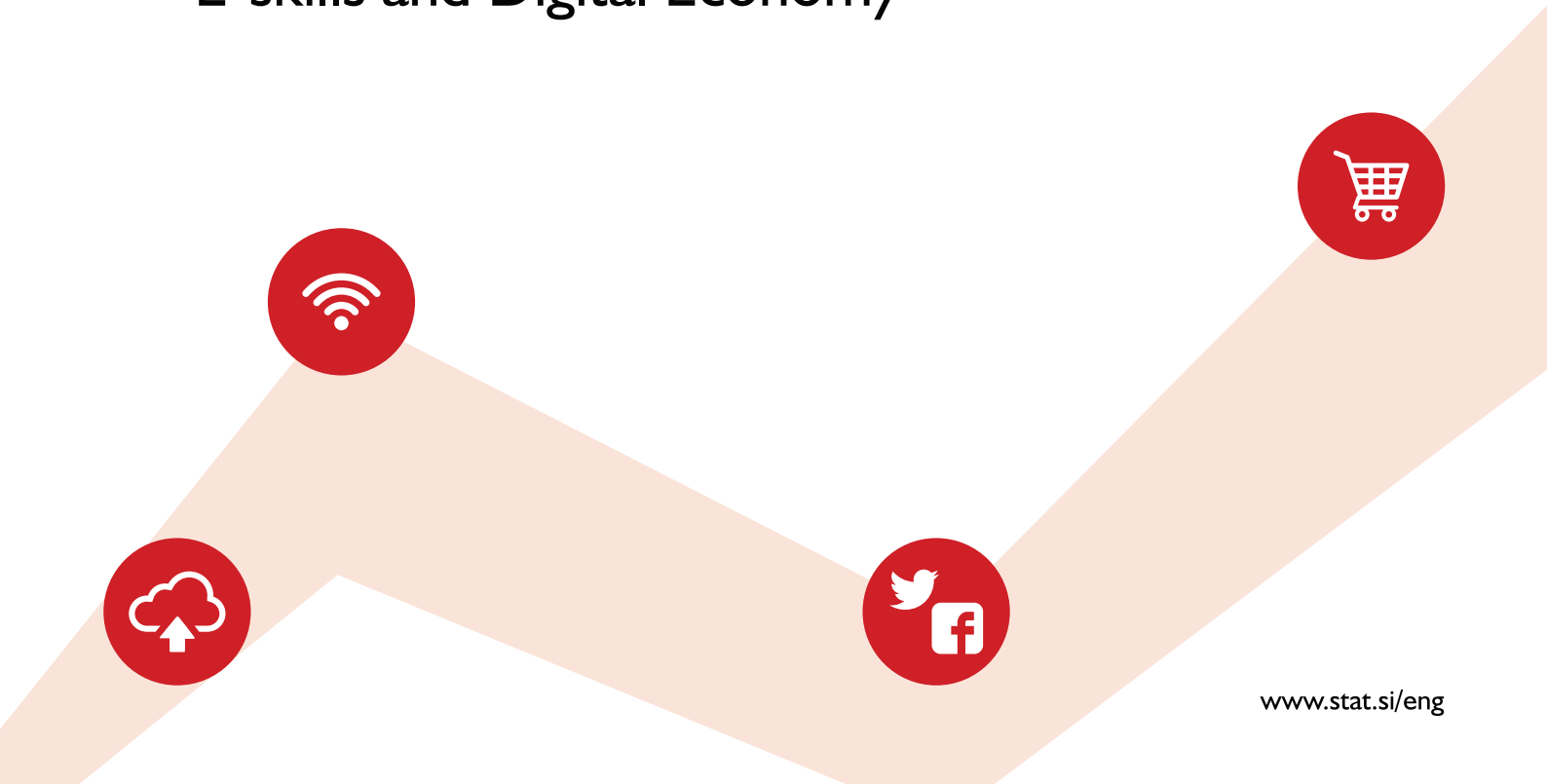
REPUBLIC OF SLOVENIA
STATISTICAL OFFICE

E-skills and Digital Economy



www.stat.si/eng

REPUBLIC OF SLOVENIA
STATISTICAL OFFICE

E-skills and Digital Economy

Ljubljana, 2016

www.stat.si/eng

E-skills and Digital Economy
Original title: E-veščine in digitalna ekonomija
Author Gregor Zupan
Translated by Boris Panič
Printed by the Statistical Office of the Republic of Slovenia

The publication is available on the website http://www.stat.si/StatWeb/en/publications
Information provided by the Information Centre:
phone +386 241 64 04
e-mail info.stat@gov.si
@StatSlovenija

CIP - Kataložni zapis o publikaciji
Narodna in univerzitetna knjižnica, Ljubljana

659.23:004(0.034.2)

ZUPAN, Gregor, 1976-
E-skills and digital economy [Elektronski vir] / [author Gregor Zupan ; translated by Boris Panič]. - El. knjiga. - Ljubljana : Statistični urad Republike Slovenije, 2016

Prevod dela: E-veščine in digitalna ekonomija

ISBN 978-961-239-357-1 (pdf)
1. Gl. stv. nasl.
285495296

FOREWORD

The information and communication technology (ICT) is changing our activities and touches upon many areas of our life: from reading news to how we shop. We communicate via social networks, where in addition to photos we post selfies and where we "like" the posts of our friends. Desktop computers are being replaced by tablets, documents and photos are stored in clouds. Our mobile phones are small computers for which new apps are constantly being developed. With the increasing use of ICTs and their functionalities, it is necessary to master relevant new skills. The use of ICT is changing the functioning of enterprises. The ICT generates new opportunities. Digital economy is growing.

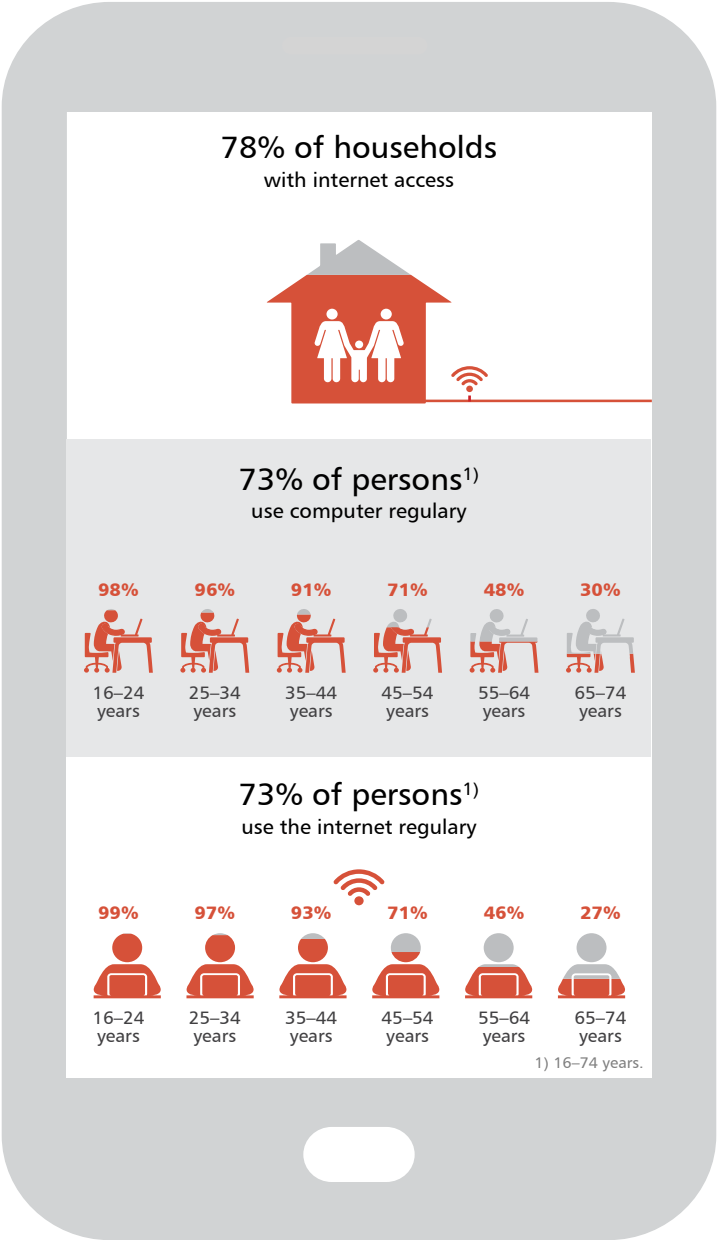
This publication presents the development of information society in Slovenia. You will learn to what extent people in Slovenia use computers and the internet compared to the other EU Member States. Based on available data, the development level of digital economy in Slovenia is presented. Numerous data on the ICT sector are available, i.e. on enterprises engaged in production, development and provision of ICT services, as well as on web sales of goods and services and on how many people engage in online shopping.

SURS is aware of the importance of new interactive technologies, i.e. social media, which enable more direct communication with you. Contact us at @StatSlovenia

Genovefa Ružić
Director-General

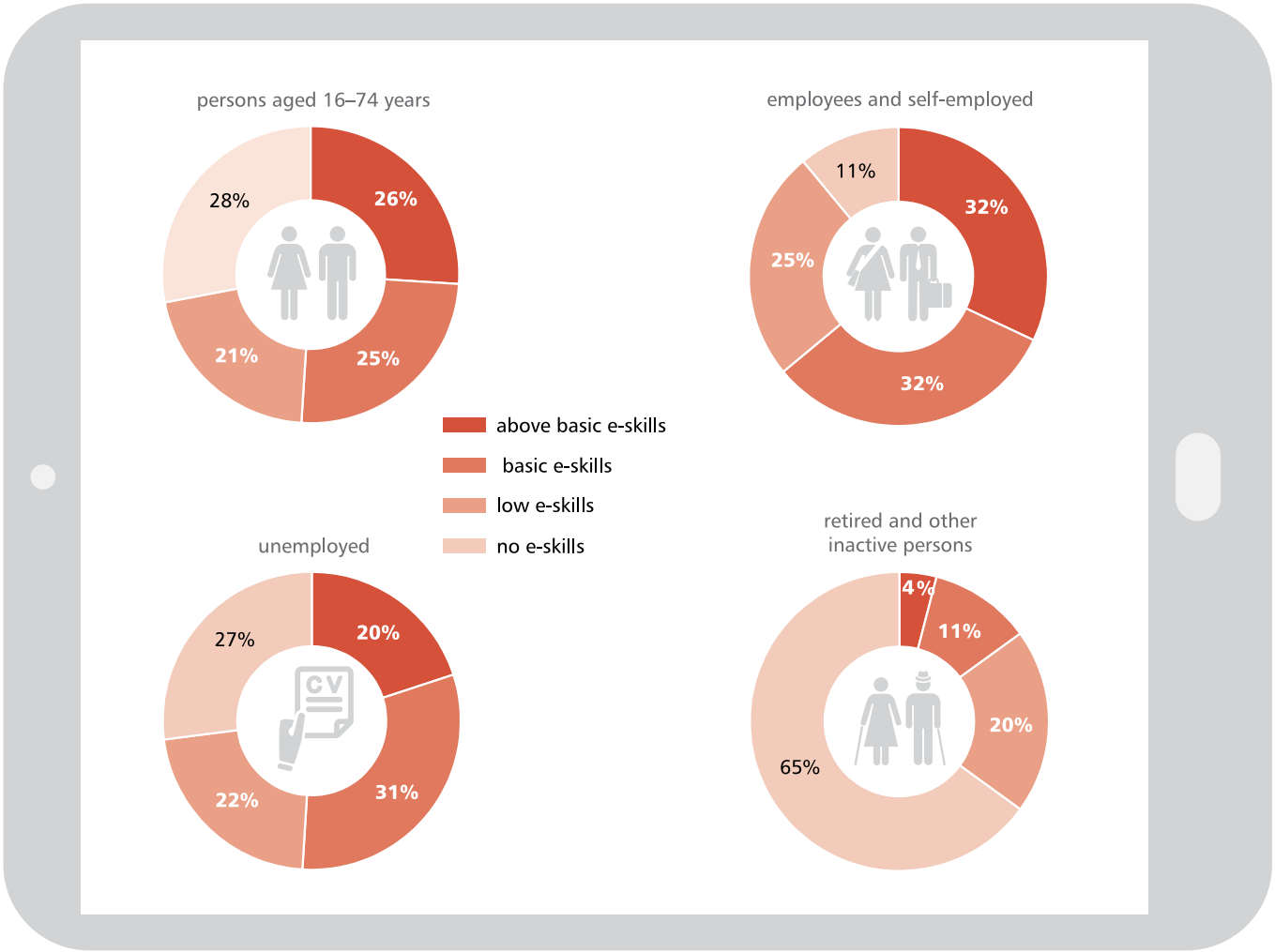
Contents

COMPUTERS AND INTERNET ACCESS



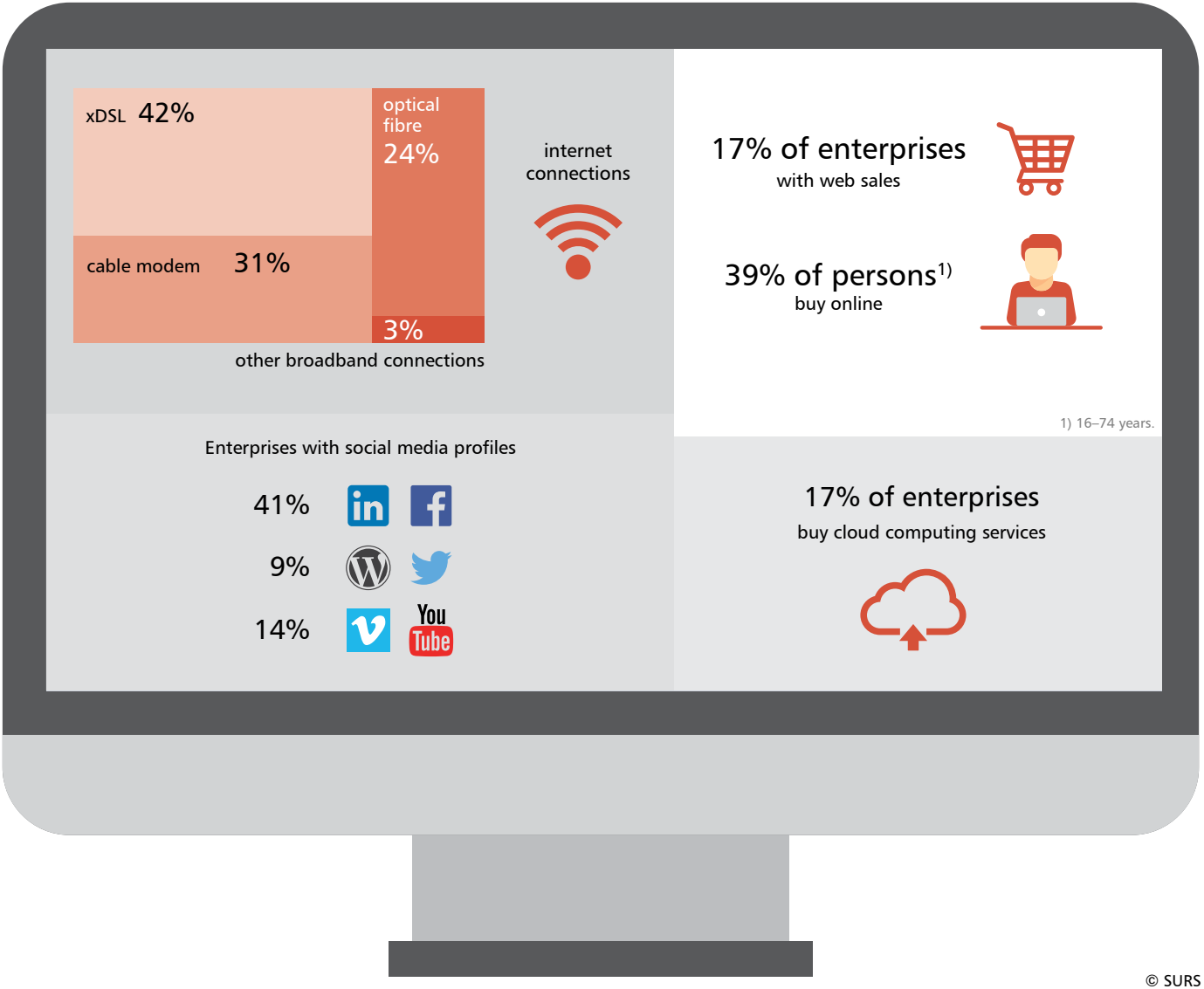
Source: SURS

E-SKILLS



Source: SURS

DIGITAL ECONOMY



Source: SURS

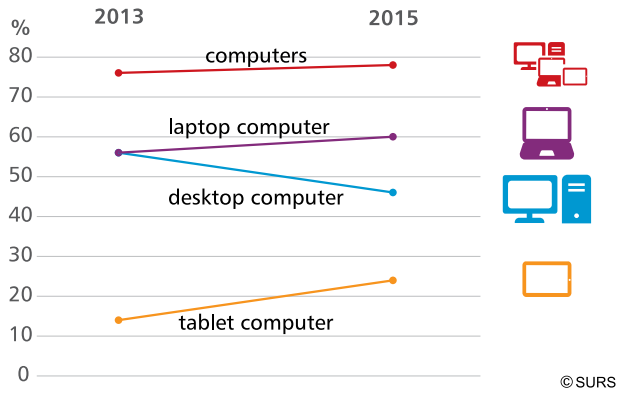
COMPUTERS AND INTERNET ACCESS

Information society has permeated all areas of life. This is a society based on the usage of information and communication technology (ICT), i.e. all types of computers, mobile phones, the internet, etc. The new technology is changing our everyday activities and the way enterprises operate; at the same time it requires new knowledge, so-called e-skills.

