

Baseline Study, 2017

Use of digital tools in SMEs everyday work and situation in Latvia

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1. Territorial characteristics

1.1. General information

Total border line of **Latvia** comprises 1.8 thousand km¹, of which land border constitutes 1.4 thousand km. Latvia has land boundary with Estonia (343 km), Russia (292 km), Belarus (171 km), and Lithuania (576 km), as well as maritime boundary with Sweden, Lithuania and Estonia. Total territory of Latvia **comprises 64.6 thousand km²** - 62.2 thousand km² are occupied by land (30.4 thousand km² of forests and 23.5 thousand km² of agricultural area), while 2.5 thousand km² are taken by inland waters. Latvia is located in western part of the East European Plain; melting of glaciers has resulted in a relief rich in monticules and valleys facilitating water accumulation in lowlands. In Latvia there are more than 12 thousand rivers with total length of 38 thousand km. The highest point of the country territory is located in Vidzeme Upland - 311.6 m above the sea level.

Provisional estimates show that, at the beginning of **2016 Latvia population** accounted for **1 million 972 thousand people** to **1 million 954.6 thousand people** at the end of 2016. The indicator is still declining - by 14.6 thousand persons in 2015 (decrease rate comprising 0.6% has fallen slightly, as compared to 0.8% in 2014). Since 1991, natural increase in Latvia has been negative, and the number of deaths still exceeds the number of births. Population number decreases due to both negative natural increase and long-term migration (with the number of emigrants exceeding the number of immigrants). At the beginning of 2015, **67.9 %** of Latvia population lived in urban areas, more than a third or 32% of which resided in Riga, where population density accounted for 2 116 persons per km² (31 pers./km² on average in Latvia).

Territory of Latvia is divided in **five regions**, consisting of the counties and cities. After 2009, the country completed the administrative and territorial reform of Latvian regions as follows: Riga, Kurzeme, Vidzeme, Zemgale and Latgale; 110 counties, 76 cities of which 9 are national importance cities.



General Economy Data²

GDP per capita: 12,762 EUR (EU28 – 26 500EUR), 2016;

GDP per inhabitant in PPS (*Purchasing Power Standards*) 64% (EU 28- 100%), 2015;

GDP growth rate: 2, 0% (EU28 – 2, 2%), 2016;

Inflation rate (HICP all items) change compared to same month of previous year: 1.2% (EU28 – 06%), 2016/11;

Unemployment rate: 9, 5% (EU28 – 8, 3%), 2016/10;

General government gross debt (*Percentage of GDP*): 40, 1% (EU28 – 83, 5%), 2016;

General government deficit/surplus (*Percentage of GDP*): - 0, 3% (EU28 – (-1, 4%), 2016q4.

General Business Data

Share of enterprises' turnover on e-commerce 7% (EU28 – 16%), 2016³.

Due to Latvia's geographical location, transit services are highly developed, along with timber and wood-processing, agriculture and food products, and manufacturing of machinery and electronic devices. The most important sectors of Latvia's economy in 2016 were wholesale and retail trade, transport, accommodation and food services (25, 2 %), industry (16.4 %) and public administration, defence, education, human health and social work activities (15.7 %). For the first time in the second quarter of 2016 in Latvia, IT and programming services exports has exceeded the railway Export services. Broadband facilitates the development of e-services for government, schools, commerce, health and business besides providing high speed internet to residents, businesses and public administrations in Latvia⁴.

¹ http://europa.eu/european-union/about-eu/countries/member-countries/latvia_en

² <http://www.liaa.gov.lv/en/about/latvia-facts>

³ <http://ec.europa.eu/eurostat/quip/introAction.do?init=1>

⁴ <http://www.liaa.gov.lv/en/about/latvia-facts>

1.2. ICT development, application of digital skill by people and companies, its impact on the overall economy and business development⁵.

Indicators	2010	2011	2012	2013	2014	2015	2016
Percentage of the ICT sector from GDP, %	3,55	3,30	3,49	3,74	3,77	n/a	n/a
Percentage of workforce working in the ICT sector, %	2,05	2,15	2,47	2,62	3,03	n/a	n/a
Percentage of SMEs selling on-line, %	14,0	15,2	14,9	13,8	16,2	14,4	n/a
Enterprises that issued/sent electronic invoices, % of SMEs	n/a	n/a	n/a	n/a	13,4	21,8	n/a
Enterprises that issued/sent paper invoices, % of SMEs	n/a	n/a	n/a	n/a	40,7	87,1	n/a
ICT specialists in enterprises, total	n/a	n/a	44,5	n/a	42,3	36,1	n/a
Enterprises which provide any type of training to develop ICT related skills of the persons employed, % of SMEs	n/a	n/a	n/a	14	18,3	18,2	n/a
Enterprises with broadband Internet connection, % of SMEs	n/a	n/a	88	94	95	97	97
Use of computers in enterprises, % of SMEs	99,1	99,5	99,7	98,9	99,6	100	99,2
Use of internet in enterprises, % of SMEs	98,3	99,1	99,5	98,7	99,3	100	98,5
Use of web sites in enterprises, % of SMEs	69,2	76,3	74,7	74,5	78,4	83,8	84,2
Employees using computers and computers with Internet connection in their job regularly, % of employees of SMEs	24,7	38,7	38,9	41,6	40,5	42,2	36,1
Use of social media in enterprises, % of SMEs	n/a	n/a	n/a	18,9	24,6	29,6	34,3
Individuals using the Internet for ordering goods and services, % of individuals aged 16 to 74	n/a	20	27	32	34	38	n/a
Individuals' Low Level of computer skills, % of the total number of individuals aged 16 to 74	n/a	11	12	n/a	13	n/a	n/a
Individuals' Medium Level of computer skills, % of the total number of individuals aged 16 to 74	n/a	22	23	n/a	23	n/a	n/a
Individuals' High Level of computer skills, % of the total number of individuals aged 16 to 74	n/a	29	29	n/a	30	n/a	n/a
Percentage of individuals, which have never used the Internet, %	n/a	27	24	22	21	18	n/a
⁶ Rural households having access to internet by broadband connection, % of all households	n/a	59	67	70	73	74	75

