash with the laws of the State. The twenty Italian regions are distingushed between Regioni a Statuto Ordinario (regions with common statute), established in I972, and Regioni a Statuto Speciale (regions with special statute), estblished earlier, and which enjoy greater autonomy. The region is governed by a “Consiglio Regionale” (Regional Council), which has between 30 and 60 members elected by citizens. The Regional Council in turn elect the “Giunta Regionale” (Regional Committee), which has executive and administrative functions, and both elect the President of the Regional Council. Three delegates elected by the Regional Council of each region take part in the elections of the President of the Republic, together with both Houses of Parliament (the Chamber of Deputies and the Senate of the Republic).

The provinces are at the third level of classification.

2 The spatial structure of Italy

Italy is subdivided for administrative purposes into 20 regions, which are then organised into provinces and communes. Five of these regions have a special statute (Friuli-Venezia Giulia, Sardinia, Sicily, Trentino-Alto Adige and Valle d’Aosta). The total surface area of the country is 30I,40I squre km and the total population numbers 57,844,000 inhabitants. Italy is, without doubt an interesting country from a geographical point of view. The variety of landscapes is infinite, from Mont Blanc, through the Padanian plain, the rolling hills of Tuscany and the Marches and the villages clinging to the Appennines, to the arid landscapes of the South and the geographical uniqueness of the islands (especially in Sicily and Sardinia). This brings about a series of differences in climate, population, economy and agriculture which make the country a place of ever-changing landscapes.

Qualitative Description of Region Lombardy

3 Basic facts

	Region (NUTS2)	Country (NUTS0)	EU
	Regioni Lombardy	Italy	EU15 average
GDP [€ in PPP per inhabitant (2000)]	31,118.3	23,588.4	22,576.4
Area [km²]	23,872.0	301,316.2	3,191,119.9
Population absolute (1998)	9,008.9	57,588.0	375,812,900
Population density [inhabitants/km² (1998)]	377.4	191.1	117.8

4 Map

5 Regional structure

5.1 Spatial structure

Lombardy covers approximately the centre of the Po Valley, as well as extending over the middle of the Italian Alps. It borders with Switzerland to the north, Emilia-Romagna to the south, Piedmont to the west and Trentino-Alto Adige and Venetia to the east. The region (23,856 sq km.) is only the fourth largest in Italy though it is unquestionably the most densely populated (c. 8,879,000); Lombardy is the second region, after Campania for population density (372 inhabitants per sq.km); 1/14 of the country's entire population is concentrated in the Province of Milan.

5.2 Infrastructure

Milan is the hub of a road and train network which connects the region with Southern Italy, the Veneto, Piemonte, Liguria and on towards Switzerland, Germany and France. Furthermore, the 'Malpensa' airport of Milan is very busy and can be reached easily thanks to the reorganistion of the road and train network which connects the airport with the city centre.
The international airport of Malpensa covers a total surface area of around 935 ha, 45 km from the centre of Milan. Currently, the reorganisation of the airport is in the hands of the *Malpensa 2000* project, new infrastructure consists of newly retrained runways (the first measures 3,920 x 60m, the second 3,920 x 60m) and a series of buildings out to the west of the area.

5.3 Population structure / migration (demography)

The population distribution has been affected both by morphology of the area and the strong pull of the industrial areas. The most heavily urbanized area is the Province of Milan, at the centre of the plain, with a population density of 1,442 inhabitants per sq km. The capital of Lombardy, second only to Rome for population and the country's major economic centre, is constantly expanding and is likely to form a conurbation with the principal neighbouring towns (Monza, Legnano, Saronno, Rho etc.) in the near future, incorporating important towns such as Sesto San Giovanni, Cinisello Balsamo, Cologno Monzese, Paderno Dugnano, etc. Elsewhere, the population is concentrated in the upper plains, eg. in the wealthy Provinces of Varese, Como, Brescia and Bergamo, and around the lakes.