Computer – desktop, laptop, tablet – one of the symbols of information society

In 2015, 78% of households in Slovenia had computers (in the EU-28: 82%) and in 2013 76% (in the EU-28: 80%). The number of households with laptops and tablets is growing; the number of households with desktop computers is falling.

Households with computers by type of computer, Slovenia



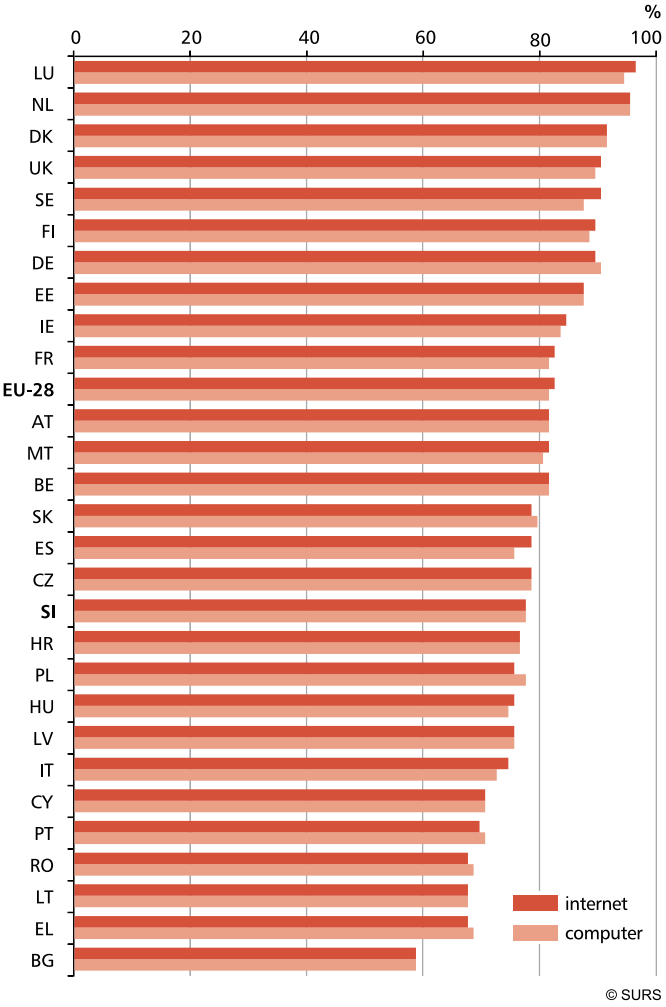
Source: SURS

Access to the internet, the global computer network

In 2015, 78% of households in Slovenia had internet access (in the EU-28: 83%). Since 2008 the share has been lower than in the EU-28, except in 2011, when the shares were the same.

Almost all households with internet access had broadband access; 75% of them had fixed broadband access (in the EU-28: 72%) and 54% had mobile broadband access (in the EU-28: 35%).

Households with computers and internet access, EU-28, 2015



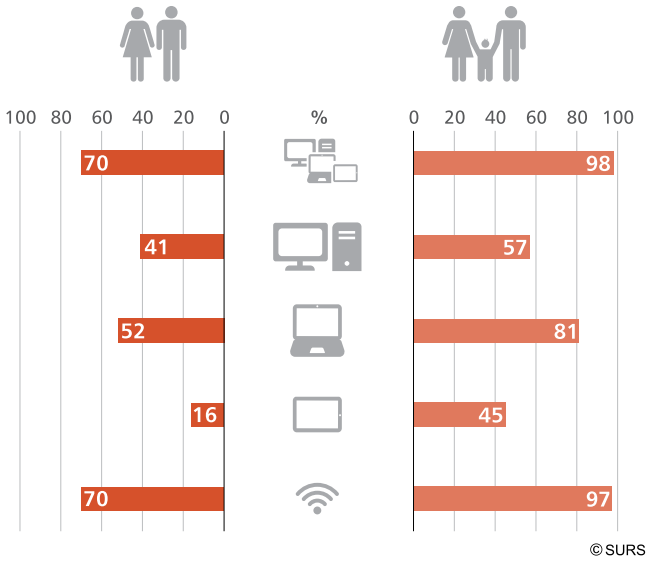
Source: Eurostat (http://ec.europa.eu/eurostat, 7. 3. 2016)

Among EU Member States, in 2015 the share of households with internet access was the highest in Luxembourg (97%), followed by the Netherlands (96%) and the Scandinavian countries.

Children have an impact on ICT equipment

The share of households with computers and internet access was higher among households with children than among households without children.

Households with computers and internet access by type of household, Slovenia, 2015



Source: SURS

22% of households in Slovenia did not have internet access in 2015

61% of these households did not have internet access because they did not need it, 29% due to lack of knowledge or skills, 28% because equipment was too expensive and 25% because the cost of internet access was too high. However, households with children stated different reasons than households without children.

In the cohesion region Zahodna Slovenija the share of households with computers and internet access was higher than in the cohesion region Vzhodna Slovenija.

Households with computers and internet access, cohesion regions, Slovenia, 2015

Source: SURS

Computer usage

Computer usage is one of the main indicators of information society development

In 2015, computers (desktops, laptops or tablets) were regularly[1] used by 73% of persons aged 16–74 (in the EU-28: 78%), irrespective of the purpose. 60% of them were using computers every day or almost every day (in the EU-28: 63%). 80% of persons had already used a computer (in the EU-28: 84%).

Regular computer users (16–74 years) by gender and age groups, Slovenia and EU-28, 2015

%

	SI	EU-28
16–74 years	**73**	**78**
16–24 years	98	94
25–34 years	96	91
35–44 years	91	87
45–54 years	71	81
55–64 years	48	65
65–74 years	30	45

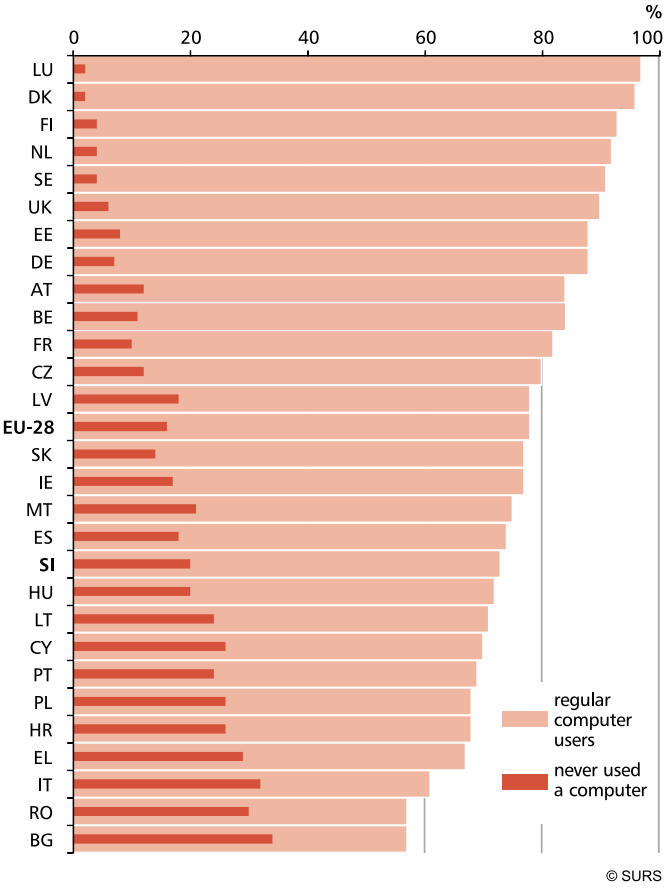
%

	SI		EU-28	
	men	women	men	women
16–74 years	**75**	**71**	**80**	**76**
16–24 years	97	99	94	94
25–54 years	85	86	86	86
55–74 years	47	35	61	52

Source: Eurostat (http://ec.europa.eu/eurostat, 8. 3. 2016)

The number of regular computer users is falling with age. In 2015, the share for persons in Slovenia aged 45+ was lower than the EU-28 average. The share of persons who had never used a computer was higher than the EU-28 average.

Regular computer users and non-users (16–74 years), EU-28, 2015



Source: Eurostat (http://ec.europa.eu/eurostat, 8. 3. 2016)

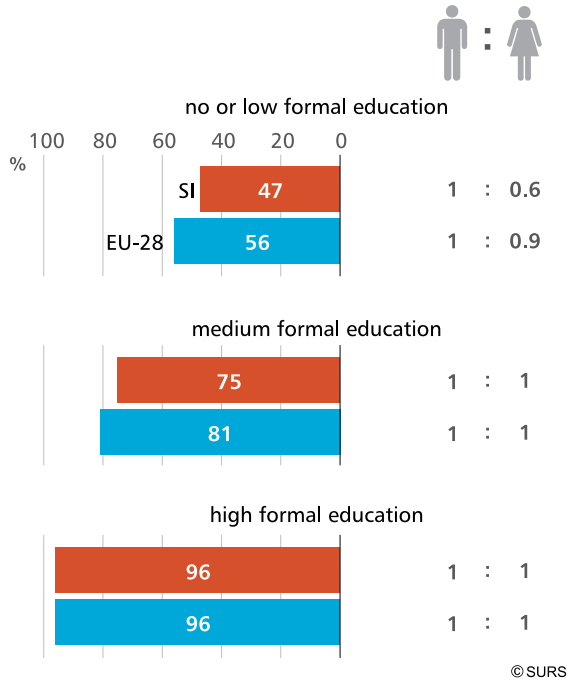
Most persons aged 16–74 were using computers regularly in Luxemburg (97%) and Denmark (96%), and the fewest in Bulgaria and Romania (57% in each) and Italy (61%). These three countries also had the highest shares of persons who had never used a computer.

1 "Regularly" means using a computer at least once in the last three months before the survey.

Most computer users among students, the fewest among retired persons

In 2015 almost all tertiary students in Slovenia were regular computer users (99%; in the EU-28: 97%). Among persons employed (employees, self-employed and unpaid family members) 90% were regular computer users (in the EU-28: 88%), while among the unemployed the share was 75% (in the EU-28: 72%). The share of computer users was the lowest among retired and other inactive persons (36%), much lower than in the EU-28 overall (52%). Half (52%) of retired and other inactive persons had never used a computer (in the EU-28: 38%). Among the unemployed the share was 17% (in the EU-28: 18%).

Regular computer users (16–74 years) by education and gender, Slovenia and the EU-28, 2015



Source: Eurostat (http://ec.europa.eu/eurostat, 8. 3. 2016)

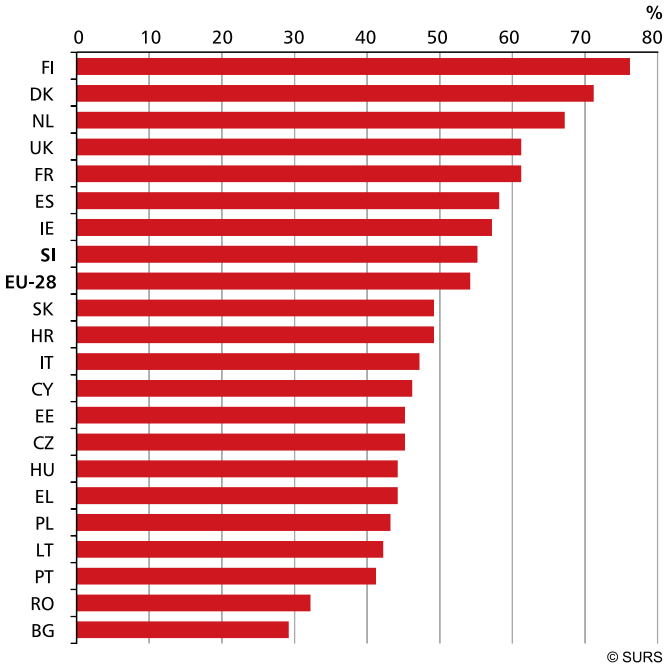
In 2015, the share of regular computer users among persons with basic education or less was lower than in the EU-28 overall.

Computers are used at work by more than half of persons employed in enterprises with at least 10 persons employed

Working without computers can hardly be imagined. In 2015, almost all enterprises in Slovenia (99%) were using computers; the exception was enterprises in individual activities on behalf of which administrative activities were performed by other enterprises.

In 2015, computers were used by 55% of persons employed in enterprises with at least 10 persons employed (in the EU-28: 54%). In small enterprises the share was 56% (in the EU-28: 48%), in medium-sized 52% (in the EU-28: 52%) and in large 56% (in the EU-28: 58%).

Persons employed in enterprises with at least 10 persons employed using computers at their work, EU-28[1)], 2015



1) No data for BE, DE, LV, LU, MT, AT, SE

Source: Eurostat (http://ec.europa.eu/eurostat, 30. 4. 2016)

In 2015, the share of persons employed using computers at their work was the highest in the Scandinavian countries (particularly in Finland) and the lowest in Bulgaria.

Internet usage

Internet is used for private and business purposes – for information, communication, education, etc.

In 2015, the internet was regularly[2] used by 73% of persons aged 16–74 (in the EU-28: 79%). 61% of them were using it every day or almost every day (in the EU-28: 67%). 78% of persons had already used the internet (in the EU-28: 83%).

Regular internet users (16–74 years) by gender and age groups, Slovenia and EU-28, 2015

%

	SI	EU-28
16–74 years	**73**	**79**
16–24 years	99	96
25–34 years	97	94
35–44 years	93	89
45–54 years	71	82
55–64 years	46	66
65–74 years	27	45

%

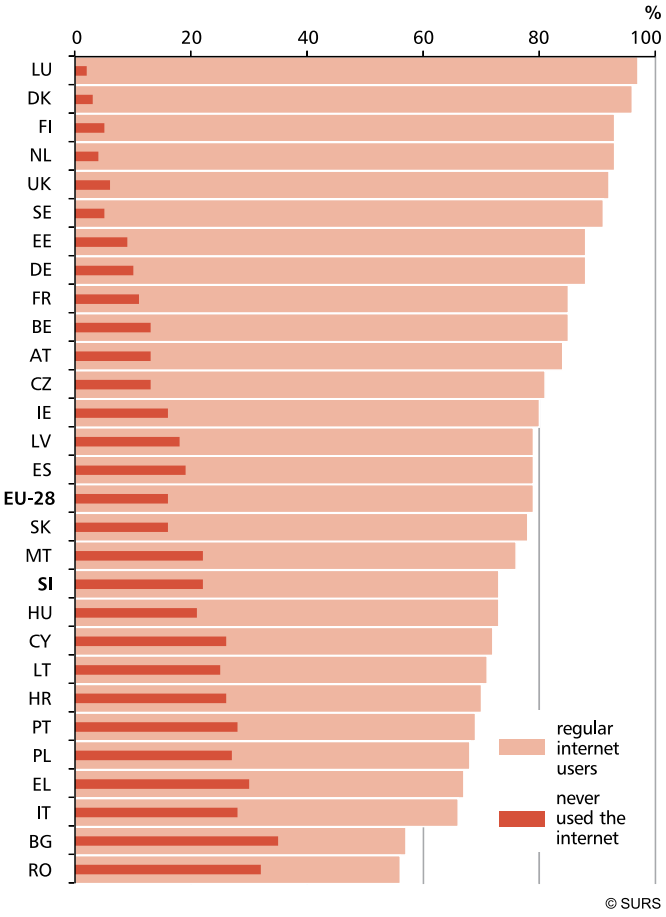
	SI		EU-28	
	men	women	men	women
16–74 years	**75**	**71**	**81**	**78**
16–24 years	96	100	99	97
25–54 years	87	86	88	88
55–74 years	43	34	61	52

Source: Eurostat (http://ec.europa.eu/eurostat, 8. 3. 2016)

In 2015, the share of regular internet users aged 16–74 in Slovenia was lower than the EU-28 average.

The share of persons who had never used the internet was higher than the EU-28 average.

Regular internet users and non-users (16–74 years), EU-28, 2015



Source: Eurostat (http://ec.europa.eu/eurostat, 8. 3. 2016)

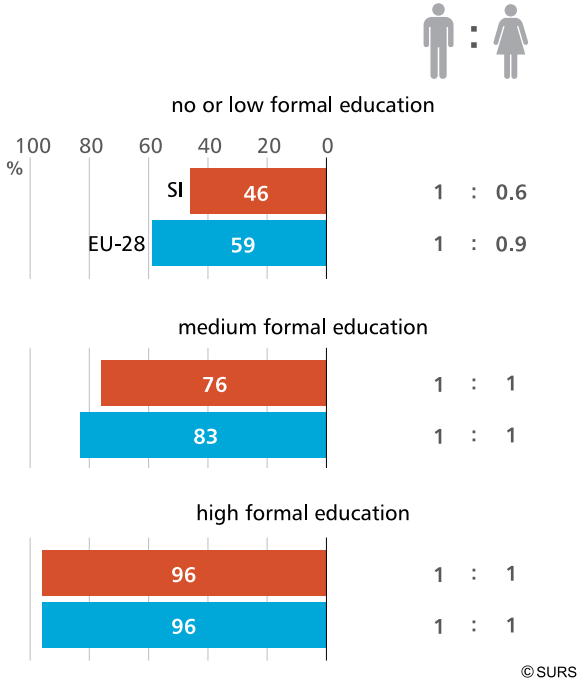
As regular computer users, the shares of regular internet users were the highest in Luxembourg (97%) and Denmark (96%), and the lowest in Romania (56%), Bulgaria (57%) and Italy (66%).