⁵ http://data.csb.gov.lv/pxweb/lv/zin/zin_datoriz_03ikt_komerc_03_uzn/ITUG0090.px/table/tableViewLayout2/?rxid=cdcb978c-22b0-416a-aacc-aa650d3e2ce0

⁶ <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tin00073&plugin=1>

1.3. Broadband connection⁷

On behalf of the Ministry of Economics of the Republic of Latvia the “**Study of Administrative procedures and business environment in Latvia**” (Survey) has been developed. A result of the study finalized on February, 2017 the final report summarizing main conclusions of the business survey, "Doing Business" and Global Competitiveness Index analysis, put forward proposals for reducing administrative burden and improving the overall business environment in Latvia, as well as included conclusions of the experts' discussions. Survey has been used in the next subparagraphs of the Baseline Study.

According to the overall connectivity dimension of Digital Economy and Society Index (DESI 2016⁸), Latvia ranked 10th. Latvia's position of fixed broadband coverage of households, is still lagging behind the EU, but ensures widespread Next Generation Access (NGA). The speed of connection in Latvia is higher (91% of households have access to NGA as opposed to only 71% in the EU), while the EU is better served in terms of fixed broadband coverage (97% of households as compared to 93% in Latvia). However, while there has been a positive trend in fixed broadband take-up, Latvia is still somewhat below the EU average in terms of both coverage and take-up of mobile broadband. (65 subscriptions per 100 people vs the EU average of 75).

The effort of national investment in broadband should continue according to the Latvian National Broadband Plan till 100 % coverage with 30 Mbps service is achieved, and 50% household penetration with 100 Mbps service is attained by 2020. The overall goal, namely to ensure the availability of high-speed broadband network access everywhere including in scarcely populated, remote territories, where telecommunications providers do not see any commercial incentive, should be further pursued. The intermediate evaluation and comparison of planned and actual outcomes in the process of broadband deployment in 2015, showed that the original goals concerning both deployment of NGA access points in rural areas and the deployment of optical cable connections between main grid and access points have been respected. The implementation of the plan should continue as planned until all of its goals are met.

1.4. E-skills development

Latvia is below average and making limited progress in the Human Capital dimension (in DESI 2016). The number of Internet users (75%) has increased slightly from 2015, and is now close to the EU average. At the same time, basic digital skills of Latvians (16-74 years) are below average. On the higher end of the digital skills spectrum Latvia has a lower share of ICT specialists (2% vs 3.7% in the EU) and science and technology graduates (13/1000 vs. 18/1000 in the EU) than the EU average. This can potentially hold back Latvian companies from digitally developing their business and the public sector from modernising. Since 2013 Latvia has had a strong national coalition for digital skills and jobs as a part of the European Grand Coalition for digital skills and jobs. It involves several ministries from the national government, as well as industry represented by among others the Latvian Information and Communications Technology Association (LIKTA), which coordinates the coalition. Their activities span basic everyday skills to highly specialised ICT professional skills. Overall Latvia recognize the importance of digital skills in different groups and takes into action to reduce skills gaps in order to make Latvia's private and public sector efficient and competitive.

1.5. Integration of ICT tools in businesses

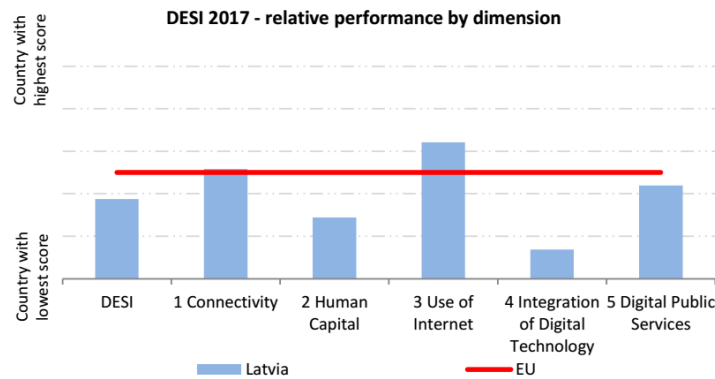
In 2016 the DESI⁹ Latvia falls into the cluster of catching up countries, scoring below the EU average (19th among the EU Member States). Latvian businesses are lagging behind the EU in all aspects of e-commerce and the performance of on-line commercial activities has stagnated compared to previous year. E-commerce remains underdeveloped in Latvia with only 38% of the population purchasing online goods or services (53% EU7) and consumer confidence in national and EU online sellers is below EU average indicator 8. Moreover, only 8% of Latvian SMEs were selling online in 2015 (16% EU9). The slow digitisation of the economy is also reflected in the low growth of ICT jobs. The number of ICT specialists has increased less than in the EU on average, which corresponds to the low take-up of digital technologies in all sectors of the economy.

However for digital entrepreneurship there have been a positive development over the last few years and if sustained, and possibly expanded, Latvia could grow a sustainable Start-up scene. Furthermore, efforts on digital skills SMEs are promising and will lead to modernisation of more traditional industries as well.

⁷ Study of Administrative procedures and business environment in Latvia of GatewayBaltic Ltd. (<http://gatewaypartners.net/>)

⁸ <https://ec.europa.eu/digital-single-market/en/scoreboard/latvia>

⁹ <https://ec.europa.eu/digital-single-market/en/scoreboard/latvia>



According to DESI 2016, the overall progress is driven by increasing shares of fast broadband subscriptions, as well as by the improved delivery of public services. More and more Latvians are going online and using eGovernment services, but still around half of the population has to improve their digital skills. Latvians are increasingly shopping online, businesses using social media and web sites, but still exploiting technologies in a limited way.