The Provinces of Pavia, Cremona and Mantua on the lower plains are suffering progressive depopulation caused by the decreasing number of agricultural workers and the demand for labour in industry and service sectors around Milan. Mountain areas (Province of Sondrio, part of the Provinces of Brescia and Bergamo) are thinly populated, because of internal migration to the more highly industrialized areas, only partly checked by the recent expansion of tourism.

The consumption indexes is higher than the national average. It reveals an averagely high standard of living, with great differences within the region itself; high-income areas contrast with those which are economically depressed (Province of Sondrio, mountain areas, lower plains).

6 Economic factors

6.1 Economic development in the last decade

The economic affluence of Lombardy is linked, above all, to the development of its industrial sector which peaked during the 60s and the 80s. Although it has been overtaken by the tertiary sector in recent years, industry remains extremely important and the greatest concentration of industry in Italy is found along the Varese-Milan-Bergamo-Brescia line. The region of Lombardy is home to industries from all sectors: steel, chemicals, pharmceuticals, rubber, typology and publishing, textiles, cement, furniture, agriculture and food.

6.2 Sectors

Farming and agro-food industry: Dairy products, Distilleries, Meat transformation industry, Sugar-beet, Wine production
Industry: Aeronautics, Building materials, Design industry, Electrical industry, High technologies, Iron and steel industry, Machinery and furniture, Mechanical industry, Petrochemistry, Sub-products for car industry, Textile and fashion industry
Services: Banking, Business services, Computer engineering, Education and training, Environmental engineering, Fairs and exhibitions, Financial services, Insurance, Publishing and printing, Research and development, Tourism, Transport, Trade

Source : Servizio statistica della regione – Elaborazioni su dati Istat

Where economical growth is at its greatest, industrialization has brought both general prosperity and serious drawbacks. One example is immigration from the poorer regions of Italy. This started after the Second World War and has brought social inequality, segregation, precarious activities bordering on the illegal and increased crime which are now Milan's major problems. Degradation of the environment from atmospheric and water pollution linked to high concentration of industrial plants cannot be underestimated. A certain ecological awareness has emerged, in recent years, also among industrialists, and the greater sensitivity of local administration to these problems makes prospects for the future of urban Lombardy less pessimistic.

For what regards economy, agriculture lost its importance in recent decades, after giving rise to the accumulation of capital later invested in industry. Job rationalization and mechanization have, however, kept agriculture alive, guaranteeing large high quality production. Rice growing (Province of Pavia), fodder (`lower' Milanese area) and sugar beet (Province of Cremona) are particularly important in the lower plain. In the hills and in the upper plain there are cultivations of corn, wheat, potatoes, other vegetables and fruit trees. In some areas (Valtellina, Oltrepò Pavese) vines and wine production are important.

The livestock sector is well-developed and technologically advanced (especially in the lower plain). One million, five hundred and seventy thousand people are employed by industry, a much higher number than in any other Italian region. The development of the industrial sector (even before the unification of Italy) has always been linked to the flourishing agriculture which provided the capital required for investment and to the good geographical position, at the junction of the main lines of communication between the Mediterranean and Central Europe. The availability of water resources also favoured industry, and all sectors are well represented in Lombardy. Mechanical and electromechanical engineering (Milan, Provinces of Varese and Brescia), chemicals (Milan) and textiles (cotton mills, silk spinning and weaving around Varese, Brianza and Como) are especially important. Other major industries are food (sausages and salami, cakes, dairy products) concentrated round Milan and Cremona; footwear (Varese, Vigevano), steel (Dalmine, Lovere), furniture (Brianza) and publishing (Milan). Mineral deposits are small and mining (Prealps near Bergamo and Brescia) is not very important. Natural gas is extracted in Provinces of Milan, Pavia and Cremona.

The growth of industry has greatly influenced the development of service sector over the last few decades. This is mainly concentrated in Milan, one of the liveliest business centres in Europe, with a busy stock exchange, head offices of the most important banks, insurance and finance companies and the head-quarters of the major Italian firms. One third of Italy's trade with foreign countries passes through Milan.