2 " Regularly" means using the internet at least once in the past three months before the survey.

Most regular internet users among students, the fewest among retired persons

The internet was also regularly used by all tertiary students in 2015. Among persons employed (employees, self-employed and unpaid family members) 90% were regular internet users (in the EU-28: 90%), among the unemployed 75% (in the EU-28: 77%) and among the retired and other inactive persons 35% (in the EU-28: 53%). 19% of unemployed persons had never used the internet (in the EU-28: 17%), while the share for the retired and other inactive persons was 56% (in the EU-28: 40%).

Regular internet users (16–74 years) by education and gender, Slovenia and EU-28, 2015



Source: Eurostat (http://ec.europa.eu/eurostat, 8. 3. 2016)

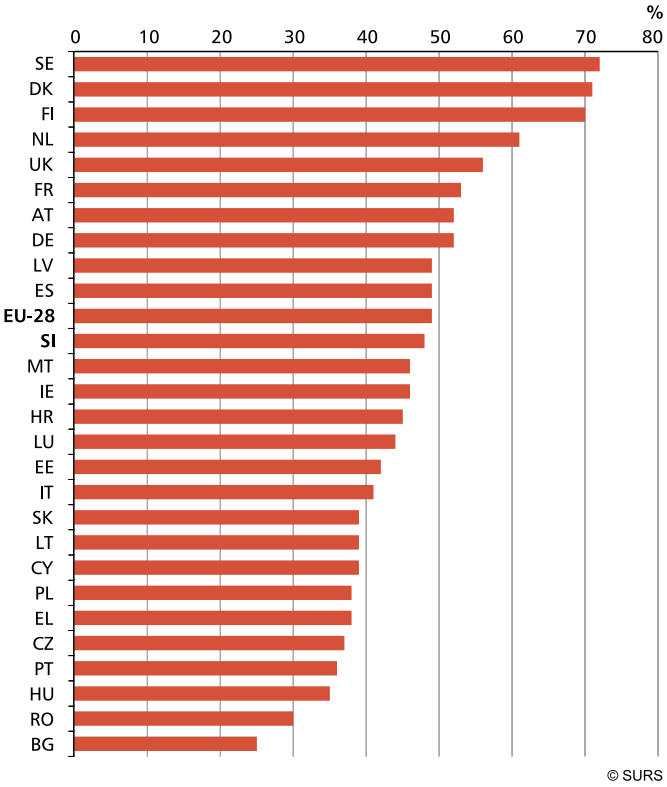
In 2015 there were fewer regular internet users in Slovenia than in the EU-28 overall among persons with basic education or less and among persons with upper secondary education (both male and female).

Internet usage in enterprises with at least 10 persons employed

In 2015, 99% of enterprises in Slovenia had internet access; they had fixed or mobile broadband internet access. All medium-sized and large enterprises and 98% of small enterprises had internet access.

Computers connected to the internet were used for work by 48% of persons employed in Slovenia (in the EU-28: 49%): in small enterprises 52% (in the EU-28: 45%), in medium-sized 46% (in the EU-28: 48%) and in large 48% (in the EU-28: 52%).

Persons employed in enterprises with at least 10 persons employed using computers connected to the internet at their work, EU-28[1], 2015



1) No data for BE.

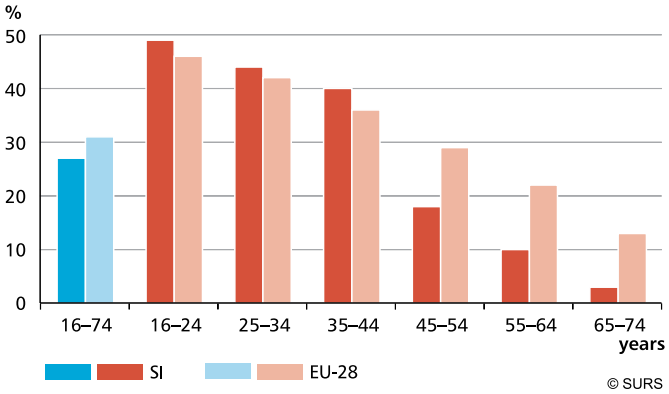
Source: Eurostat (http://ec.europa.eu/eurostat, 31. 3. 2016)

Mobile internet usage

Internet access anytime and anywhere

Internet usage is not limited to only home, workplace, school, etc., or the access via fixed internet connections. Persons access the internet with mobile devices (laptop or tablet computers, mobile or smart phones, e-readers, smart watches) via mobile internet connections anytime and anywhere. Mobile internet connections enable connectivity anywhere and thus access to information anytime and anywhere. Ever faster mobile internet connections enable the development of new services and change the everyday life and operation of enterprises.

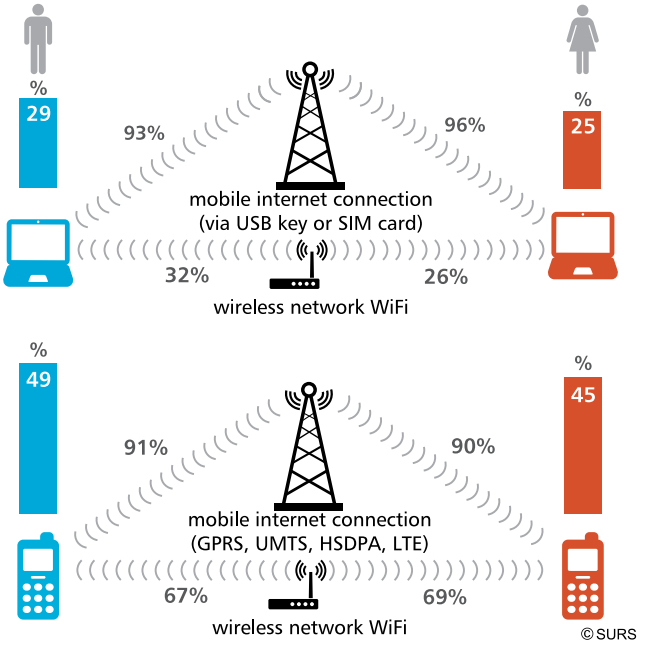
Internet users (16–74 years) who access the internet via laptop or tablet computer outside home, school or workplace, by age groups, Slovenia and EU-28, 2015



Source: Eurostat (http://ec.europa.eu/eurostat, 9. 3. 2016)

In 2015, 27% of persons aged 16–74 accessed the internet outside their home, school or workplace via laptop or tablet computer. Almost all of them accessed the internet via mobile phone networks (94%) and 29% via wireless WiFi network. 47% of persons accessed the internet via mobile phone; 91% of them via mobile phone networks, and 68% via wireless WiFi network. 2% of persons accessed the internet outside home, school or workplace via other mobile devices (e-reader, game console, etc.).

Users of mobile devices for internet access outside home or workplace by types of devices, by gender, Slovenia, 2015



Source: SURS

Enterprises benefit from the mobile internet access

Portable devices and mobile internet connections for access to e-mail, documents or dedicated applications of enterprises are a benefit for enterprises, for increasing productivity. Persons employed can access the enterprises' resources from anywhere.

In 2015, mobile devices using mobile phone networks (at least 3G technology) to access the internet were given to their persons employed by 76% of enterprises (with at least 10 persons employed). 59% of enterprises accessed mobile internet via laptop or tablet computers, and 71% via mobile (smart) phones. Portable devices enabling internet access via mobile phone networks were given by enterprises to 17% of their persons employed in 2015 (in 2014: 14%).

E-SKILLS

E-skills cover knowledge and skills persons obtained and know how to use; they are composed of four sets of e-skills measured by the number of activities persons can perform and are related to ICT usage (i.e. computers, portable devices, software and the internet).

Information e-skills

- finding information about goods or services on the internet
- seeking health-related information on the internet
- obtaining information from e-government websites
- copying or moving files or folders
- usage of storage space on the internet

Communication e-skills

- sending or receiving e-mails
- participation in social networks (creating a user profile, posting messages)
- telephoning or video calls over the internet
- uploading self-created photos, videos, texts to website

Problem-solving e-skills

- transferring files or folders between computers or other devices
- installing software or applications
- changing the settings of any software, including operational system or security programs
- online purchase in the last 12 months
- selling via websites
- doing an online course
- usage of online learning material
- communication with instructors or students via educational websites or portals
- internet banking

Software e-skills

- usage of word processing software
- usage of spreadsheet software
- usage of advanced functions of spreadsheet software (filtering, to organise data, usage of formulas, creation of charts)
- usage of software to edit photos, video or audio files
- creation of presentations or documents with integration of text, pictures, tables or charts
- writing code in a programming language

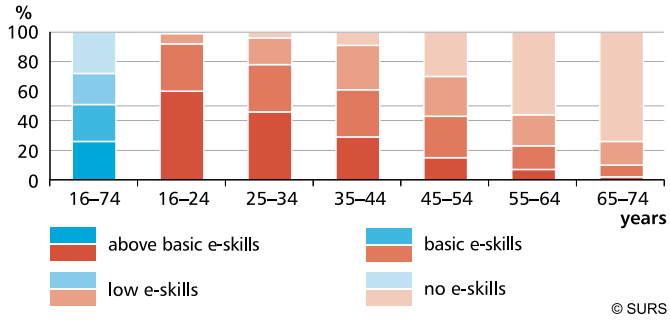
Levels of mastering e-skills are:

- above basic e-skills – a person has very good e-skills in all four groups;
- basic e-skills – a person has basic e-skills in each group;
- low e-skills – a person does not have any e-skills in at least one but not more than three groups;
- no e-skills – a person did not carry out any activity in any group in the last 3 months or ever.

Digital literacy is an important factor in improving people's statuses in the society

E-skills (digital literacy) are skills necessary for using computers, mobile devices and the internet (ICT) and for performing various activities online (using e-administration services, searching all types of information, various forms of communication, etc.).

Persons aged 16–74 by e-skills, by age groups, Slovenia, 2015



Source: Eurostat (http://ec.europa.eu/eurostat, 9. 3. 2016)

In 2015, 26% of persons in Slovenia aged 16–74 had above basic e-skills (in the EU-28: 28%); 25% had basic e-skills (in the EU-28: 27%), 21% had low e-skills (in the EU-28: 23%), and 28% had no e-skills (in the EU-28: 22%).

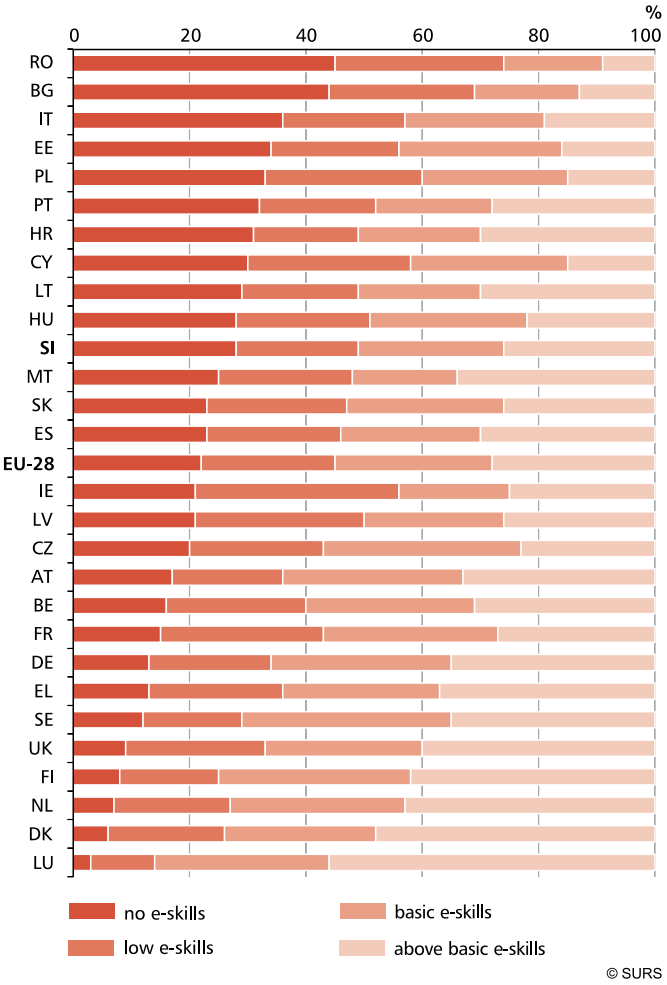
Persons aged 16–74 by e-skills, by gender, Slovenia and EU-28, 2015 %

	SI		EU-28	
	men	women	men	women
Above basic e-skills	26	26	31	26
Basic e-skills	25	26	27	27
Low e-skills	24	19	22	24
No e-skills	25	29	20	23

Source: Eurostat (http://ec.europa.eu/eurostat, 14. 3. 2016)

In 2015, more women than men in Slovenia lacked appropriate e-skills.

Persons aged 16–74 by e-skills, EU-28, 2015



Source: European Commission (https://ec.europa.eu/digital-single-market/en/digital-scoreboard, 14. 3. 2016)

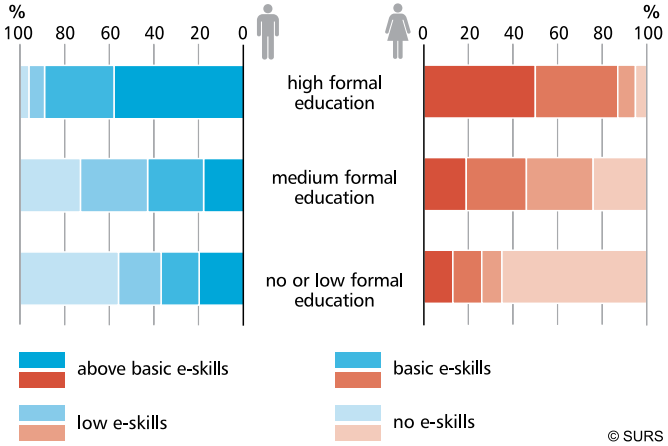
In the EU-28, the highest share of persons had above basic e-skills in Luxembourg and the lowest in Romania.

The higher the education, the better the e-skills

In Slovenia, persons with tertiary education had above basic e-skills. As regards persons aged 16–74 with tertiary education, 53% had above basic e-skills (in the EU-28: 50%), 34% had basic e-skills (in the EU-28: 33%), 8% had low e-skills (in the EU-28: 13%) and 5% had no e-skills (in the EU-28: 4%).

The share of women with no e-skills was the highest among those with basic education or less.

Persons aged 16–74 by e-skills, by education and gender, Slovenia, 2015

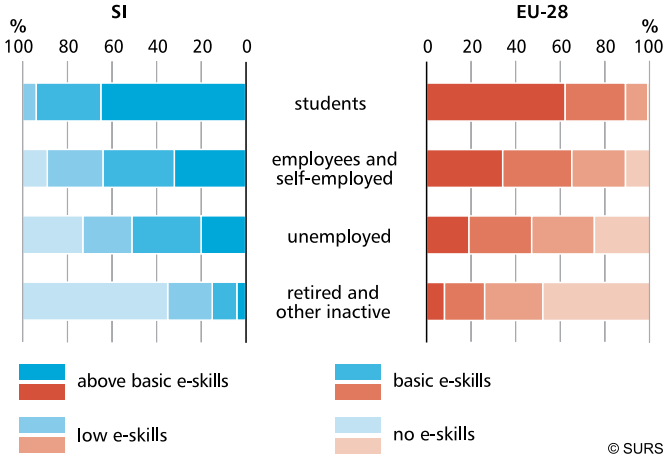


Source: Eurostat (http://ec.europa.eu/eurostat, 14. 3. 2016)

Having e-skills is an advantage and a must on the labour market

In 2015, 32% of employees and self-employed persons in Slovenia had above basic e-skills; 11% of them had no e-skills (the same as in the EU-28 overall). As regards unemployed persons, 27% had no e-skills (in the EU-28: 25%). As regards retired and other inactive persons, the shares of those without e-skills and with low e-skills were large.

Persons aged 16–74 by e-skills and activity status, Slovenia and EU-28, 2015



Source: Eurostat (http://ec.europa.eu/eurostat, 14. 3. 2016)

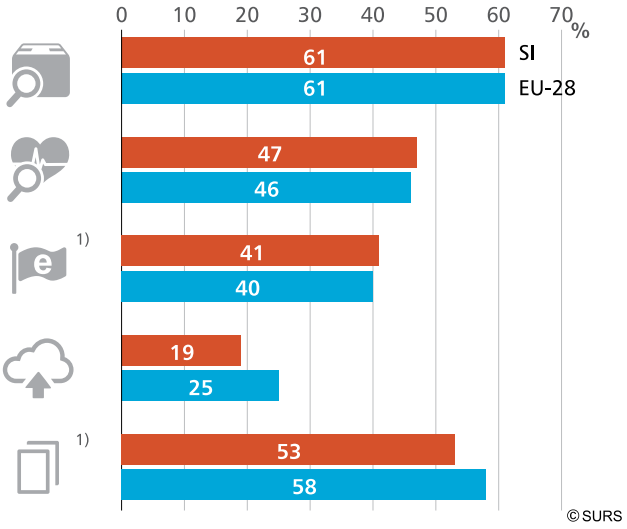
Information e-skills

Persons with information e-skills *have knowledge that enables them to identify, locate, retrieve, store and analyse digital information and judge its relevance and purpose. The skill level is measured with the number of activities persons are able to perform. If they performed one activity, the have basic skills; if they performed more than one activity, their information e-skills are above basic.*

In 2015, 70% of persons aged 16–74 in Slovenia had information e-skills (in the EU-28: 75%); 62% had above basic e-skills (in the EU-28: 65%) and 8% basic e-skills (in the EU-28: 10%).