In general, taking into account indicators shown above, there is a considerable scope to improve the overall situation, continuing to implement the SKILLS + project with the aim to enhance the competence and competitiveness and encouraging the integration and use of modern ICT tools in daily business routines.

2. Characteristics of ICT of each region

2.1. Main stakeholders of ICT of each region

All of the stakeholders involved in the SKILLS+ project are in some way linked and closely work with the business environment, its political development or have connection with business. The stakeholders are cooperating with the Ministry of Environmental Protection and Regional Development of the Republic of the Latvia (MoEPRD) also in other projects, so they are more reliable and able to give input for the development of the Action plan as well as they will be the main players during the second phase of the project – implementation.

Involved stakeholders of the Latvian partnership are the following:

Organization	Address
Ministry of the Economics	Brīvības iela 55, Rīga, LV – 1519, Latvia; Phone:+371 67013100 E-mail: pasts@em.gov.lv
Investment and Development Agency of Latvia	Pērses iela 2, Rīga, LV-1442, Latvia; Phone: +371 67039400; E-mail: liao@liao.gov.lv
Kurzeme Planning Region	Elizabetes iela 4-1, Rīga, LV-1010, Latvia; Phone: +371 67331492, +371 67331634; E-mail: pasts@kurzemesregions.lv
Zemgale Planning Region	Jelgava, Katolu iela 2b, LV-3001, Latvia; Phone: +37163027549; E-mail: zpr@zpr.gov.lv
Vidzeme Planning Region	Jāņa Poruka iela 8, 108 kabinets; LV-4101, Cēsis, Cēsu novads; Phone +371 64116006 Fax: +371 64116012; E-mail: vidzeme@vidzeme.lv
Latgale Planning Region	Latgale Business Center, Saules iela 15, Daugavpils; LV-5401, Latvia Phone./Fax. +371 654 28111; E-mail: info@latgale.lv
Rīga Planning Region	Zigfrida Annas Meierovica bulvāris 18, Rīga, LV-1050, Latvia ;Phone: + 371 6 7226430 Fax: + 371 6 7226431; E-mail: rpr@rpr.gov.lv
Ventspils University College	Inženieru iela 101a, Ventspils; LV-3601, Latvia; Phone: +371 636 29657 E-mail: venta@venta.lv
Non-governmental organization "Latvian Information and Communications Technology Association"	Stabu iela 47-1, Rīga ; LV-1011, Latvia; Phone: +371 67311821, +371 67291896 e-mail: office@likta.lv
Latvian IT Cluster	Skolas iela 11, Rīga, ; LV-1010, Latvia; Phone.:+371 67089815 e-mail: itcluster@itbaltic.com
Latvian Chamber of Commerce and Industry	Krisjana Valdemara iela 35, Rīga, ; LV-1010, Latvia; Phone: + 371 67225592 E-mail: info@chamber.lv

2.2. Regional policy: drawbacks and initiatives for digitalization of SMEs

2.2.1. Political documents/strategies promoting digitalisation.

[National Development Plan for 2014-2020](#) (ENG)

A national comprehensive medium-term planning document to facilitate a balanced and sustainable development. The aspects relating to digital entrepreneurship include the increase in R&D efforts in the defined priority scientific areas, reduction of obstacles for entrepreneurs, ensuring a high-speed connectivity throughout Latvia, as well as the development of digital content, product and e-services to expand the use of digital technologies in the economy and in the population.

[Operational Programme „Growth and Employment 2014 - 2020”](#) (ENG)

Its aim is to promote a business enhancing environment that is based on available information (data), integrated ICT solutions for both the public and private sector and full inclusion of Latvia in the single European digital market. The policy promotes eSkills among both the public sector and the private economy and shall contribute to provide to anyone the opportunity to take the best use possible of modern ICT solutions. The policy is therefore aligned to Latvia's goal to improve the quality of life by contributing to national competitiveness, increasing economic growth and accelerating job creation. The implementation of the policy instrument therefore needs to be optimised to make sure that rural areas' SME take full use of the available opportunities and that financed interventions lead to durable impacts to the benefit of Latvia's overall economic competitiveness.

[The Information Society Development Guidelines for 2014 - 2020](#) (ENG) is to provide the opportunity for anyone to use ICT, to create a knowledge-based economy and to improve the overall quality of life by contributing to the national competitiveness, and increasing an economic growth and job creation. Special attention in the Guidelines is devoted to implementation of open data principle in the public administration and simplifying delivery of public services, by means of efficient and effective eServices and interoperable information systems. By reducing administrative burden it is expected to increase the number of those entrepreneurs (especially SMEs), which until now have been deterred from commencing their businesses or official registration due to the complexity and unwieldiness of bureaucratic procedures.

[National industrial policy guidelines for 2014 to 2020](#) (only LV) The aim at promoting economic structural changes, increasing the production of goods and services with high added value, including strengthening the role of industry, allowing modernization of industry and services, as well as expanding exports. As the key directions we can mention – availability of financing; increase of capacity of innovation; promotion of exports. In 2017. There is planned a Review of the guidelines, including assessing the need for the guidelines to include the policy objectives and provide business action for the digitization.

[Science, Technology Development, and Innovation Framework 2014-2020](#) (only LV)

The Guidelines implement a new horizontal approach to science and innovation policy, linking research and industry sectors in a single system. The main components for a successful development of Latvian innovation system are the following: 1) the development of the potential of scientific activity; 2) the development of the platform for long-term cooperation between researchers and enterprises; 3) the support of the development of innovative enterprises. The aim of the STI Guidelines is to raise the global competitiveness of Latvian science, technology and innovation, satisfying the development needs of Latvian society and economy. One of the Latvia's "Regional innovation strategy for smart specialisation" (RIS3) policy priority is "Modern ICT" and specialization area is "Information and communication technologies".