The communications network is one of the best in Italy with roads, motorways and national and international railway lines all radiating from Milan; this expansion has also been facilitated by the relative proximity of the main Alpine passes and tunnels (others, such as the Spluga tunnel, are planned). Major exploitation of waterways has been under consideration for some time. At present these are little used and a navigable canal running into the Po River may be built from Milan to Cremona. Lombardy is served by Malpensa and Linate international airports and Orio al Serio domestic airport.

There is a vast number of commuters in the metropolitan area: most of the office staff, factory workers and students living in vast suburbs, travel daily to work or study in Milan, by public transport.

6.3 Unemployment

Lombardy has the highest level of employment in Italy and acts as a magnet for a large number of unemployed people in other Italian regions. The low unemployment rate is connected to the economic development of Lombardy, which provides 20% of the total national income.

- Capital city: Milan
- Area: 23,863 km2
- Total population: 9.121.714
- Density: 373,9
- Working population: 3,926,360
- Distribution of employment:
    - Industry: 40.5%
    - Services: 58.%
    - Agriculture: 1.8%
- Unemployment rate: 3,7% (Italy 9,5%)
- Activity rate 52,4% (Italy 48,5%)

Source: Servizio Statistica della Regione -Elaborazione su dati ISTAT

6.4 Innovation

It is important to consider the level of diffusion of some infrastructures. Lombardy has a higher than national level: tele-communication networks 177,1%, Airports (189,6%) and Banks (143,1%).

7 Soft factors

7.1 Housing

In I99I, the population of Lombardy, according to ISTAT figures, was around 3.8 million, 26% in municipal capitals and 83% in other Lombard communes. Observing the main characteristics of housing in Lombardy, we can see that the supply outnumbers the demand, and above all, does not actually meet the needs of the demand, probably due to the different speeds of change which characterise the demand and supply of housing.

Private and public initiatives carried out in Lombardy over the last fifteen years have also been important in this sector, aiming towards reclamation and intervention in the urban make up.

7.2 Culture

Cultural Heritage policy in Lombardy has seen the region and its competent authorities involved in developing the artistic resources of the region, aiming above all for a decentralisation of responsibility towards local bodies.

7.3 Regional image

The image of Lombardy is principally linked to its capital. In the collective imagination, Milan is, indeed, a city famous for its economic and financial dynamism and a capital of culture, entertainment, fashion and television. Alongside this image, however, lies the other side of Lombardy, made up of Bergamo, Mantova, Como and the other provinces. It is easier to spot the signs of globalisation in these cities, multiethnicity, multiculturalism; a multitude of identities and interests which interlink. In this way, worlds which are often extremely different (and not just geographically) have nonetheless found common ground in terms of interests and lifestyle and have penetrated into the fabric of Lombard society. Another sign of globalisation are the international business communities which have made Milan a port of call.

8 BISER survey results on Lombardy

The following will (by necessity brief) provide an exemplary insight into the BISER survey data, in order to give an overview on how the *Regioni* Lombardy perfoms regarding key Information Society indicators.

8.1 Methodology

There are 211 European regions at the NUTS 2 (Nomenclature des unités territoriales statistiques) level and clearly a project like BISER can not carry out surveys in each of these regions since accuracy of the resulting metrics requires a minimum number of observations. Within the limits of budget, it was decided to select 28 out of 211. The regions cover the range of patterns of sectoral structure ("agricultural", "manufacturing" and "services", depending on the share of employment in each of the sectors) and economic power (as GDP per head) as well as Member States according to the distribution of population.

Regions which were surveyed are: Salzburg (Austria), Liége (Belgium), Fyns Amt (Denmark), Väli-Suomi (Finland), Ile de France, Bretagne, Nord-Pas-De-Calais, Languedoc-Roussillon (all France), Darmstadt, Stuttgart, Braunschweig, Magdeburg, Mecklenburg-Vorpommern (all Germany), Kentriki Makedonia (Greece), Border, Midland & Western (Ireland), Sicilia, Lazio, Toscana, Lombardia (all Italy), Friesland (Netherlands), Lisboa & Vale do Tejo (Portugal), Castilla- Leon, Cataluna (both Spain), Smaaland Med Oerna (Sweden), Berkshire, Buckinghamshire and Oxfordshire, Leicestershire, Greater Manchester, and Tees Valley and Durhams (all U.K.).