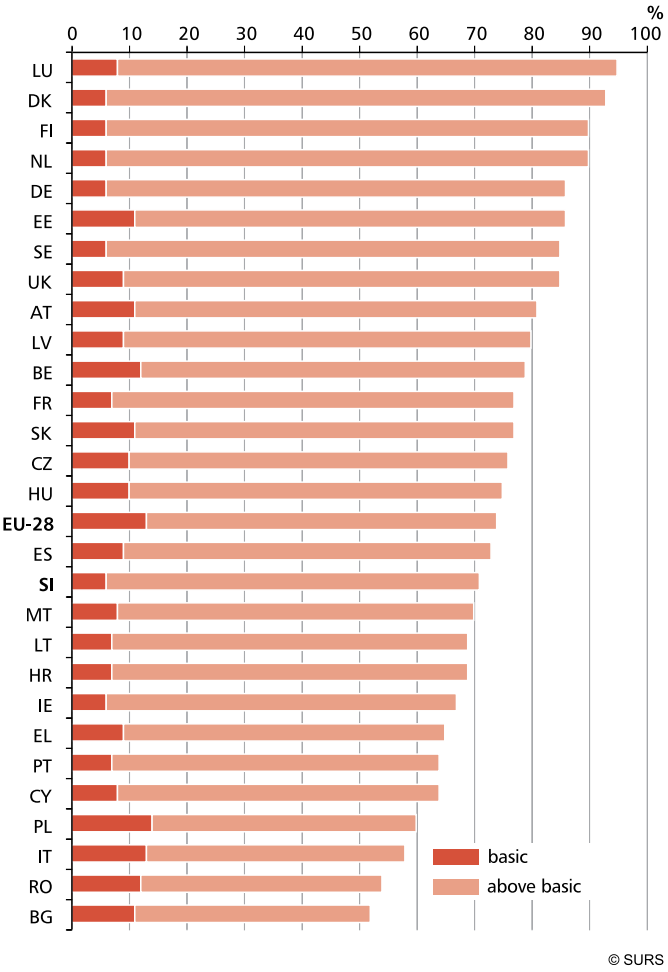
The level of information e-skills is measured with the number of the following activities performed by regular internet users in the last 3 or 12 months before the survey:

Persons aged 16–74 with information e-skills by activities performed, Slovenia and EU-28, 2015



1) Users in the last 12 months, others in the last 3 months.
Source:: Eurostat (http://ec.europa.eu/eurostat, 15. 3. 2016)

Persons aged 16–74 with information e-skills by skill level, EU-28, 2015



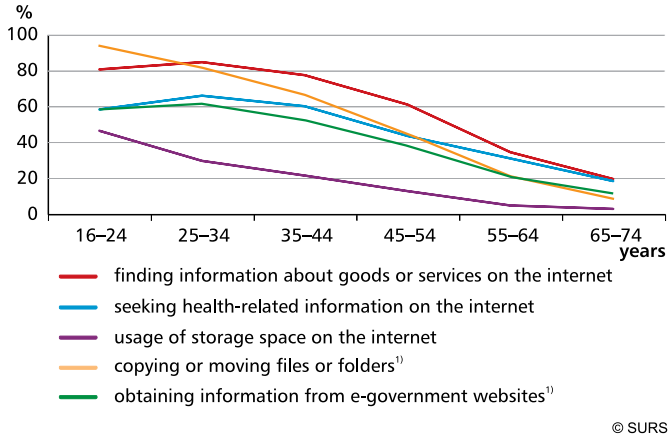
Source: Eurostat (http://ec.europa.eu/eurostat, 15. 3. 2016)

Among the EU-28 Member States, the share of persons with above basic information e-skills was the highest in Luxembourg and Denmark and the lowest in Bulgaria.

Most of the young persons have information e-skills

In 2015, 98% of 16–24-year-olds had information e-skills; 91% had above basic e-skills and 7% had basic e-skills. Almost all of them copied or moved files or folders (94%), and many used internet storage space (47%).

Persons aged 16–74 with information e-skills by activities performed, by age groups, Slovenia, 2015



1) Activity performed in the last 12 months, others in the last 3 months.

Source: SURS

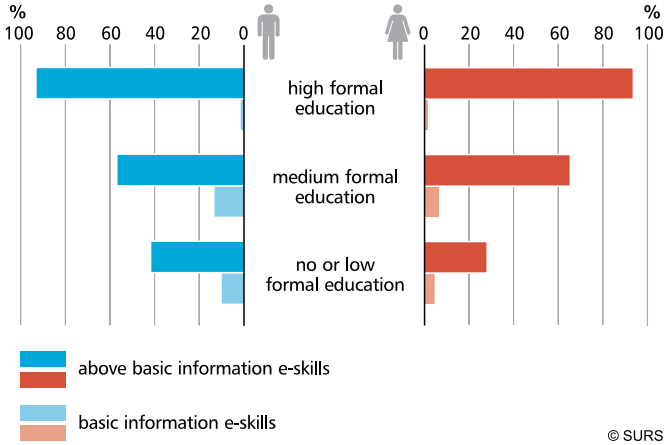
Information about goods or services was sought on the internet by the highest share of 25–34-year-olds (85%); they also sought health-related information (66%); in the last 12 months most of them sought information on e-government websites (62%).

93% of 25–34-year-olds had information e-skills; 88% had above basic skills and 5% had basic skills.

The shares of men and women with information e-skills are almost the same

The share of men with information e-skills in Slovenia in 2015 was 70% (in the EU-28: 76%); 60% had above basic e-skills (in the EU-28: 66%) and 10% had basic e-skills (in the EU-28: 10%). As regards women, 68% of them had information e-skills (in the EU-28: 73%); 63% had above basic e-skills (the same as the EU-28 average) and 5% had basic e-skills (in the EU-28: 10%).

Persons aged 16–74 with information e-skills by skill level, education and gender, Slovenia, 2015



Source: Eurostat (http://ec.europa.eu/eurostat, 15. 3. 2016)

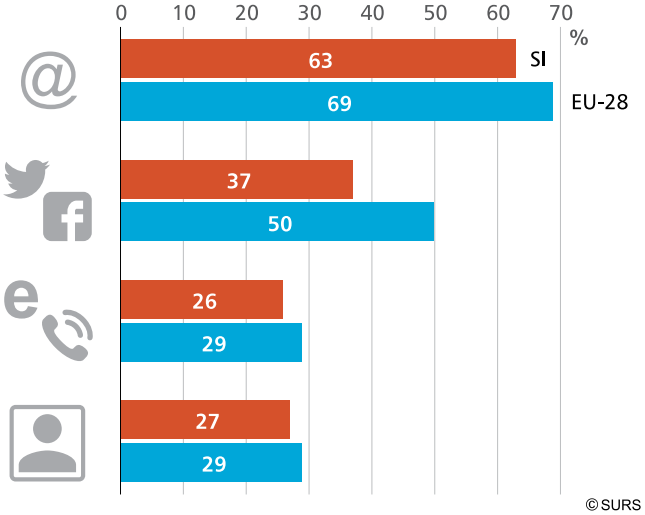
Communication e-skills

Persons with communication e-skills *have knowledge that enables communication with the help of digital technologies; sharing information and various content (images, text, audio-visual content) online, collaborating with others, etc. The skill level is measured with the number of activities persons are able to perform. If they performed one activity, the have basic skills; if they performed more than one activity, their communication e-skills are above basic.*

In 2015, 67% of persons aged 16–74 in Slovenia had communication e-skills (in the EU-28: 74%); 46% had above basic e-skills (in the EU-28: 56%) and 21% had basic e-skills (in the EU-28: 18%).

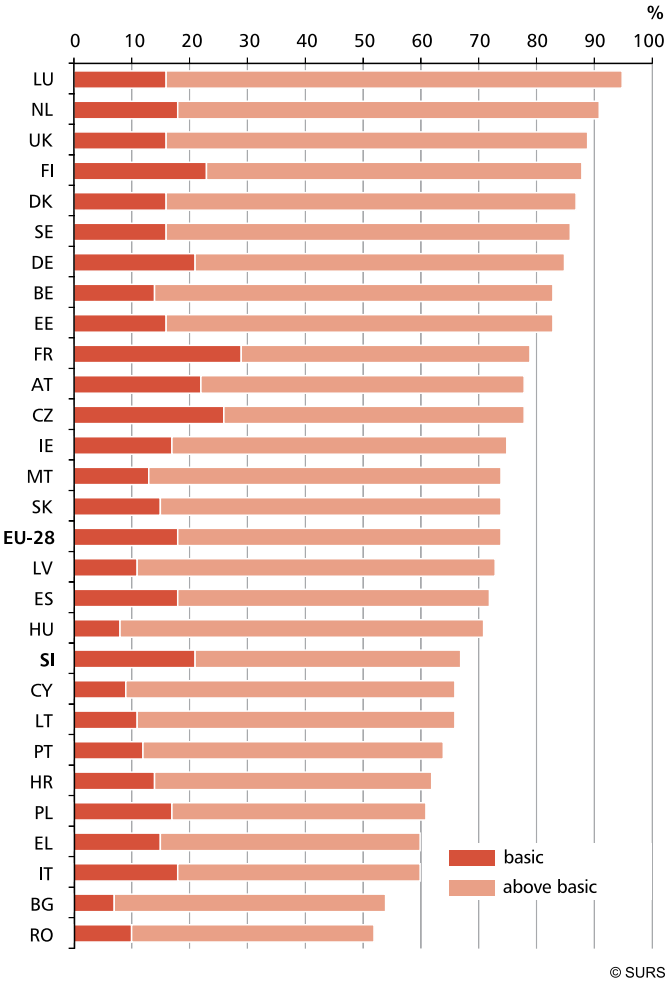
The level of communication e-skills is measured with the number of the following activities performed by regular internet users in the last 3 or 12 months before the survey:

Persons aged 16–74 with communication e-skills by activities performed, Slovenia and EU-28, 2015



1) Users in the last 3 months.
Source: Eurostat (http://ec.europa.eu/eurostat, 16. 3. 2016)

Persons aged 16–74 with communication e-skills by skill level, EU-28, 2015



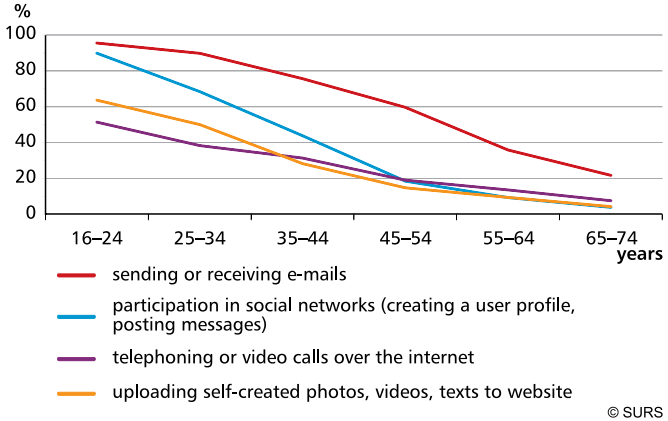
Source: Eurostat (http://ec.europa.eu/eurostat, 16. 3. 2016)

Among the EU-28 Member States, the share of persons with above basic communication e-skills was the highest in Luxembourg and the lowest in Romania and Bulgaria.

Most of the young persons have communication e-skills

Almost all 16–24-year-olds (99%) and a large majority of 25–34-year-olds (95%) had above basic communication e-skills. 16–24-year-olds were the most active in sending or receiving e-mails (96%), participating in social media (90%), uploading self-created content (photos, text, audio or video content) to websites (64%) and telephoning and making video calls over the internet (51%).

Persons aged 16–74 with communication e-skills by activities performed[1], by age groups, Slovenia, 2015



1) Activity performed in the last 3 months.

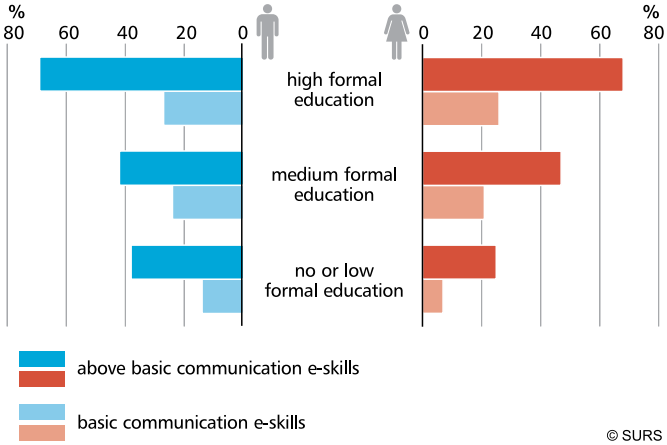
Source: SURS

The shares of men and women with communication e-skills are almost the same

The share of men with communication e-skills in Slovenia in 2015 was 69% (in the EU-28: 76%); almost half (46%) had above basic e-skills (in the EU-28: 57%) and almost a quarter (23%) had basic e-skills (in the EU-28: 19%).

As regards women, 66% of them had communication e-skills (in the EU-28: 74%); 47% had above basic e-skills (in the EU-28: 56%) and 19% had basic e-skills (in the EU-28: 18%).

Persons aged 16–74 with communication e-skills by skill level, education and gender, Slovenia, 2015



Source: Eurostat (http://ec.europa.eu/eurostat, 16. 3. 2016)

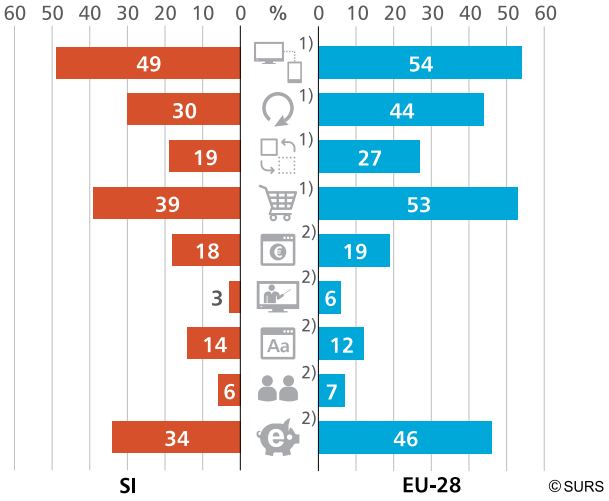
Problem-solving e-skills

Persons with problem-solving e-skills *have knowledge that enables solving of technical and conceptual problems through digital means, creative use of digital tools or knowledge of web services. The skill level is measured with the number of activities persons are able to perform. If they performed one problem-solving activity and one activity relating to knowledge of web services, the have basic skills; if they performed more than one activity, their problem-solving e-skills are above basic.*

In 2015, 63% of persons aged 16–74 in Slovenia had problem-solving e-skills (in the EU-28: 71%); 43% had above basic e-skills (in the EU-28: 52%) and 20% had basic e-skills (in the EU-28: 19%).

The level of problem-solving e-skills is measured with the number of the following activities performed by regular internet users in the last 3 or 12 months before the survey:

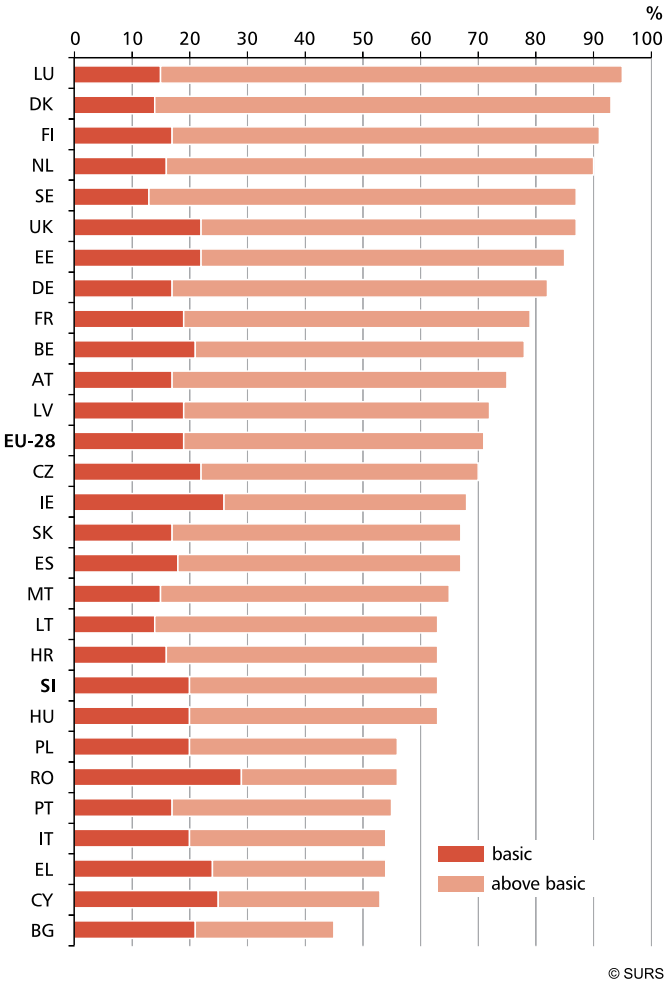
Persons aged 16–74 with problem-solving e-skills by activities performed, Slovenia and EU-28, 2015



1) Users in the last 12 months.
2) Users in the last 3 months.