The Policy Guidelines for the Electronic Communications Sector of the Republic of Latvia 2011-2016 provide for a task for the Ministry of Transport to draw up a [concept for the development of the next generation broadband electronic communications network](#) (only LV) in order to achieve the objective laid down in the strategy Europe 20201 – to improve access to fast and ultra-fast internet for European citizens. Next generation broadband electronic communications networks ensure high data transmission speed, therefore, their expansion is the basis for further economic and life quality development of the modern society. Nowadays a large number of public, informative and State administration services are accessible more easily and conveniently in the digital environment rather than in the physical environment¹⁰.

2.2.2. Linking ICT to the regional/national innovation strategy for smart specialisation (RIS3).

Latvia's "Regional innovation strategy for smart specialisation"¹¹ (RIS3) policy rationale is linked to the "Information Society Development Guidelines for 2014 - 2020" (Guidelines) and therefore it gives priority to ICT research and innovation. This furthermore underpins the necessity to improve ICT education and the development of eSkills in SME and country's workforce. In the framework of RIS3 is set the transformation of economic axes, priorities and areas of specialization, including that related to ICT. One of the priorities of the RIS3 is a modern and complying with modern requirements development of ICT systems in the private and public sectors corresponding specialization within the field of "Information and communication technologies". Modern ICT has been identified as one of the priorities for the implementation of these directions.

At the same time the ICT has been identified as one of the five Latvia's Smart specialization areas.

2.2.3. Support available to businesses wishing to upscale the use of digital tools and ICT and digital developments.

In order to ensure an attractive business environment, based on a systemic and thought-out reforms and ensure not only the legislative process transparency, simplicity and avoid duplication, but also such regulations that do not prevent enterprises from start-up to the end and to foster a public administration

¹⁰ <https://ec.europa.eu/digital-single-market/en/country-information-latvia#national-broadband-strategy-and-policy>

¹¹ <http://www.izm.gov.lv/en/Science/smart-specialisation-strategy>

services that would be easy to use and market requirements, as one of the most important instruments for business developed is the Annual Business Environment Improvement Action Plan¹². This Action Plan aims to "simple and qualitative services in entrepreneurship: more e-services" and includes 47 actions. The main focus of Latvia to support SMEs in the digital field, is to support their employees in ICT and digital skills development, which is being implemented by the EU structural funds. In 2007.-2013. EU Cohesion funds programming period the Latvian Information and Communications Technology Association (LIKTA) was implementing two ICT industry training projects - "ICT industry and training partners in innovative technology and business development" with the aim to train industries employees in the latest technologies in the field of ICT and business development (available ESF financing 1,98 m EUR) and "ICT training for small and micro businesses to promote competitiveness and productivity" with the aim to raise productivity and efficiency of micro and SMEs by increasing employee's qualifications and skills in ICT (available ESF financing 1,95 m EUR), training was organized on three thematic blocks:

1. Digital skills and ICT solutions for increasing company productivity;
2. Usage of ICT tools for competitiveness and development of micro and small enterprises;
3. Usage of ICT solutions for raising business efficiency and export development.

In 2014 -2020 EU Cohesion funds programming period LIKTA is continuing to organize two training projects for ICT industries employees- "ICT professional trainings for ICT industry development and innovations" with the aim to ensure high-level the most advanced - ICT technology training for over 1600 ICT specialists employed in ICT and high technology - industries of Latvia (available ERDF financing 0,89 m EUR) and "Support for small and micro ICT skills development and implementation" with the aim to support ICT skills development in three thematic blocks (available ERDF financing 2 m EUR):

1. Digital technology;
2. Digitalization of company internal processes;
3. Digital tools for manufacturing and development of services;

Training projects are linked to the policies and strategy for digital and ICT specialist skills development supported by the Latvian National Coalition for Digital skills (see more in the subparagraph 4.1.).

At the same time other initiatives, such as, the set up and successfully running IT Cluster, which is also involved in a cross-cutting ICT solutions development activities. A good example of IT cluster activity is the establishment of the Riga IT Demo Centre, which serves as a platform not only for the ICT industry development in Latvia, but also as an environment that provides the opportunity for other sectors to get acquainted with ICT solutions for company digitization and use of ICT solutions for increasing productivity. The IT Cluster project which has been implemented in 2007-2013 EU Cohesion funds programming period has got a bronze quality label in the scope of EC programme "Cluster Organisation Management Excellence Label (Quality Label)".

Another digital development, which can be mentioned is the Network of State and Municipal Unified Customer Service Centres that are developing quite quickly and support SMEs by informing and helping them to use state e-services and encouraging learn how to use these ICT tools in their daily routine (see more in the subparagraph 4.1.).

An important support initiative is the information campaign "eSkills Week", which works as a bridge between government and non- governmental institutions and SMEs and helps to inform about news in the e-services, trainings, ICT tools etc., which can be used for the development for SMEs (see more in the subparagraph 4.1.).

2.2.4. *The main driving forces in the digitalisation of SME's business activities.*

In order to assess the main driving forces of digitization, a Stakeholder's survey has been used in the study, which let you view the issue from the Stakeholder's point of view and derived from practical experience:

- as the main driving forces in the digitalization of SMEs business activities can be mentioned electronic billing, reports, formalities administration, electronic signature, marketing etc.;
- what is even more important - a relevant information, best practices, educational and informative campaign expansion, as well as support for pilot projects and ERDF in general;
- local municipalities also play a certain role, but the scale of their efforts is limited due to the fact that other development priorities are usually preferred;
- there is a good technological base for ICT and digital development;
- there is social media and also different digital marketing tools available for SMEs.