Within each region the sample was set up as a random probability sample which provides a sufficiently representative picture of the resident population (aged 15+) and of the region's business establishments. For the population survey (RPS), a minimum of 400 successsful interviews were conducted in each region; in the establishment survey (RDMS) the sample was at least 300 per region.

Computer Aided Telephone Interviewing (CATI) was used. Telephone interviews offer the advantage of quick and reliable data collection from a central telephone unit. For general population surveys in former times there have been doubts about accuracy of randomisation but recent developments in sampling practices can provide for real probability samples even with rather poor list sources and the growing fractions of non-pub numbers – the shortcoming being that a very small number of households without telephone are not included. CATI also offers best field control, automated sample administration, simultaneous data entry and permits a complex branching of the interview flow depending on filter questions and thus allows to apply questions tailored e.g. to the respondent's experiences with ICT, a firm's equipment status etc.

The population survey provided a person sample (rather than a household sample) and was predominantly based on random dialling methods. Sampling in each Member States was carried out allowing for national differences regarding organisation of telephone number allocation and unlisted telephone numbers, and taking other national peculiarities into account which may require various strategies of random drawing.

The establishment sample included establishments (and thus covered also branch offices and not only autonomous enterprises) from different industries across all economic activities but excluded establishments with less than 5 employees. Sampling was managed as a stratified approach, i.e. done separately for groups of establishments conforming with certain criteria, in order to guarantee a sample representative of the industrial structure and employment size distribution in each region. The establishment sample was drawn from the best existing source lists available, either provided by public authorities or by specialised address brokers.

Readers are reminded that survey results are estimates, the accuracy of which, everything being equal, depends on the sample size and on the observed percentage. With samples of about 300 and 400 interviews respectively, the real percentages vary within the following confidence intervals:

Observed percentages	10%	20%	30%	40%	50%	60%	70%	80%	90%
Confidence intervals if n=300	6.4% - 15.4%	14.7% - 26.6%	23.7% - 37.2%	33.0% - 47.4%	42.6% - 57.4%	52.6% - 67.0%	62.8% - 76.3%	73.4% - 85.3%	84.6% - 93.6%
Confidence intervals if n=400	7.1% - 13.9%	15.9% - 24.9%	25.1% - 35.4%	34.6% - 45.6%	44.4% - 55.6%	54.4% - 65.4%	64.6% - 74.9%	75.1% - 84.1%	86.1% - 92.9%

8.2 Selected results

The following figure presents relative performance of Lombardy region compared to the average across all 28 BISER region. The BISER average is not representative for the whole of the EU territory in a statistical sense. However, it has been checked that the sample is very similar to the EU with regard to average values for key socio-demographic and business sector variables, respectively.´