Source: Eurostat (http://ec.europa.eu/eurostat, 16. 3. 2016)

Persons aged 16–74 with problem-solving e-skills by skill level, EU-28, 2015



Source: Eurostat (http://ec.europa.eu/eurostat, 16. 3. 2016)

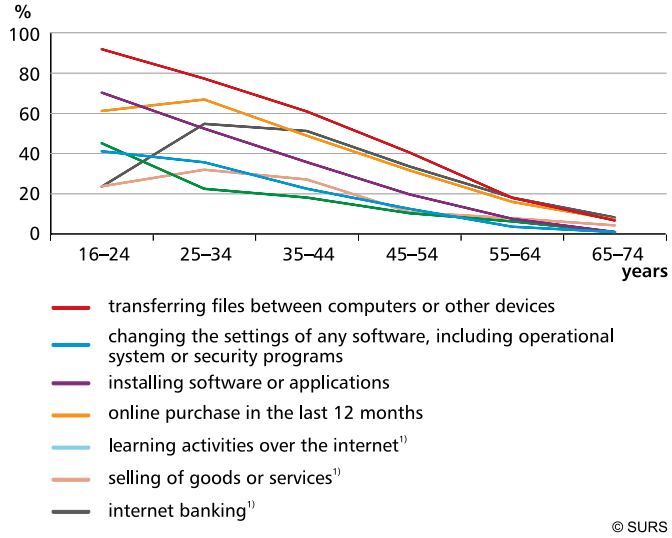
Among the EU-28 Member States, the share of persons with above basic problem-solving e-skills was the highest in Luxembourg and the lowest in Bulgaria.

Most software and apps installed by 16–24-year-olds

The share of persons having problem-solving e-skills was the highest among 16–24-year-olds: 98% (74% had above basic and 24% had basic e-skills). 16–24-year-olds mostly performed the following activities: installing software or applications (70%), changing the settings of software applications (41%), transferring files between computers or other devices (92%). They used online learning material (37%) and communicated with instructors or students via websites or portals (23%).

The share of 25–34-year-olds with problem-solving e-skills was also high (91%): 72% had above basic e-skills and 19% had basic e-skills. Persons in this age group mostly used internet banking (55%), sold goods or services via websites (32%), purchased online in the last 12 months (67%) and took online courses (6%).

Persons aged 16–74 with problem-solving e-skills by activities performed[1)], by age groups, Slovenia, 2015



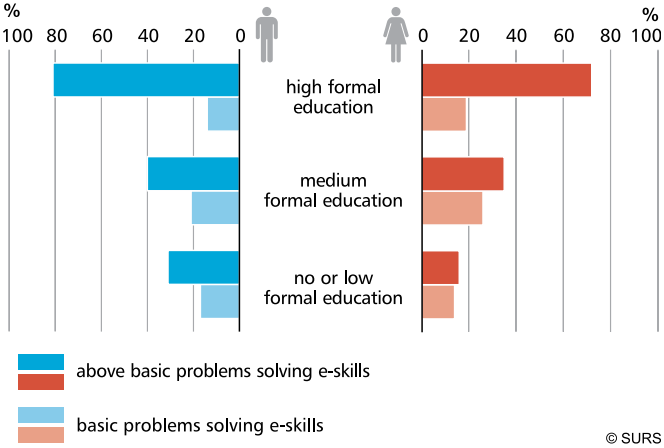
1) Activity performed in the last 3 months, others in the last 12 months.

Source: SURS

Men and women almost levelled

The share of men with problem-solving e-skills in Slovenia in 2015 was 64% (in the EU-28: 74%); for women the share was 61% (in the EU-28: 69%). The share of men with above basic e-skills was 45% (in the EU-28: 56%) and the share of women 40% (in the EU-28: 48%). The share of men with basic e-skills was 19% (in the EU-28: 18%) and the share of women 21% (in the same as in the EU-28).

Persons aged 16–74 with problem-solving e-skills by skill level, education and gender, Slovenia, 2015



Source: Eurostat (http://ec.europa.eu/eurostat, 16. 3. 2016)

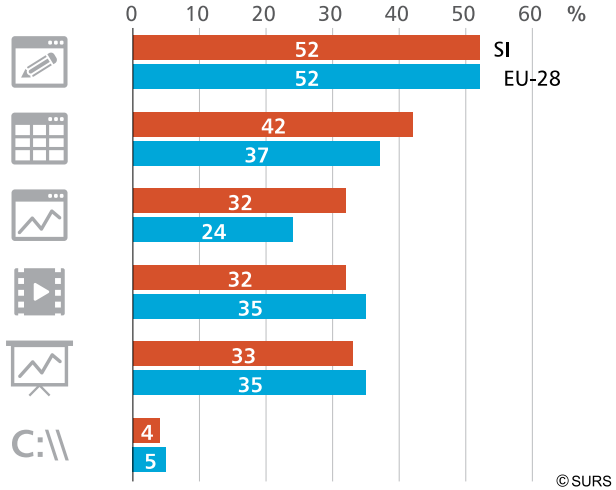
Software e-skills

Persons with software e-skills *have knowledge necessary for using software to create or edit new content (text, images, video), produce creative content, programming, etc. The skill level is measured with the number of activities persons are able to perform. If they performed one activity, the have basic skills; if they performed more than one activity, their software e-skills are above basic.*

In 2015, 54% of persons aged 16–74 in Slovenia had software e-skills (in the EU-28: 58%); 40% had above basic e-skills (in the EU-28: 39%) and 14% had basic e-skills (in the EU-28: 19%).

The level of software e-skills is measured with the number of the following activities performed by regular internet users in the last 12 months before the survey:

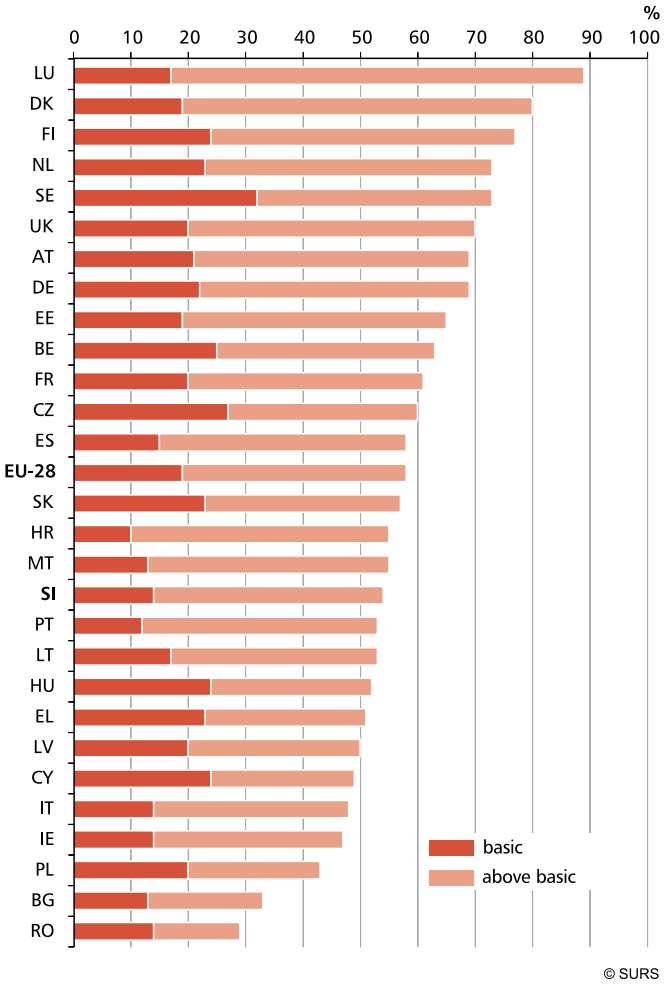
Persons aged 16–74 with software e-skills by activities performed[1], Slovenia and EU-28, 2015



1) Users in the last 12 months.

Source: Eurostat (http://ec.europa.eu/eurostat, 17. 3. 2016)

Persons aged 16–74 with software e-skills by skill level, EU-28, 2015



Source: Eurostat (http://ec.europa.eu/eurostat, 17. 3. 2016)

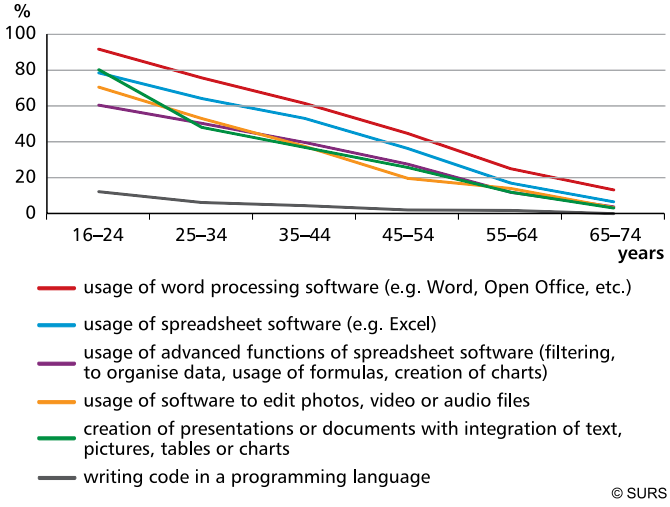
Among the EU-28 Member States, the share of persons with above basic software e-skills was the highest in Luxembourg and the lowest in Romania.

Most persons had already worked with software

As regards software e-skills, too, the share of persons having them was the highest among 16–24-year-olds: 92% had already used word processing software, 78% had already used spreadsheet software, and 60% had already used advanced functions of spreadsheet software (data sorting, using formulas, creating charts).

As regards 25–34-year-olds, 76% had already used word processing software, 64% had already used spreadsheet software, and a half had already used advanced functions of spreadsheet software. More than half of 35–44-year-olds had already used word processing software (61%) and spreadsheet software (53%).

Persons aged 16–74 with software e-skills by activities performed[1)], by age groups, Slovenia, 2015



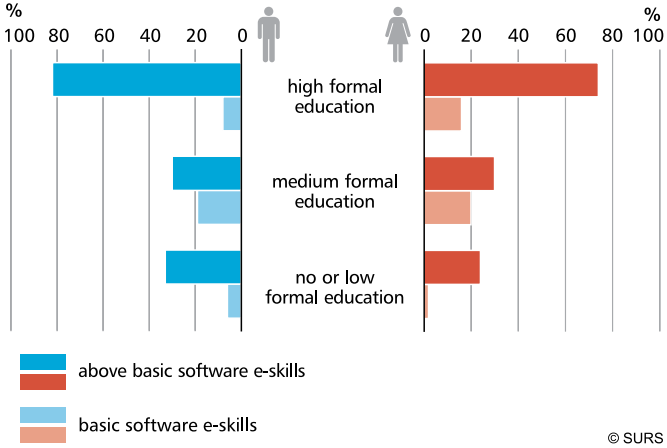
1) Activity performed in the last 12 months.

Source: SURS

Both genders have good software e-skills

In 2015, 54% of men in Slovenia (in the EU-28: 61%) and 54% of women in Slovenia (in the EU-28: 56%) had software e-skills; 40% of men (in the EU-28: 42%) and 40% of women (in the EU-28: 36%) had above basic e-skills and 14% of men (in the EU-28: 19%) and 14% of women (in the EU-28: 20%) had basic e-skills.

Persons aged 16–74 with software e-skills by skill level, education and gender, Slovenia, 2015



Source: Eurostat (http://ec.europa.eu/eurostat, 17. 3. 2016)

DIGITAL ECONOMY

Digital economy is a series of economic, social and cultural activities that are performed online and are related to the use of information and communication technology (ICT). Digital economy is convergence of economy, informatics, (tele) communications, computing and digitalisation. It is based on intangible resources such as information, innovation, creativity, etc.

Digital economy and its development are based on:

- Appropriate infrastructure (internet access; ICT equipment – hardware and software)
- E-business
- E-commerce
- Use of social media, cloud computing
- Big data
- Internet of things
- Appropriate e-skills
- E-inclusion of civil society, etc.

The main elements of digital economy are digitalisation and high level of ICT usage, conversion of information into market value and new ways of organising the economy, business processes, work and production. Growth of digital economy has an impact on the entire economy. More intensive ICT usage, and the changing of consumer habits demand that enterprises and organisations adjust to new conditions and exploit the advantages of the digital world.

How developed is digital economy in Slovenia?

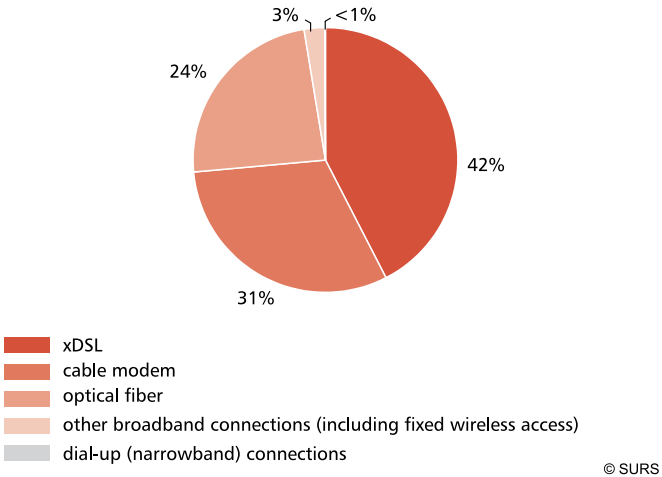
Internet access

Rapid internet access is the basis for developed information society and digital economy

Internet, a world-wide computer network, enables rapid access to unlimited amounts of information and creates a global market. In addition to information access, it provides many services offered by enterprises and public administration, education, offers enterprises access to new markets, more effective communication, increased productivity, possibility of generating and offering new goods and services, etc. Appropriate infrastructure, i.e. rapid internet access, is the main condition for the development of digital economy, e-business, cloud computing, internet of things, big data, etc.

In the 4th quarter of 2015 there were 574,901 internet connections in Slovenia; 99.94% of them broadband and 0.06% narrowband. xDSL broadband internet connections predominated with 42.4%.

Internet connections, Slovenia, 4th quarter 2015



Source: AKOS

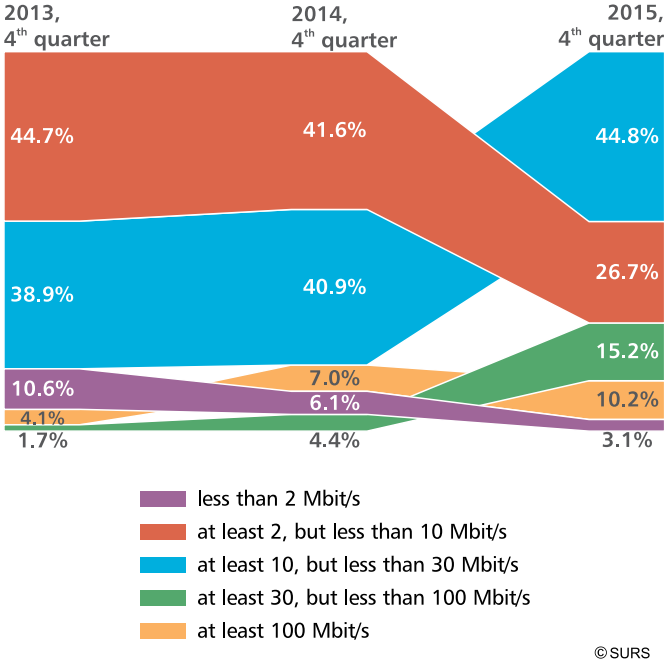
Between the 4th quarter of 2007 and 4th quarter of 2015 the number of internet connections increased by about 40%; the number of broadband connections increased by 70%. Optical fibre connections are also on the rise.

Speed of internet connection is important

The speed of internet access is increasing. The number of connections with less than 10 Mbit/s is declining, while the number of internet connections with 10 Mbit/s or more is rising. In the 4th quarter of 2015, 45% of connections had between 10 and 30 Mbit/s and 10% at least 100 Mbit/s.