¹² https://www.em.gov.lv/en/sectoral_policy/industrial_policy/entrepreneurship/business_environment/

2.2.5 *The main reasons for not using digital technologies by SME in rural areas mentioned in survey by Stakeholders.*

As barriers to implement digital technologies and tools and use them, can be mentioned:

- low level of digital skills;
- a lack of IT professionals in business;
- low awareness of benefits provided by the use of digital technologies for SMEs and the impact on business productivity and competitiveness;
- the company's strategy and business model does not focus on the use of digital technologies;
- the idea that use of digital technology and the integration in everyday routine processes create additional costs;
- use of digital tools and technologies is associated with low security.

2.2.6. *The impact of E-government and e-services on business development.*

Since 2014, it has been increasing use of electronic services penetration in consultations with the Register of Enterprises and the State Revenue Service. If in 2014 options for communication with the Register of Enterprises were used by 38% of the surveyed entrepreneurs, then in 2016 they were used by 42%, but the communication with the State Revenue Service in 2016 was used by 61% of entrepreneurs, increasing from 46% in 2014.

As it is observed in the survey, Latvian business majority uses the Internet to obtain information and to communicate with state and local authorities. The majority (90.4%) of respondents use the Internet to obtain information from state and local authorities with the highest rate among all survey years (In 2014 they were 85.4%, in 2011 - 78%).

It can be concluded, that the awareness of e-signature services by business has been increasing. About E-signature, where the signature generation requires a special plastic card with chip and card reader, informed are 83.7% of respondents¹³ (7% more than in 2014) and is used by 23.3% of entrepreneurs (16% more than in 2014). About virtual eSignature informed 79.7% of the respondents (3% more than in 2014) and is used by 30.1% of the surveyed entrepreneurs (1% more than in 2014).

Entrepreneurs who do not use e-signature services in their daily routine, among the reasons mentioned lack of a need (93%), solution of high level of complexity (78%), and lack of information about the service (70%).

A variety of e-services options entrepreneurs generally appreciated:

- Communication options with national / local authorities by e-mail, as sufficient assessed 63% of entrepreneurs.
- Electronic submission of documents at national / local government institutions, and sufficient, evaluated 53% of entrepreneurs.
- Information for obtaining opportunities on the Internet from the state / local authorities and form downloads, as sufficient assessed 50% of entrepreneurs.
- 72.5% of entrepreneurs supported the mandatory introduction of e-mail addresses for communication with state and local authorities.

Improve the existing situation in the field of e-government from business raised the following proposals and there has to be:

- usability for entrepreneurs improved of the Latvian state portal www.latvija.lv interface;
- combine several local e-services forms to improve the Latvian state portal www.latvija.lv usability.

¹³ Interviewed 740 companies from all over the Latvia

3. SWOT Analysis - ICT skills and tools and use by SMEs

Internal factors:

Strengthens	Weakness
<ul style="list-style-type: none"> - 93% of households have access to broadband internet (<i>EU - 97%</i>); - Latvia has one of the fastest Internet connections in the World; - 36% of population are an e-government users (<i>EU-32%</i>); - Computer and Internet is used by: <ul style="list-style-type: none"> • 100% of large SMEs and; • 98,6% of small companies; - There are several government support programs for both – SMEs and e-skills development; - Availability of infrastructure – e-signature, internet access; broadband connection; free use of internet access points in Libraries, Client contact centers ect; - There are a lot of e-services proposed by the private sector; - There is a Ministry – MoEPRD which is responsible for development of e-government, including e-skills. 	<ul style="list-style-type: none"> Number of inhabitants who use the Internet to purchase goods from other countries is gradually increasing, but in 2015 it was still only ~ 19%; - 18% of Latvian citizens have never used the Internet (<i>EU - 16%</i>); - only 2% of the workforce are ICT specialists (<i>in EU - 3.7%</i>); - Only 10.2% of SMEs sell online (<i>EU-16%</i>); - 26% of Internet users' digital skills are higher than the EU average (<i>28%</i>) level. - Little use of cloud computing; - Despite citizens' increase in eCommerce activities, very few SMEs make use of electronic sales channels.

External factors:

Threats	Opportunities
<ul style="list-style-type: none"> - Investment in the Latvian ICT sector – large share of investment is coming from EU CF (<i>~ 83% of total investment</i>), which could lead to additional unplanned burden on the state budget when the EU funds will no longer be available in the future and can create a threat for the development of ICT infrastructure; - E-commerce development is threatened by a low number of SMEs that sell online; - Failure to develop e-skills can slow down acquiring of a new strategic knowledge and understanding of use of ICT tools; - If SMEs will not be able to compete due to lack of digital skills and not using technologies they can lose market; ICT specialists outflow abroad (<i>brain drain</i>). 	<ul style="list-style-type: none"> - Broadband Internet access in most of public areas and access to fast internet connection create good opportunities for SMEs and digitization; - Good digital skills of a large share of the Latvian population create good opportunities for digital innovation and possibilities for using them in business; - Latvian SMEs have good opportunities to increase e-commerce within the country taking into account that about 2 times more Latvian residents used the opportunity to shop online in Latvia rather than abroad; - An opportunity to raise awareness about the use of ICT tools; - Due to the activities of the MoEPRD it is possible to raise awareness and improve digital skills.

4. Analysis and identification of main regional experiences and lessons learnt/ Good practice assessment

4.1. Assessment of own selected good practices

E-Leadership skills for SMEs

(„Informācijas Tehnoloģiju apmācības mazajiem un mikro uzņēmumiem konkurētspējas un produktivitātes veicināšanai”) <https://www.likta.lv/LV/Aktivitates/Lapas/MMU-projekts.aspx>.