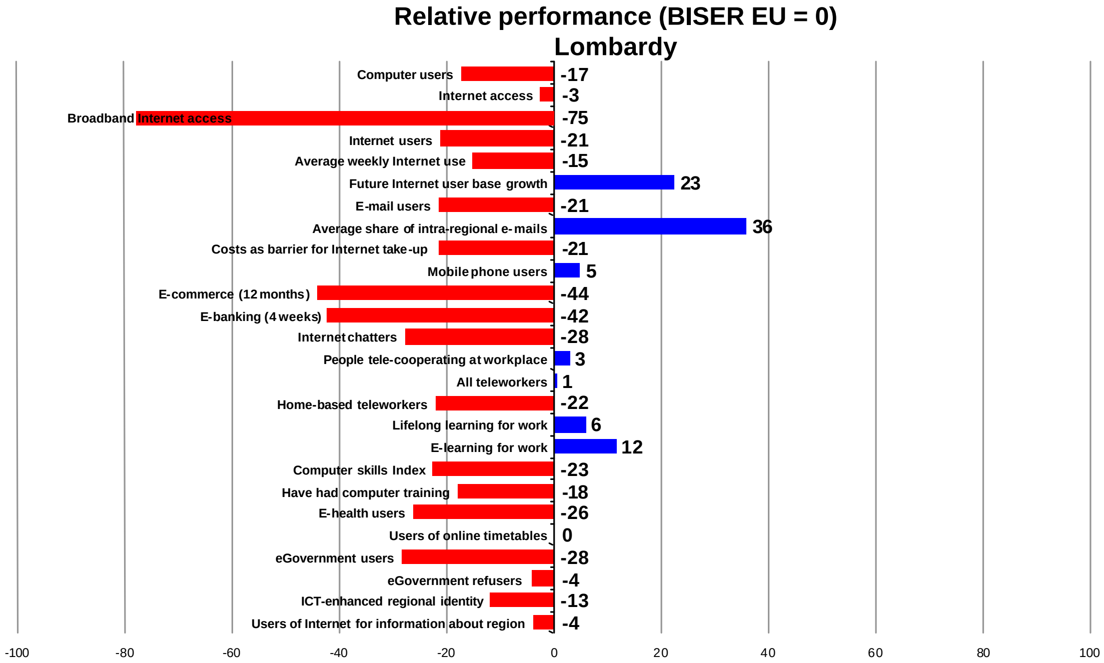
8.2.1 Population

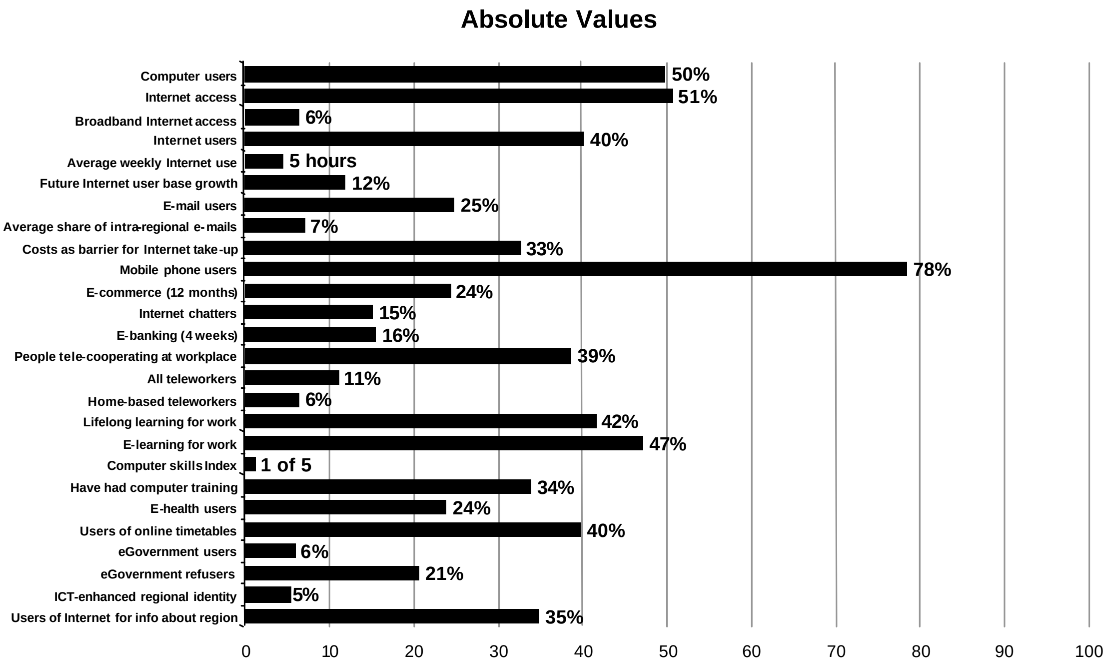
Indicator description (RPS)			
Area	**Indicators**	**Definition**	**Base**
Access and basic usage	Computer users	Persons who have used a computer in the last four weeks	Total population 15+
	Internet access	Persons who have access to the Internet in their home	Total population 15+
	Broadband Internet access	Persons who have access to the Internet at home via DSL or cable.	Persons with access to the Internet at home
	Internet users	Persons who have used the Internet in the last four weeks	Total population 15+
	Average weekly Internet use	Average time spent using the Internet (hours per week)	Internet users (4 weeks), excluding DK
	Future Internet user base growth	Non-users who think it is likely they will use the Internet in the future	Total population 15+
	E-mail users	Persons who have sent at least one e-mail (for private purposes) in the week prior to survey	Total population 15+
	Average share of regional mails	Average percentage of e-mail partners located in the same NUTS 2 region	E-mail users (last week, for private purposes)
	Costs a barrier to Internet take-up*	Involved non-users who agree completely that the Internet is too expensive to use	Involved Internet non-users
	Mobile phone users	Persons who have a mobile phone for their own personal use	Total population 15+
Standard applications	E-commerce (12 months)	Persons who have used the Internet to order products or sevices in the last 12 months	Internet users (12 months)
	E-banking (4 weeks)	Persons who have used the Internet to conduct on line banking in the last 4 weeks	Internet users (12 months)
	Internet chatters	Persons who have used the Internet to conduct online forum in the last 4 weeks	Internet users (12 months)