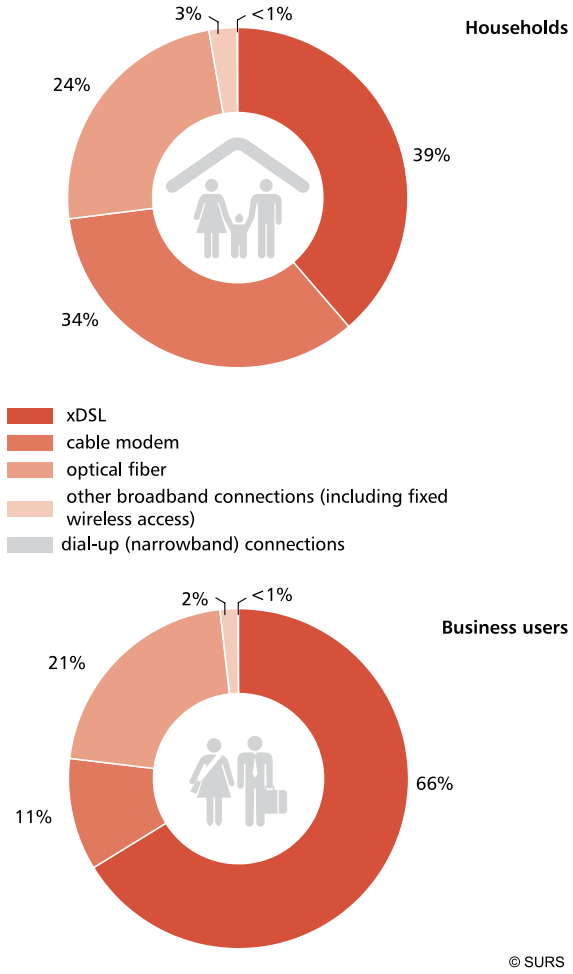
In 2015, 14% of enterprises with at least 10 persons employed had broadband internet connections with at least 100 Mbit/s.

Speed of broadband internet access, Slovenia



Source: AKOS

Types of internet access by type of user, Slovenia, 4th quarter 2015



Source: AKOS

In the 4th quarter of 2015 households were using 496,633 or 86% and business users 78,268 or 14% of internet connections in the country.

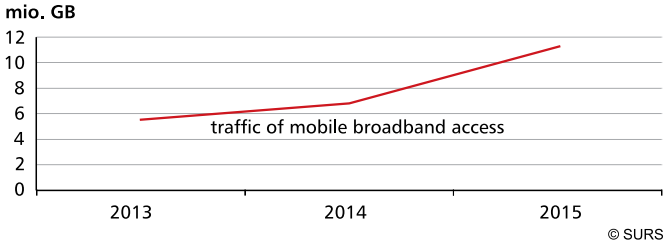
Most of the households had xDSL connections (39%) and cable modems (34%); most business users had xDSL connections (66%).

Usage of mobile network is on the rise

In the 4th quarter of 2015 there were 2,353,296 mobile network users, which is 22% more than in the 4th quarter of 2007. The share of business users increased by 50% and the share of private users by 16%.

In the 4th quarter of 2015, 79% of mobile network users were private users and 21% were business users. 31% of private users were prepaid mobile users and 69% were subscribers. Business users were almost exclusively subscribers.

Transfer of data via mobile broadband access, Slovenia



Source: AKOS

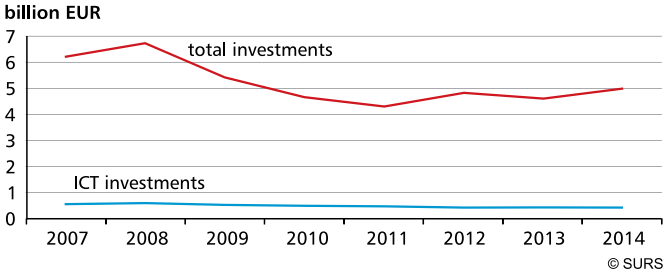
The growth of the number of mobile network users and higher speeds of mobile internet connections lead to the growth of mobile internet access. Growth is also clear from the extent of data transfer (in GB) via mobile broadband access, which doubled in the 2013–2015 period.

Investment in information and communication technology

Investment in tangible or intangible fixed assets is important for economic growth. Data on ICT investment show how much enterprises invest in ICT (software or hardware).

In 2014, enterprises[3] invested EUR 427 million in ICT (i.e. for computers and other peripheral equipment, for communication equipment and consumer electronics and for software, databases and own-developed software and databases) or 8.56% of total investment. From 2007 on the share of ICT investment in total investment was the highest in 2011 (11.21%) and in 2010 (10.62%).

Investment in enterprises, Slovenia



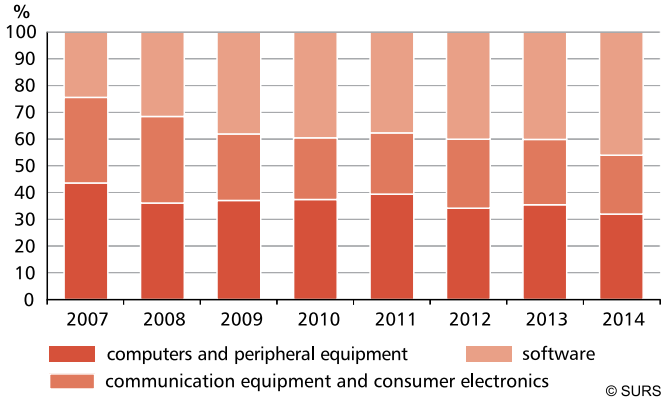
Source: SURS

In 2014, enterprises invested 46% of total ICT investment in software, databases, and own-developed software and databases, 32% in computers and other peripheral equipment and 22% in communication technology.

Software investment is increasing

The structure of ICT investment by enterprises changed in the 2007–2014 period. The share of investment in communication equipment and consumer electronics and in computers and peripheral equipment was declining and the share of investment in software (software, databases and own-developed software and databases) was rising.

Structure of ICT investment, Slovenia



Source: SURS

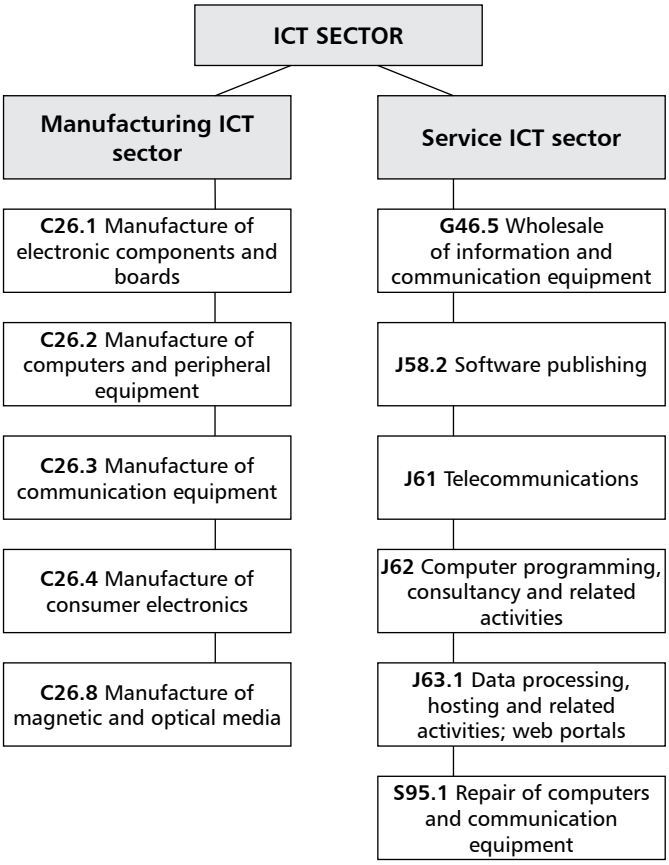
The highest ICT investment in 2014 was recorded in enterprises in information and communication activities (66%): they invested 48% in communication equipment and consumer electronics, 39% in software and 13% in computers and other peripheral equipment.

Enterprises in financial and insurance activities invested the highest share of their total ICT investment in software (65%), followed by enterprises in real estate activities (60%). The least was invested in software by enterprises in agriculture, forestry and fishing, in arts, entertainment and recreation, and in administrative and support service activities (24% in each).

3 Business entities according to SKD 2008, except in activities of households as employers, undifferentiated goods- and services-producing activities of households for own use (T) and activities of extraterritorial organisations and bodies (U).

ICT sector

The growing ICT usage increases the importance of enterprises offering and developing services the main purpose of which is development, maintenance and repair of ICT. Enterprises classified according to the 2008 Standard Classification of Activities into activities related to the development and production of ICT equipment or services are called the ICT sector (the expression was determined by the OECD). What is the importance of the ICT sector in Slovenia?



The service ICT sector is growing

In 2014, the ICT sector in Slovenia encompassed 6,614 enterprisers or 9% more than in 2013. Compared to 2005, the number of enterprises in the ICT sector increased by 138%. The sector is divided into the manufacturing ICT sector and the service ICT sector. In the 2005–2014 period the number of manufacturing ICT sector enterprises increased by 18% and of service ICT sector enterprises by 147%.

In 2014 there were 28 high-growth enterprises (i.e. enterprises with an average annual growth higher than 10% over a three-year period and at least 10 employees in the first year of monitoring of three-year growth of employment) in the ICT sector in Slovenia. 26 high-growth enterprises were in the service ICT sector and two in the manufacturing ICT sector. In 2014, these enterprises represented 5% of all high-growth enterprises in the country.

Number of enterprises in the ICT sector

	2005	2014[1)]	2014/2005
	number		index
Enterprises – total[2)]	89.488	130.051	145
ICT sector	2.777	6.614	238
Manufacturing ICT sector	190	225	118
C26.1	102	125	123
C26.2	32	28	88
C26.3	35	24	69
C26.4	19	48	253
C26.8	2	-	-
Service ICT sector	2.587	6.389	247
G46.5	169	264	156
J58.2	13	29	223
J61	189	346	183
J62	1.728	4.797	278
J63.1	224	652	291
S95.1	264	301	114

- no occurrence of event
1) Provisional data.
2) Enterprises active in predominantly market activities.
Source: SURS

ICT sector, Slovenia, 2014[1)]

	Turnover	Value added	Employees	Persons employed
	mio EUR		number	
Enterprises – total[2)]	81.591	18.611	498.002	579.800
ICT sector	3.508	1.171	19.410	23.446
Manufacturing ICT sector	360	106	2.985	3.076
Service ICT sector	3.148	1.065	16.425	20.370

1) Provisional data.
2) Enterprises active in predominantly market activities.
Source: SURS

By selling goods and services in 2014, the ICT sector generated 4.3% of the total turnover (EUR 3,508) of all enterprises engaged in market activities in Slovenia. 39% of turnover in the ICT sector was generated by telecommunications enterprises, 29% by enterprises in computer programming, consultancy and related activities and 16% by enterprises in wholesale of information and communication equipment.

Employment in the ICT sector

The number of employees (i.e. persons receiving salaries who had social insurance based on the employment contract) in the ICT sector increased in the 2005–2014 period by 9%, while the number of all employees in enterprises engaged in market activities decreased by 5%..

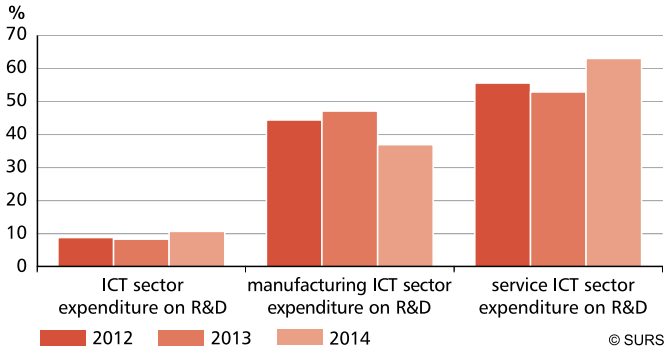
In the 2005–2014 period the number of persons employed in the ICT sector (i.e. all persons working, paid or unpaid, including those working outside the enterprise, such as sales representatives, and part-time employees, seasonal workers, persons working at home who were on the payroll) increased by 23%; in all enterprises engaged in market activities the share was practically the same (up by 0.4%).

In 2014 the ICT sector employed 2.5% of all employees or self-employed persons in Slovenia, the same as in 2013

Research and development (R&D) is very important for economic growth

In 2014 business sector R&D expenditure amounted to EUR 688 million, of which EUR 74 million or 10.7% was contributed by the ICT sector. Most of this expenditure came from service ICT sector enterprises (63%); 37% came from manufacturing ICT sector enterprises.

ICT sector expenditure on R&D, Slovenia



Source: SURS

In 2014, the ICT sector generated EUR 1,171 million of value added, i.e. 6.3% of total value added of all enterprises dealing with market activities. Most of it (91%) was generated by service ICT sector enterprises.

ICT sector's share of GDP, Slovenia

1) Provisional data.
Source: SURS

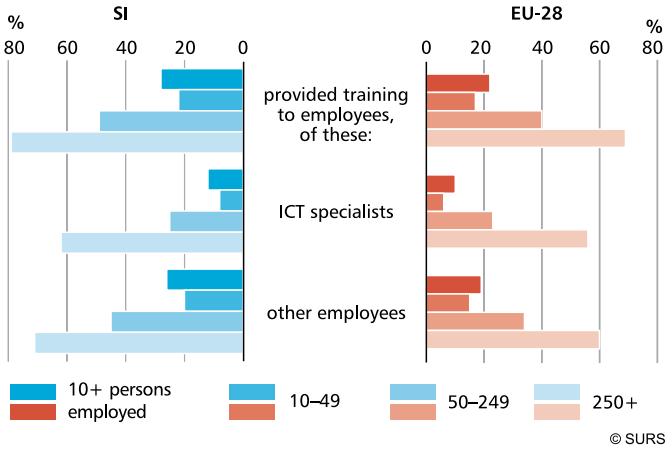
The share of the ICT sector in the gross domestic product (GDP) in 2014 was 3.1%.

ICT specialists

Relevant knowledge for ICT usage

The growth of internet usage, e-business, digital technologies – e.g. integration of information and processes in enterprises – leads to growing needs for relevant knowledge and skills.

Enterprises with at least 10 persons employed by providing ICT training for the persons employed by size, Slovenia and EU-28, 2014



Source: Eurostat (http://ec.europa.eu/eurostat, 25. 3. 2016)

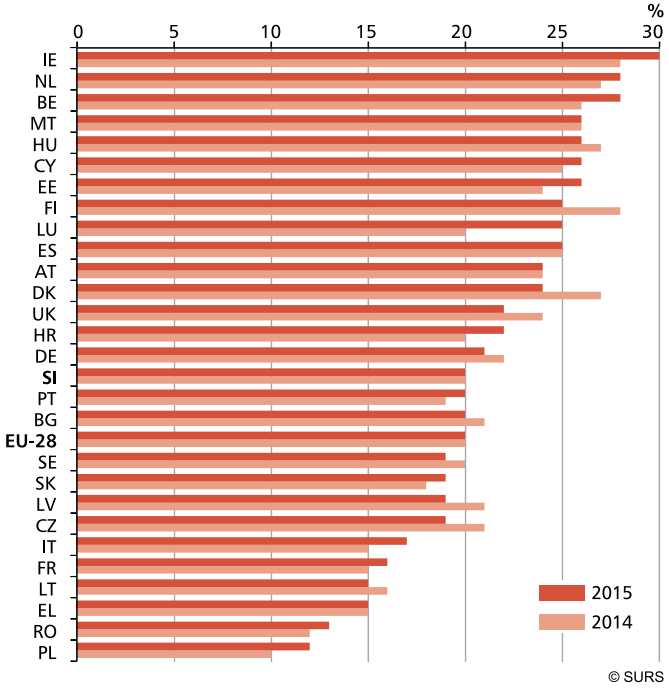
In 2014, 28% of enterprises with at least 10 persons employed offered to their employees some form of ICT training (in-house or external) in order to improve their knowledge or obtain skills regarding computer usage, software, etc. (in the EU-28: 22%). In 2013 the share was 20% (in the EU-28: 21%).

In addition to relevant knowledge, the need for ICT specialists maintaining, upgrading and developing software and hardware is also growing. The main task of these specialists is to maintain, manage, set-up or develop information systems (computers, software) in the enterprise.

ICT specialists are employed by one in five enterprises

In 2015, ICT specialists were employed by 20% of enterprises in Slovenia (in the EU-28: 20%), which was the same as in 2014 (in the EU-28: 20%). Among small enterprises the share was 14% (in the EU-28: 14%), among medium-sized enterprises 38% (in the EU-28: 43%) and among large enterprises 80% (in the EU-28: 77%).

Enterprises with at least 10 persons employed employing ICT specialists, EU-28



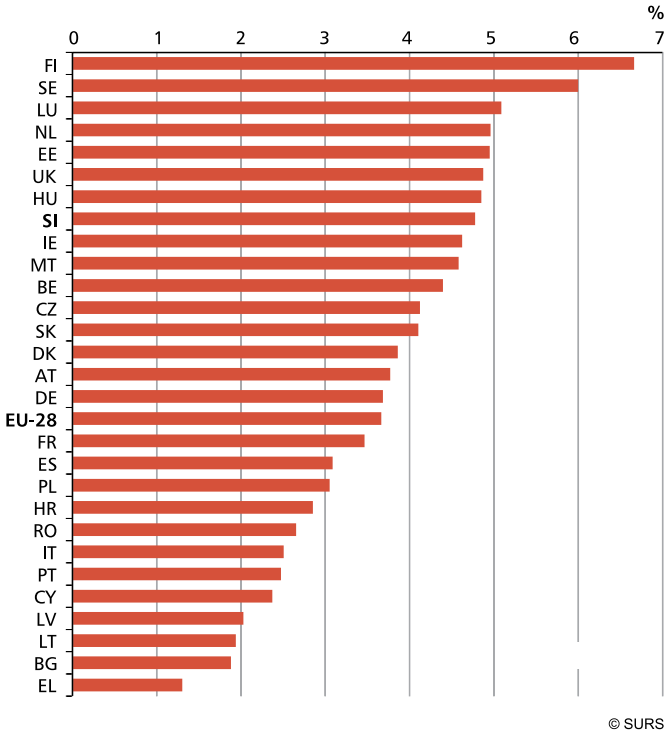
Source: Eurostat (http://ec.europa.eu/eurostat, 25. 3. 2016)

Suitable ICT specialists are difficult to find

In 2014, 6% of enterprises with at least 10 persons employed recruited or tried to recruit ICT specialists (in the EU-28: 8%), which was the same as in 2013. Among small enterprises the share was 4% (in the EU-28: 6%), among medium-sized enterprises 9% (in the EU-28: 15%) and among large enterprises 26% (in the EU-28: 39%). 51% of enterprises in Slovenia that tried to recruit ICT specialists in 2014 had jobs for them but it was difficult to get the specialists (in the EU-28: 38%); the situation was the same in 2013. 50% of small, 34% of medium-sized and 49% of large enterprises in Slovenia had difficulty finding relevant personnel.