Project “ICT training for small and micro businesses to promote competitiveness and productivity” was aimed to raising productivity, innovations and increase in the long-term competitiveness of small and micro-enterprises by teaching how to effectively apply ICT technologies and e-skills. Trainings were delivered by 16 modular programs in 3 training areas: 1.Strategy (ICT for innovations; Market analysis; Management of changes; Management of processes and products). 2. Technologies (Infrastructure; Security; Multimedia and graphical design; Office software) 3.Business processes (Client and partner management; Finance management, accounting; E-commerce.) The project was co-financed by the EU Social fund (80 %). In total 6784 training courses were held for 1446 SME and 3249 employees of enterprises were trained. Trainings were held in 20 municipalities of Latvia. The project was nominated by the Latvian Investment and Development Agency and submitted to the EU's competition “Regio Stars 2015 - The Awards for Innovative Projects”. Also, the project was presented to the EU high-level e-skills conference and Digital Assembly. Project experience was presented at the e-Leadership conference “Future e-Leadership Education and Training for SMEs and start-up” in Brussels, which was organized by the European Commission's DG GROWTH.

Project "Support for small and micro ICT skills development and implementation" is continuation of the previous EU Cohesion funds programming period supported project for SMEs. The project is co-financed by the EU European Regional Development Fund (70%). It is estimated that within the project 6500 entrepreneurs and self-employed persons will be trained. Trainings will be delivered in 3 thematic blocks: 1. Digital technology (new tendency – cloud computing, online collaboration, infrastructure and safety). 2. Digitalization of company internal processes (business and financial management tools, marketing and document management tools). 3. Digital tools for manufacturing and development of services (digital design tools, customer relationship management and communication tools, manufacturing and process control digital tools and programmes).

Information Campaign "eSkills Week"

(Informatīvā kampaņa "ePrasmju nedēļa" <http://eprasmes.lv/>.)

The aim of this initiative is to raise awareness citizens for improving their command of ICT skills. In result of cooperation between industries, educational bodies and public authorities deliver a large and diverse programme of events and activities throughout the year for people at all levels of education and skills. The campaign targets different groups, including SMEs, informing them about the vast range of opportunities that ICT - related jobs present.

One day of the week informing entrepreneurs about opportunities to raise their level of knowledge and competitiveness on the ICT issues and all opportunities offered by the governmental institutions (e-services, use of e-signature etc.), NGOs (new ICT solutions in e-commerce, cloud computing business opportunities, social networking etc.) and IT associations (training's, practical use of ICT, integrating new programmes etc.). It is essential that this measure reaches all Latvia's regions and operators concerned. Basically, this campaign in Latvia includes communication activities combined with awareness raising events and trainings. There are also possibilities to see live broadcasts of seminars that facilitate access of people interested in the event. There are more than 25 000 participants on average participating in the "e-Skills Week for Jobs" every year and about 8-10% of them are entrepreneurs. In this event, more than 150 stakeholders' have been involved and around 700 events are taking place in all regions. The Information Campaign reflects interest and involvement of the all stakeholders with respect to e-services. In general, it helps to get the impression, information about new e-services, trainings and also legislation useful for business development and adoption of new ICT opportunities.

Network of State and Municipal Unified Customer Service Centres

(Valsts un pašvaldību vienotie klientu apkalpošanas centri; <https://www.latvija.lv/pakalpojumucentri>)

Significant changes have taken place in the society, technology, and assumptions in delivery of public services, earlier approaches and techniques needed to be updated and revised. Therefore, after extensive study and execution of pilot project government of Latvia came out with new approach by eliminating borders in delivery and access of public services by setting up Network of State and Municipal Unified Customer Service Centres (VPVKAC). Innovative approach of implementation of the "one stop shop" principle - significant change of inter-institutional and inter-governmental cooperation by minimizing distinction between services provided by local governments or state institutions, as well as paying significant attention to development of e-skills and fostering a positive attitude toward self-service. Particularly innovation is a voluntary involvement of local governments to provide most popular "physical/on-site" state institution services and use of existing infrastructure/ assets and human resources. VPVKAC focuses on needs of citizens and the business friendly public administration, i.e. establishment and delivery of state and municipal services, including e-services. At the moment one out of two public services is available electronically. Electronic services can be found on the portal www.Latvija.lv and on institutional websites.

The role of leaders on the national or local government levels was very important for co-designing and taking decisions to implement multi-channel, multi government, interdisciplinary and interoperable approach towards the needs of clients and at the same time being efficient from the point of using public funds. Leadership is a necessary precondition for such kind of changes in public, including e-services delivery.

Restructuring of delivery of public services in Latvia makes significant contribution to the development of public service system, thereby reducing administrative burdens, improving business environment, ensuring availability of services in regions and promoting more efficient public administration, to optimize formalities. 59 of 119 municipalities of Latvia are involved in activities of VPVKAC. 1) State Social Insurance Agency 2) State Employment Agency 3) State Revenue Service 4) Register of Enterprises 5) State Rural Support Service 6) State Land Service 7) Office of Citizenship and Migration Affairs 8) State Labour Inspectorate. Until the end of 2016 - 56 VPVKACs were established in the development centres of regional importance. From the beginning of the project - 1st September, 2015, until 1st January, 2017, in all regional VPVKACs

the total of 43 204 services were registered and 9 529 consultations provided. At the same time all regional VPVKACs have registered 3 295 consultations related to services of the State Revenue Service.