Indicator description (RPS)

Area	Indicators	Definition	Base
Work organisation	People tele-cooperating at workplace	Use of e-mail or other electronic data transfer for co-operation with clients, customers, suppliers or other working partners at other locations	Total employment
	All teleworkers	Multi-locational workers who spend paid working time doing home-based telework or mobile telework	Total employment
	Home-based teleworkers	Persons who spend paid working time working at home or on the same grounds or bulidings as their home, and are using a connection to the Internet or their company's computer system while doing so	Total employment
Learning and skills	Lifelong learning for work	Persons in paid employment who have been involoved either work related training by their company or by training organisation or in self-directed work related learning in the 4 weeks prior to the survey	Total labour force incl. temporarily not working (unemployed)
	E-learning for work	Persons engaged in lifelong learning who have used e-learning	All respondents engaged in lifelong learning in the 4 weeks prior to the survey
	Computer skills index	Average number of computer skills (out of a list of 5 of increasing sophistication) in the population	Total population 15+
	Have had computer training	Persons who have once attended a computer training course lasting at least half a day in total	Total population 15+
Special applications	E-health users	Internet users who have searched for any health-related information on the Internet in the 12 months prior to the interview	Internet users (12 months)
	Users of online timetables	Percentage of Internet users who have used the Internet to get any timetable information in the 4 weeks prior to the survey	Internet users (12 months)
	eGovernment users	Persons who have used the Internet for receiving at least one of three typical services provided by government/ public administration in the 12 months prior to the survey	All persons who have carried out at least one of these three typical services provided by government/ public administration in the 12 months prior to the survey. Non Internet-users excluded.
	eGovernment refusers*	Persons who agree completely that eGovernment is nothing they are interested in	Internet users (12 months)
Region-specific usage	ICT-enhanced regional identity	Percentage of respondents who state that the Internet and e-mail have given them a greater sense of identity with the region in which they live	Total population 15+
	Users of Internet for information about region	Percentage of Internet users who have got news about region from the Internet	Internet users (12 months)

* = scale inverted in figure below





Note: In the upper figure, the scale has been inverted for indicators where high values are considered negative (see table). This means that if the bar chart is blue and pointing towards the right for "costs as a barrier for Internet take-up", for example, this means that in this region below average shares of respondents were affected by costs as a barrier.

As regards penetration and use of ICT in the population, the region of Lombardy enjoys an encouraging profile. There is a general familiarity with the Internet and the opportunities it offers, not only regarding communications, but also new methods of work made possible with the help of ICT.