In 2014, 43,791 ICT specialists were employed in Slovenia, which was 4.78% of all employees and self-employed persons in the country. Their share among all employees and self-employed persons is growing (in 2012 it was 4.18% and in 2013 4.35%).

Share of ICT specialists in total employment, EU-28, 2014

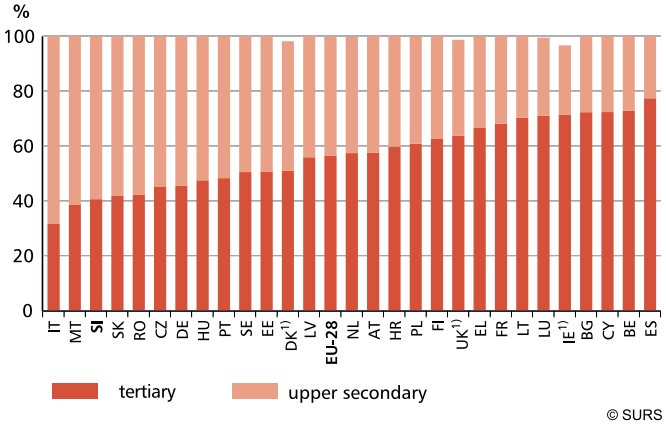


Source: Eurostat (http://ec.europa.eu/eurostat, 26. 3. 2016)

The share of women ICT specialists in Slovenia higher than in the EU-28

In 2014, 72% of ICT specialists employed in Slovene enterprises were men (in the EU-28: 82%), and the remaining 28% were women (in the EU-28: 18%); 60% of them had upper secondary education and 40% had tertiary education.

ICT specialists by educational level, EU-28, 2014



1) Due to lack of information the totals are not always 100%.
Source: Eurostat (http://ec.europa.eu/eurostat, 26. 3. 2016)

ICT specialists on average 35 or more years old

Most ICT specialists in Slovenia (62%) were 35 or more years old (in the EU-28: 63%); the others (38%) were 15–34 years old (in the EU-28: 37%).

E-business in enterprises

The role of e-business in enterprises

E-business includes the use of all forms of ICT in business relations with the aim of increasing the efficiency of processes in enterprises and their competitiveness, productivity and turnover.

The basis of successful operation is timely and accurate information provided by the information system, so that it integrates individual areas of the business into a whole. The other option is the use of ERP (Enterprise Resource Planning), modular software for integrating data and processes in an organisation into a single system that enables automation of the financial function, marketing, sales, distribution and management.

In 2015, ERP was used by a third of enterprises in Slovenia with at least 10 persons employed (in the EU-28: 36%).

CRM (Customer Relationship Management) is software the purpose of which is to set up high-quality relationships with customers. It enables improvement in operation with customers by focusing on the customers' habits, communication with customers, etc.

In 2015, CRM was used by 29% of enterprises in Slovenia with at least 10 persons employed (in the EU-28: 33%).

Enterprises with at least 10 persons employed using ERP and CRM, by size, Slovenia, 2015 %

	10+ persons employed	10–49	50–249	250+
Usage of ERP	33	26	57	92
Usage of CRM	29	24	43	60
.. to collect and store information on customers	29	24	43	60
.. to analysis information on customers	17	14	26	37

Source: SURS

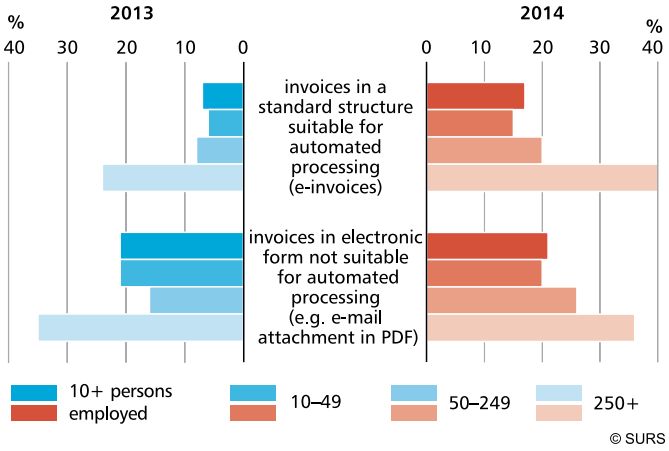
E-invoices

Since 1 January 2015 budget users in Slovenia have been receiving invoices and other documents in electronic form only (e-invoices). Legal and natural persons must issue e-invoices for goods delivered or services rendered. Advantages are: automated exchange of invoices speed up the operation, automated takeover reduces mistakes, lower costs (less paper, lower postal costs, less manual work, etc.).

To what extent were e-invoices used before 1 January 2015?

In 2014, as many as 70% of enterprises doing business with other enterprises or budget users were issuing invoices for their goods or services only in paper form (in 2013: 77%).

Enterprises with at least 10 persons employed by form of e-invoices issued to enterprises or budget users, by size, Slovenia



Source: SURS

E-commerce

E-commerce is becoming increasingly important

An important part of digital or internet economy is e-commerce. The main advantages of e-commerce are the possibility of reducing costs (lower prices), market expansion and more efficient operation. E-commerce (electronic payment is not a condition) can be web sales to customers (B2C), other enterprises (B2B) or public institutions (B2G) via websites or e-markets; it can also be selling or buying between enterprises (B2B) and public institutions (B2G) via websites or electronic data interchange (EDI).

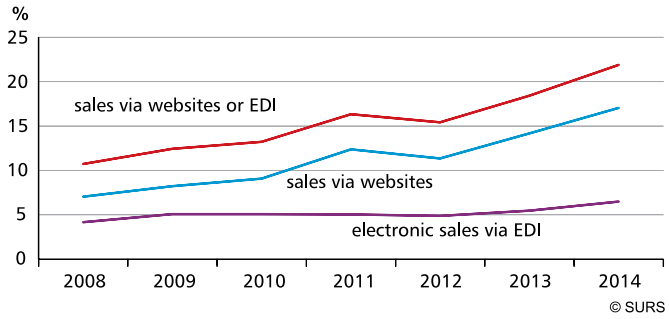
In 2014, 17% of enterprises in Slovenia had web sales; most of them were selling their products to final consumers in Slovenia. 6% of them were receiving orders from other enterprises via electronic data interchange.

Enterprises with at least 10 persons employed with web sales, by size, Slovenia, 2014 %

	10+ persons employed	10–49	50–249	250+
Website	83	80	94	100
Website with the possibility of online ordering	16	15	18	32
Enterprises with web sales	17	16	18	32
.. web sales B2C	73	71	80	82
.. web sales B2B, B2G	59	60	53	60
.. received orders via web from customers located in Slovenia	94	94	97	95
.. received orders via web from customers located in other EU countries	50	52	48	38
.. received orders via web from customers located in other countries	18	17	20	29
.. website provides online payment	35	31	45	55

Source: SURS

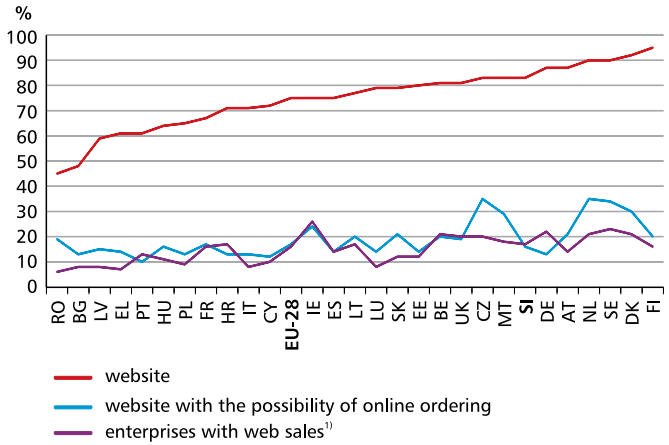
E-commerce in enterprises with at least 10 persons employed, Slovenia



Source: SURS

The share of enterprises with web sales is slowly but steadily growing.

Enterprises with at least 10 persons employed with a website and web sales, EU-28, 2015



1) Data refer to the entire 2014.
Source: Eurostat (http://ec.europa.eu/eurostat, 29. 3. 2016)

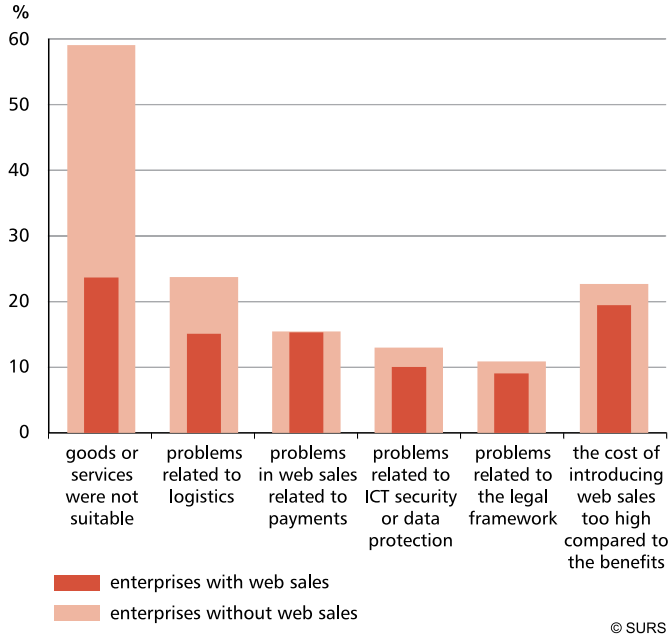
In Slovenia the shares of enterprises with a website in 2015 and 2014 were higher than the EU-28 average. In 2014, the share of enterprises engaged in web sales was the highest in Ireland.

Turnover generated via web sales is increasing

In 2014, enterprises with at least 10 persons employed generated 16.5% of their turnover via websites or electronic data interchange; most of the turnover was generated by electronic data interchange with other enterprises (61%) and web sales to all customers (39%). Web sales to final consumers generated 7.8% of the total turnover via electronic data interchange and website.

Enterprises face various obstacles making their web sales more difficult.

Enterprises with at least 10 persons employed by obstacles making their web sales more difficult, Slovenia, 2015



Source: SURS

In 2014, 25% of enterprises with at least 10 persons employed were buying over the internet (in 2013: 23%): 39% of large, 27% of medium-sized and 24% of small enterprises. Orders in the agreed format (XML, EDIFACT, etc.) were exchanged via EDI by 4% of enterprises.

Web advertising is becoming increasingly important

The growing use of ICT and the internet has impact on advertising since web (digital) advertising of goods and services via digital media is becoming increasingly important. Digital advertising reaches consumers at the right time, at the right place and in a cost-effective way (e.g. targeted advertising, which can be based on keywords, following previous activities of users on the internet, etc.).

For advertising, enterprises use adverts on internet browsers, social media (Facebook, Google, YouTube, etc.) or other websites. In 2015, 23% of Slovene enterprises with at least 10 persons employed were advertising on the internet.

Enterprises with at least 10 persons employed by web advertising, by size, Slovenia, 2015 %

	Advertise on the internet
10+ persons employed	23
10–49	22
50–249	25
250+	35

Source: SURS

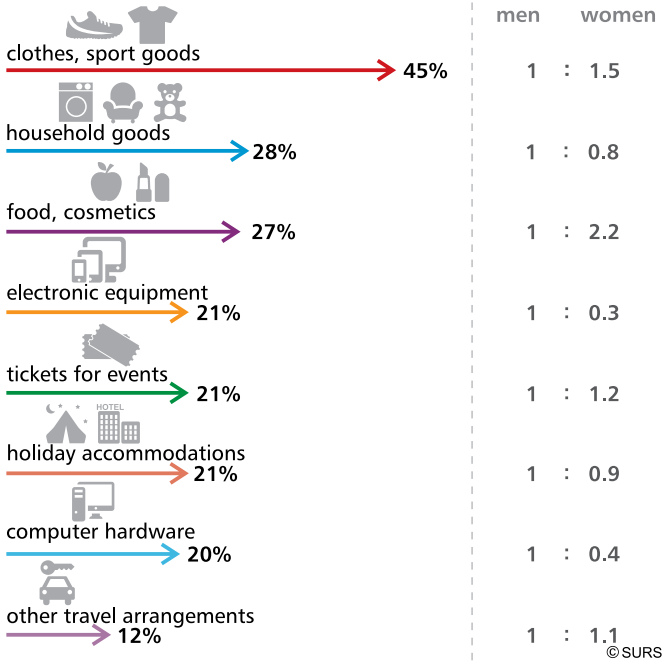
It is possible to buy almost anything on the internet

The internet has changed the way people buy. The share of online purchases is growing. One can buy almost anything online (food, technical goods, vacation, air tickets, etc.), irrespective of time and from the comfort of one's home. Doing this, one is not geographically limited and the prices of products can be lower than those in stores.

In 2015, 39% of persons aged 16–74 were buying online in the 12 months before the survey. E-buyers were 55% men and 45% women.

In the 12 months before the survey e-buyers were buying online mostly clothes and sport goods (45%), followed by household goods (28%) and food, cosmetics, etc. (27%).

E-buyers (16–74 years)[1] by type of products bought online, by gender, Slovenia, 2015

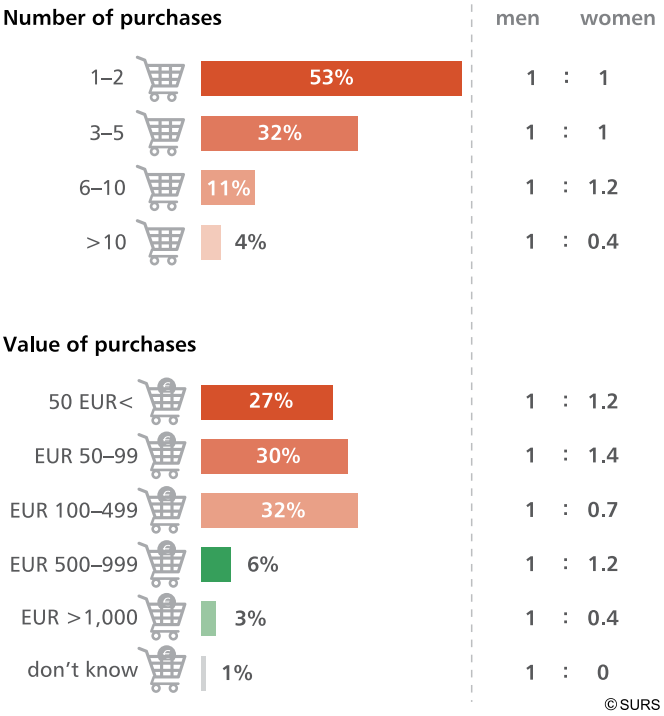


1) E-buyers in the last 12 months before the survey.
Source: SURS

Web purchases know no limits

E-buyers in Slovenia were mostly buying from online traders in Slovenia (76%), followed by online traders from other EU Member States (42%) and online traders outside the EU (26%).

E-buyers (16–74 years)[1] by number and value of online purchases, by gender, Slovenia, 2015



1) E-buyers in the last 3 months before the survey.
Source: SURS

In 2015 (in the last 3 months before the survey) most e-buyers bought online once or twice (53%); most e-buyers (32%) bought goods worth EUR 100 to 499. Goods bought by women were mostly worth EUR 50 to 99 (36%) and goods bought by men EUR 100 to 499 (38%).

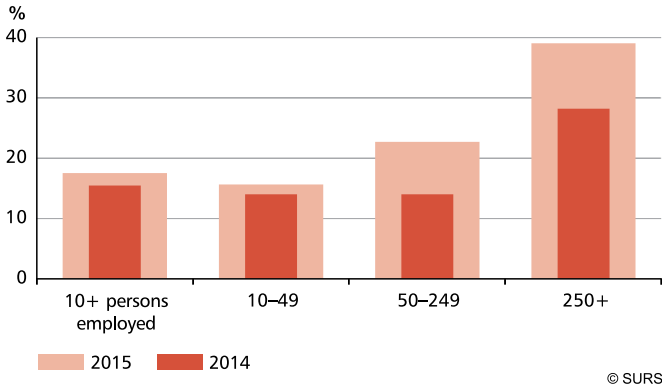
Cloud computing

Cloud computing enables enterprises and persons to rent software, applications or computer infrastructure over the internet. Users can use almost unlimited computer capabilities over the internet without having to invest much in it; at the same time they can access their data from anywhere. Cloud computing offers a possibility of decreasing ICT expenditure and having these services available for smaller enterprises.