4.2. Selecting good practices from other SKILLS+ partner regions

DIGIBOOST (Finland) is a policy tool promoting digitalisation of SMEs and midcaps (*less than 300 000 000€/annual turnover*). It is a TEKES programme, and was introduced in 2013. DIGIBOOST cofunds by 50% ICT experts (*identified by TEKES*) to work within businesses in order to: a) improve internationalisation and networking; b) development and innovation; c) investments and working capital; d) accessing financing solutions and/or securing the export receivables; e) "other", i.e. open option, for suggestions. It is continuously open and businesses apply online (<https://www.tekes.fi/en/test-your-idea/#/>). The key criterion is that the effort must include internationalisation and that there has to be a really new element in the company (*to make the 'digital leap'*). The person hired must be a new person with exact skills, not already existing in the company.

It is good example, because such a program could be useful for Latvian SMEs, in cases, when SMEs do not have sufficient own resources to pay for ICT and digital experts and could be included in the Latvian Action Plan.

ST-Online (Norway). Sør-Trøndelag Online is a pilot-project that offers competence in online/digital visibility for small- and medium scaled businesses. The project has been developed in a co-operation between two business-parks, Sør-Trøndelag County Authority, a local bank and Google. Some of the subjects offered in the pilot were strategy and online message, google ad words, how to trigger online traffic, social medias etc. The businesses parks invited businesses they knew wanted to be more visible online and connected them with both regional service partners and local bureaus. The intention was that the local bureaus could become service partners in the further run.

It is a good example, because of cooperation between institutions using main platforms and bringing together stakeholders to make useful information more available for SMEs with less financial involvement.

Diversification into non-agricultural activities and creation and development of SMEs - in the framework of the Rural Development Programme (2007-2013) (*Poland*)

Improvement of life quality in rural areas and diversification of rural economy were key issues under the 3.1.1. measure "Diversification into non-agricultural activities" and 3.1.2 measure "Creation and development of SMEs" within Rural Development Programme (2007-2013) financed by the European Agricultural Fund for Rural Development. These measures aimed directly at the development of entrepreneurship in non-agricultural activities and changing job profiles in rural areas by giving opportunities to farmers for working in non-agricultural jobs. Various kinds of activities were supported within these measures, i.e. services for agricultural or forestry, services for the local society, sale and retail, craft, construction works and services, tourist services and services related to sports, recreation and leisure, transport services, communal services, manufacturing, storage, production of energy products from biomass, accounting, consulting and IT services. The measure 3.1.1. only supported activities registered in rural areas (*rural commune, urban-rural commune or rural commune without cities with population above 5 000 citizens*) and persons insured as a farmer were supported within the measure. The support level was maximum 50% of eligible costs of the project and could cover various types of costs, i.e. purchase of IT equipment and software. Evaluation criteria of the proposals were closely related to location of the beneficiary, mean incomes and unemployment level of the commune at which beneficiary are located. Additionally, innovative level of the proposal was assessed. The measure 3.1.2. supported persons or micro-enterprises only with up to 9 employees and small economic turnover (*below 2 million Euro*), which are located in rural areas (*rural commune, urban-rural commune or rural commune without cities with population above 5 000 citizens*). Evaluation criteria of the proposals were closely related to location of the

It is a good example, because it is a solution and support mechanism for entrepreneurs, who do not see their activity in current business and want to change business direction and could be used an idea in the Latvian Action Plan.

beneficiary, mean incomes and unemployment level of the commune at which beneficiary is located. Additionally, innovative level of the proposal was assessed.

E-business Competitiveness Improvement Project (Croatia).

The main objective of the E-business Competitiveness Improvement Project was to enhance the competitiveness of Croatian enterprises by increasing their e-business and e-commerce awareness and activities. The Project's activities were divided into two components and targeted both Business Support Centres and Small and Medium-sized Enterprises (SMEs). Component 1 focused on increasing the capacity of 10 Business Support Centres (BSCs) located throughout Croatia, which have been selected to take part in the Project, while Component 2, the Business Support Centres, with the support of the Project consultants, raised SME awareness in their regions about e-business and delivered direct assistance on ICT and e-business to targeted SMEs.

During the project lifetime assistance and support was given to the Business Support Centres to develop an ICT strategy to enhance the knowledge and skills of SMEs in the field of e-business. This was achieved by the BSCs delivering quality information, education, training and advice to SMEs on how to use ICT and

It is a good example, because it is a very good idea for SMEs, especially in Latvia, where you can use existing Business centres as a basis and develop qualitative business centres with the useful information.

conduct e-business. Up to ten people in each of the 10 selected Business Support Centres took part in a training and mentoring programme covering different aspects of e-business. The Business Support Centres were expected to carry out two awareness-raising campaigns with support of the Project and to follow this with the delivery of at least two local e-business awareness-raising seminars with 25 participants in each seminar. After successfully delivering the ICT seminars, Business Support Centres with Project support were expected to deliver at least three workshops to SMEs offering training to around 20 participants aimed at increasing levels of expertise in use of ICT and e-business.

Training, certification and consulting for unemployed young people aged 18-24, in the area of ICT <http://edu.sepve.org.gr/welcome>.

The program includes the implementation of 120 hours of Theoretical Training and 260 hours Practical Training and also an individualized approach - counselling for the promotion of beneficiaries into employment and businesses. Each training program will be mandatory and include 20% of the following topics:

- Health and safety at work;
- Basic labour law authorities;
- Preparing the trainee for the labour market, such as learning resume writing techniques, personal development strategy, career guidance, learning ways of finding a job, interview simulation with the employer, etc.

It is an integrated program including vocational training, counselling and certification qualifications addressed to 1,000 (national level) unemployed people aged 18-24 years in the Information and Communication Technologies (ICT), 58 of them from the Western Macedonia Region. Practices will be implemented as follows:

At the beginning of this project it a Registry of SME's will be created. All interested SME's will be included into this registry in order to train the unemployed participants and also a matching procedure will follow that will include advisory support.