Here, both telework and e-learning for work purposes have positive values. The positive trend for telework, despite being a mere one per cent above the average in other regions, represents an extremely important figure when compared to other Italian regions. It is, in fact, the only region in Italy where this figure is above the average. Lombardy appears to offer favourable conditions for the implementation of telework; we can count the economic stucture of Lombardy amongst the causes of such a diffusion, it being a hotbed of innovation and development. It is one of the regions with the lowest unemployment rate in Italy. In such conditions of affluence, new technology takes root easily.

The great diffusion of ICT in this region is also helped by the positive trend for broadband, which without doubt makes individual and company connections easier.

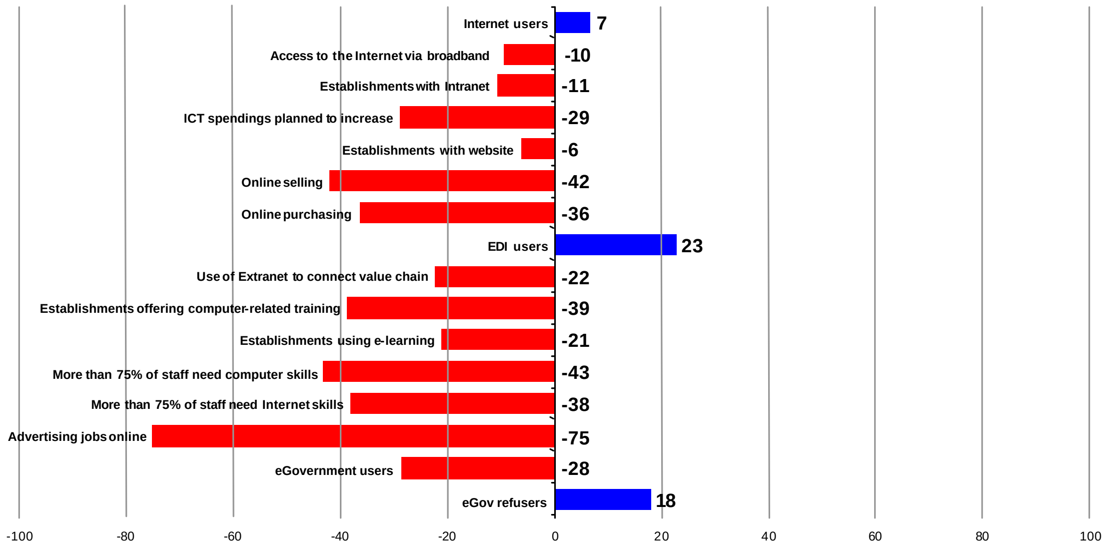
8.2.2 Establishments[1]

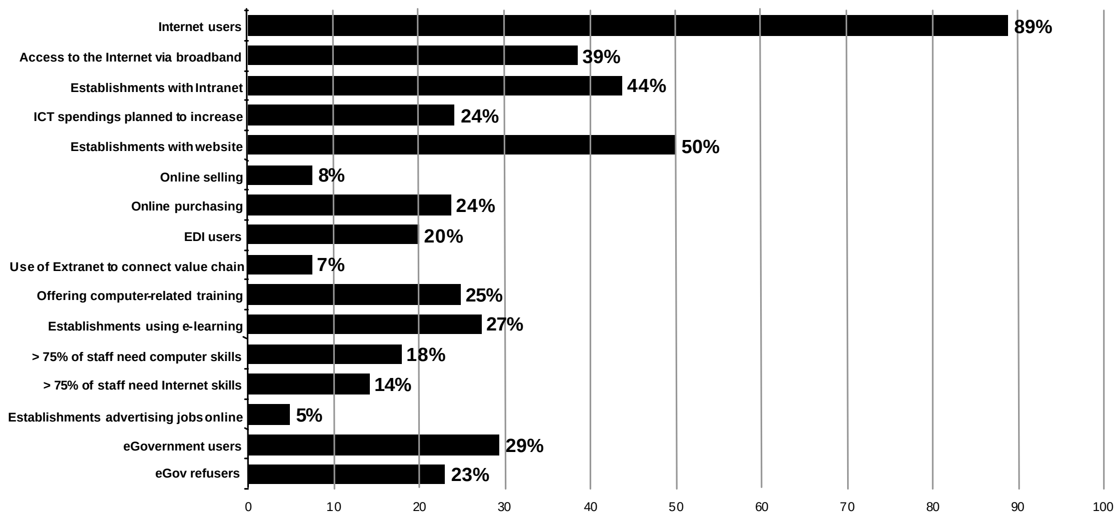
Indicator description (RDMS)