Cloud computing services (e.g. software or application, storage space, computing power, etc.) have the following characteristics:

- *They are accessed via the internet and they are offered from the servers of service providers.*
- *They are paid by usage, e.g. by the number of users, by used capacity, or are pre-paid.*
- *They are flexible: their extent is rapidly adjusted (increased or decreased) to the needs (e.g. increase in the number of users or the storage capacity).*
- *Users use them as needed and without personal contacts with service providers.*

Enterprises with at least 10 persons employed that buy cloud computing services, by size, Slovenia, 2015



Source: SURS

In 2015, cloud computing services were bought by 17% of enterprises with at least 10 persons employed (in 2014: 15%; in the EU-28: 19%).

Enterprises with at least 10 persons employed that buy cloud computing services by type of service, by size, Slovenia, 2015 %

	10+ persons em-ployed	10–49	50–249	250+
E-mail	10	9	14	19
Office software	6	6	8	20
Hosting the enterprise's database	6	6	6	7
Storage of files	9	8	13	15
Finance or accounting software	5	6	4	z
Customer Relationship Management software	4	3	6	5
Computing power	4	4	4	8

z confidential
Source: SURS

In 2015, most of the enterprises bought e-mail as a cloud computing service (10%), followed by storage of files (all types of files, storage of enterprise's backup files).

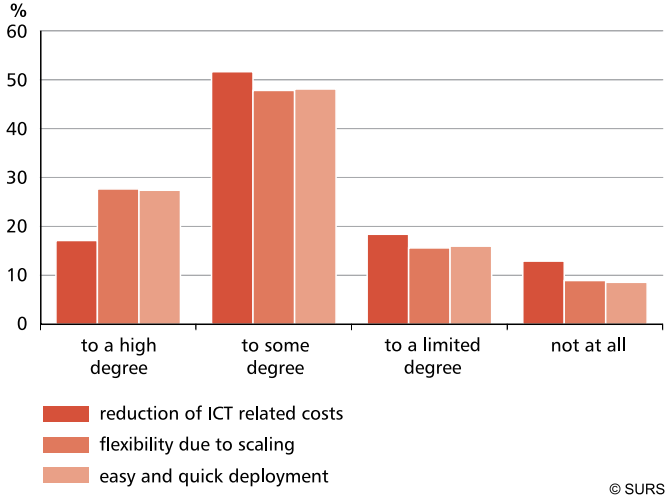
Most of the enterprises that bought cloud computing services in 2015 (77%) accessed the bought services via common servers of service providers (public cloud); 35% accessed them via the servers of service providers reserved for the enterprise (private cloud).

A comparison between 2014 and 2015 shows that in one year the share of enterprises buying file storage as a cloud computing service increased the most (from 7% to 9%).

Risk of a security breach limits buying of cloud computing services

In 2014, enterprises buying cloud computing services were mostly hindered from buying more services by possible risks of a security breach (36%), followed by high cost (30%), uncertainty about applicable law (25%), uncertainty about the location of the data (23%) and insufficient knowledge (20%).

Enterprises with at least 10 persons employed by the level of achieving the desired advantage of buying cloud computing services, Slovenia, 2014



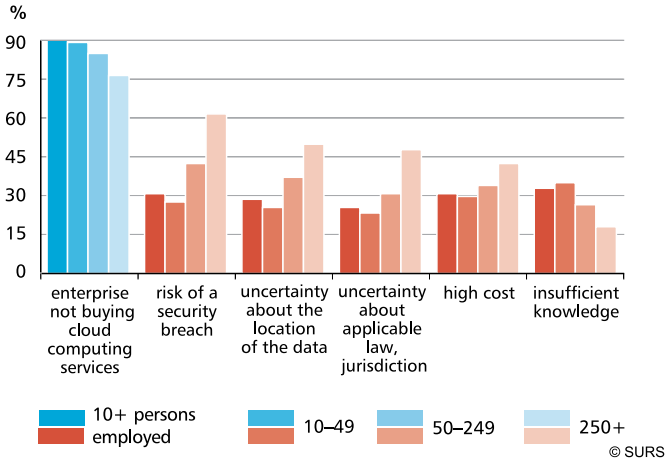
Source: SURS

One of the main advantages of buying and using cloud computing services is access to ICT without major investment. Half of enterprises (52%) buying cloud computing services in 2014 at least partially reduced their costs.

Why don't more enterprises buy cloud computing services?

In 2014, 85% of enterprises did not buy cloud computing services, most of them because of insufficient knowledge about these services.

Enterprises with at least 10 persons employed by factors preventing them from buying cloud computing services, by size, Slovenia, 2014



Source: SURS

In 2015, 31% of enterprises in Slovenia with at least 10 persons employed answered negatively to the question whether they know of cloud computing. The share among small enterprises was 35% and among medium-sized enterprises 17%. All large enterprises were familiar with cloud computing.

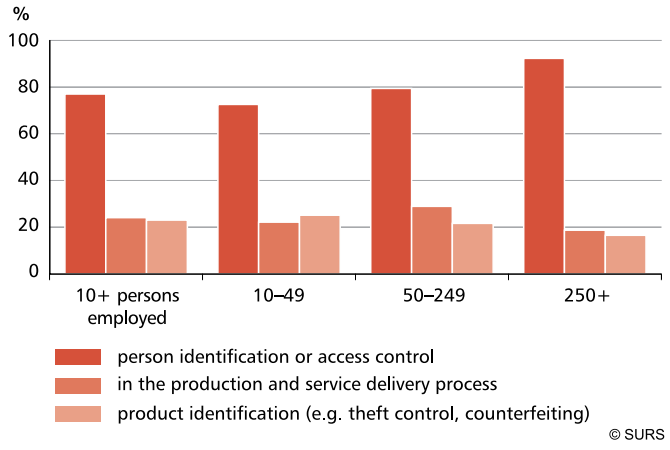
Internet of things

Internet of things is one of the pillars of the internet of future. It is based on linking large numbers of devices with built-in sensors communicating among themselves and with various applications more or less independently.

The basic technology behind the internet of things is radio frequency identification (RFID). RFID is an automated identification method for storing and retrieving data remotely by using RFID tags or transmitters. An RFID tag is a device that can be attached to a product or built into it and can transmit the data to a "reader" via radio waves.

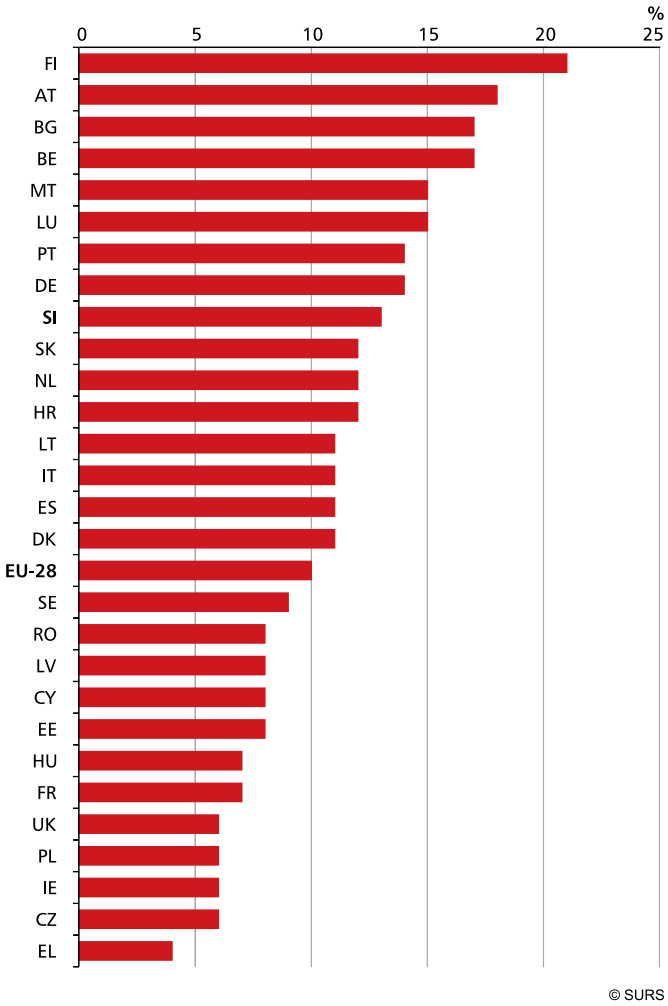
In 2014, RFID was used by 13% of enterprises in Slovenia with at least 10 persons employed (in the EU-28: 10%); the share among small enterprises was 9% (in the EU-28: 7%), among medium-sized enterprises 27% (in the EU-28: 21%) and among large enterprises 43% (in the EU-28: 37%).

Enterprises with at least 10 persons employed by what they are using RFID for, by size, Slovenia, 2014



Source: SURS

Enterprises with at least 10 persons employed by usage of RFID, EU-28, 2014



Source: Eurostat (http://ec.europa.eu/eurostat, 5. 4. 2016)

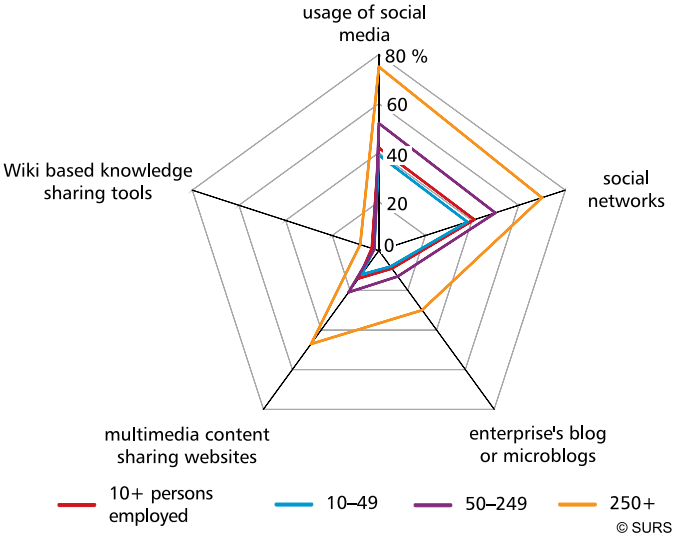
RFID is used the most be enterprises in Finland. Enterprises using RFID mostly use it for person identification or access control.

Social media

Social media are internet technologies based on Web 2.0 enabling interactive exchange of photos, videos, comments among users and consequently among enterprises and persons. They enable users' interactive cooperation, content creation, which was not possible with Web 1.0, when users could only watch content online.

Enterprises find their presence on the internet very important and in the digital economy almost a must. In 2015, 83% of enterprises in Slovenia with at least 10 persons employed had a website, and 27% had a link to the enterprise's social media profile on the website. Enterprises are increasingly aware of the advantages offered by social media and use them more and more; they have profiles, accounts or licences for use depending on the type of social media (42% in 2015, in the EU-28: 39%).

Enterprises with at least 10 persons employed by usage of social media by type, by size, Slovenia, 2015

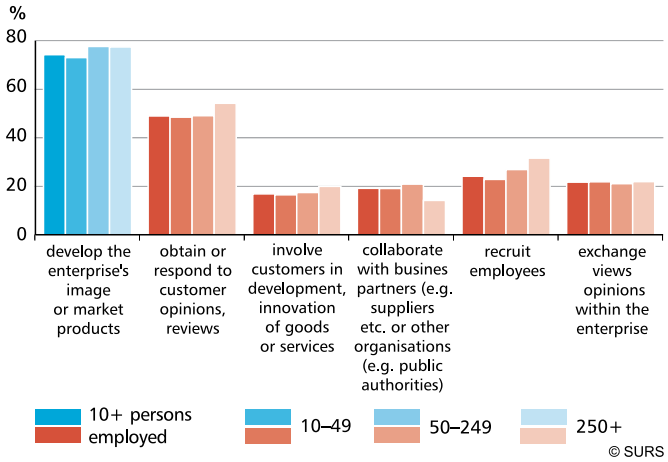


Source: SURS

Social media usage – an opportunity to effectively present the enterprise

Enterprises in Slovenia were using social media mainly to develop the enterprise's image or market products. 17% of enterprises with social media profiles were not using these media.

Enterprises with at least 10 persons employed with social media profiles by purpose and extent of social media usage, by size, Slovenia, 2015



Source: SURS

DESI

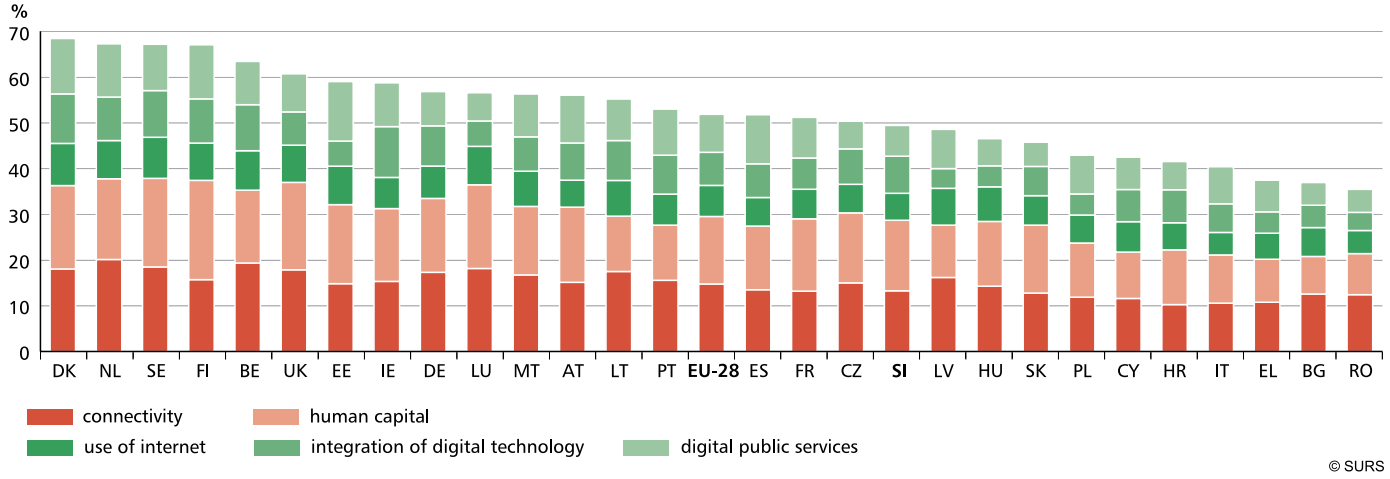
DESI (Digital Economy & Society Index) is a composite index summarising key indicators on digital performance of the European Union and tracking the evolution of Member States in digital competitiveness.

The index is structured around five dimensions:

1. Connectivity, measuring the development of broadband internet access.
2. Human capital, measuring e-skills needed to take advantage of the possibilities offered by a digital society (from basic to advanced e-skills).
3. Use of internet.
4. Integration of digital technology.
5. Digital public services (e-administration).

Based on numerous indicators, every year the Commission publishes DESI and shows the development level of an individual country.

DESI, EU-28, 2016



Source: (https://ec.europa.eu/digital-single-market/en/desi, 5.4. 2016)

As regards DESI, in 2016 Slovenia was 18th among EU Member States (the same as in 2015). Enterprises in Slovenia are successful in integrating digital technologies (11th place) and less successful in internet usage among persons aged 16–74 (24th place). Slovenia has a well-qualified population: 51% of the population has basic or above basic e-skills. As regards 20–29-year-olds, 1.9% of them have degrees in science, technology or mathematics (9th place). Our country is among the weakest as regards digital public services: e-government services (returning completed electronic forms) are actively used by 24% of internet users. The reason for such a low share of e-government users is (was) that most internet users do (did) not have to submit official electronic forms.

ABBREVIATIONS AND UNITS OF MEASUREMENT

AKOS	Agency for Communication Networks and Services of the Republic of Slovenia
AOP	Automated data processing
B2B	Business to Business
B2G	Business to Government
B2C	Business to Customers
GDP	Gross Domestic Product
CRM	Customer Relationship Management
DESI	Digital Economy & Society Index
ERP	Enterprise Resource Planning
EDIFACT	Electronic Data Interchange for Administration, Commerce and Transport
GPRS	General Packet Radio Service
HSDPA	High Speed Downlink Packet Access
ICT	Information and Communication Technology
LTE	Long-Term Evolution
OECD	Organisation for Economic Cooperation and Development
RFID	Radio-Frequency IDentification
EDI	Electronic Data Interchange
R&D	Research and Development
SURS	Statistical Office of the Republic of Slovenia
SKD 2008	Standard Classification of Activities
SIM	Subscriber Identification Module
USB	Universal Serial Bus
UMTS	Universal Mobile Telecommunications System
WiFi	Wireless local area network
xDSL	Digital subscriber line
XML	Extensible Mark-up Language

EUR	euro
GB	gigabyte
Mio.	million
Mbit/s	megabit per second
%	percent
250+	250 or more (employees, etc.)

COUNTRY CODES

EU	European Union
EU-28	28 EU Member States
AT	Austria
BE	Belgium
BG	Bulgaria
CZ	Czech Republic
CY	Cyprus
DE	Germany
DK	Denmark
EE	Estonia
EL	Greece
ES	Spain
FI	Finland
FR	France
HR	Croatia
HU	Hungary
IE	Ireland
IT	Italy
LT	Lithuania
LU	Luxemburg
LV	Latvia
MT	Malta
NL	Netherlands
PL	Poland
PT	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
SK	Slovakia
UK	United Kingdom