Area	Indicators	Definition	Base
Access and basic usage	Internet users	Percentage of establishments using the WWW	All establishments
	Access to the Internet via broadband	Percentage of establishments that access the Internet via DSL, cable, or leased line	All establishments that use the Internet
	Establishments with Intranet	Percentage of establishments that have an Intranet	All establishments
	ICT spendings planned to increase	Percentage of establishments which are planning to increase spendings on ICT in the next 12 months	All establishments
	Establishments with website	Percentage of establishments that have a website on the Internet	All establishments
eCommerce	Online selling	Percentage of establishments that sell online or distribute digital products online	All establishments
	Online purchasing	Percentage of establishments that purchase online	All establishments
	EDI users	Percentage of establishments that use EDI	All establishments
	Use of Extranet to connect value chain	Percentage of establishments that have an Extranet	All establishments
Training and skills	Establishments offering computer-related training	Percentage of establishments that offer computer-related training courses to their staff	All establishments
	Establishments using e-learning	Percentage of establishments that use e-learning tools (online or offline) for training their staff	All establishments
	More than 75% of staff need computer skills	Need for any computer skills in the establishment: More than 75% of staff	All establishments, excluding DK
	More than 75% of staff need Internet skills	Need for Internet skills in the establishment: More than 75% of staff	All establishments, excluding DK
	Establishments advertising jobs online	Percentage of establishments that have published job adverts on the Internet	All establishments
eGovernment	eGovernment users	Establishments that have used the Internet for receiving at least one of four typical services provided by government/ public administration in the 12 months prior to the survey	All establishments that have carried out at least one of these four typical services provided by government/ public administration in the 12 months prior to the survey
	eGovernment refusers*	Percentage of respondents who agree completely that they do not need any eGovernment services	All establishments

* = scale inverted in figure below

[1] All values weighted by employment





Note: In the upper figure, the scale has been inverted for indicators where high values are considered negative (see table).

The situation regarding establishments in Lombardy, despite being marked by a prevalence of positive absolute values, is relatively poor compared to the average in other regions.

Lombardy therefore seems to spend and use ICT relatively little.

One possible explanation for the negative value of the indicator ‘future spending on ICT development’ could be attributed to the high level of computerisation among companies, which remain in first place in Italy for investment in these sectors.

Analysis into establishments provides us with a fairly complex picture of Lombardy: against a fertile, active entrepreneurial background there is still resistance to new technology.

It is probably exactly this entrepreneurial experience that leads economic players to be cautious in net-economy investments.

Nevertheless, Lombardy, in line with its regional history, remains one of the most active Italian regions in innovation and is less dependent on planned state intervention to move industrial sectors towards new markets.

Amongst the indicators not yet at the average level elsewhere, it is worth mentioning and emphasizing broadband access to the internet, sales and purchases on-line and use of public administration services on the internet.

Access procedures and use of services on the web should be made easier, and public administration services should be implemented. In both the former and the latter cases, improvements in services would fall to the different types of users: companies, citizens and economic partners.

What emerges in Lombardy is the necessity to focus on facilitating access which will lead to an intense use of the services on offer on the web, this naturally calls for more than related investments in technology and qualified professional training.

Given the economic and development conditions achieved in this region in other sectors and the receptiveness on the part of the Lombard population, it seems safe to predict that with a little investment in this direction, notable results would be obtained.

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