The certification of qualifications and skills of beneficiaries will be recognized certification bodies.

It is an example which has to be taken into account because in Latvia until 2020, demand for the ICT professionals may exceed supply by 21%. In this case, the same or similar activity could provide a springboard for young people to choose their future career in ICT.

5. Conclusions

Assessing the situation in Latvia, there were used the statistical data, survey results of the EM, as well as stakeholder interviews. There are all preconditions for the development of the SMEs digital environment and usage of e-services, however there are still long way to go.

- There is a good ICT infrastructure - broadband connection, internet access, including Free Wi-Fi access points and services with computers in Network of State and Municipal Unified Customer Service Centers, Libraries, Business centers (incubators) and others, e-signature which can be used for integrating IT tools in SMEs everyday work.
- There are good opportunities for using governmental as well as privately offered e-services for citizens and SMEs.
- There are several policy documents about the development of Information society including SMEs, however there are none of them has a specific objective to promote digitalization especially for rural SMEs.
- SMEs more using Internet, applications and other solutions to procure goods or services, but it is still has to be improved.
- There are a lot of SMEs, especially in rural areas, which consider that digital solutions are too expensive, which doesn't bring profit in a long term. There should be offered easier available information about government support programs, also EU funding and other financial instruments.
- There should be more information, which explains, how digital solutions can improve business results in long term. There have to be organized more awareness-raising activities and information campaigns.
- One of the main factors for not using IT in SMEs work is lack of e-skills and knowledge that have to be improved. EU funding for training SMEs employees to work with ICT technologies and use e-skills corresponds to actual requirements of industry.
- Lack of IT specialists and their support in SMEs is one of the problem which should be solved out.
- There are several good practices of the partner countries which can be used as an idea for enhancing and encouraging SMEs use of ICT, like examples of .Finland - DIGIBOOST; Norway - ST-Online as well as examples of Poland - Diversification into non-agricultural activities and creation and development of SMEs and Croatia - E-business Competitiveness Improvement Project.

6. List of stakeholders interviewed

1. Ministry of the Economics of the Republic of Latvia (EM);
2. Latvian IT Cluster (ITCL);
3. Latvian Information and Communications Technology Association (LIKTA);
4. Riga Planning Region (RPR);
5. Kurzemes Planning Region (KPR);
6. Vidzemes Planning Region (VPR);
7. Zemgales Planning Region (ZPR).

7. Proposed questions

7.1. How do you evaluate the current use of digital technologies by SME in rural areas?

- EM:** Assessing the situation in Latvia as a whole (for 2016) it shows that ICT is used by all Latvian companies. From 5.7% in 2014 to 8.4% in 2016 increased the proportion of companies using cloud computing services. In Latvia more and more companies are using the Internet, applications, etc. solutions to procure goods or services.
- ITCL:** Medium to low.
- LIKTA:** It is quite low. Compared to uptake of Digital technologies by larger enterprises and also EU average.
- RPR:** Insufficient to average.
- KPR:** Good internet access. The possibility of using different types of support sites for business development.
- **VPR:** Newly established enterprises mostly understand importance of using digital technologies, but there is a specific group, which consider digital solutions too expensive, which doesn't bring profit in a long term. There should be more information, which explains, how digital solutions can improve business results in long term.
- ZPR:** In 2013, 70% of households had computer and access to the Internet. Such ICT abilities as internet, e-mail and internet bank access are used by SMEs, thanks to high availability of technologies and internet. Which brings such benefits like faster information sharing and higher information availability. But there still is lack of specialized ICT products which could increase production value and profit.

7.2. What are the main reasons for not using digital technologies by SME in rural areas?

- **EM:** Limiting factors for SMEs not using Digital technologies' are - The **company's strategy** and business model **does not focus** on the use of digital technologies; **Understanding** of digital technology opportunities and **the impact** on business productivity and competitiveness; The idea **that use of** digital technology and the integration in everyday routine processes **create additional costs** (*mainly applies to micro and small enterprises*); There are **no adequate skills** and abilities **to make greater use** of digital technologies and solutions; **Promotion of support instruments** and tools in the digitization process for SMEs; Use of Digital tools and technologies is associated with **lower security**.
 - **ITCL:** Lack of knowledge, but also lack of interest. General belief that it is complicated, it is not reliable, not secure.
 - **LIKTA:** Low digital skills and understanding of the benefits that use of Digital technologies can bring to SME s as well as limited resources- time, human capital, finances- to implement digital Technologies and tools.
 - **RPR:** Lack of knowledge, relatively few AWARENESS-raising activities.
 - **KPR:** Some e-portal quality. Need more skills, knowledge.
- **VPR:** It should be used more, one of the disadvantages is that employees of the SMEs are lack of digital skills in rural areas. It is often, that also managers are lack of digital skills, so sometimes they even don't know advantages and possible improvements.
 - **ZPR:** One cause of limited adoption is the lack of dynamism between ICT firms and SMEs outside of the ICT sector. ICT firms have not provided goods and services tailored to SMEs in the past because demand from SMEs has been low. However, their demand is low in part because ICT products available in the market are too complex and expensive.

7.3. Which digital technologies should be used more to boost the competitiveness of SME and why?

- **EM:** Mostly they can be **daily technologies** - computer, mobile devices, the Internet to provide the opportunity for SMEs with the use of "**basic**" **applications**, such as e-mail, online banking, online payments, tax returns and annual reporting. The same digital technology SMEs more used to provide goods or services within the digital environment (e-commerce), B2B, B2C, B2G communication and implementation of marketing activities.
 - **ITCL:** SMEs should start with basics: communication, joint calendars, modern accounting, file sharing, document management, as well as usage of electronic signature. SMEs in rural areas especially should be encouraged to use e-government solutions when dealing with government services. That would free-up resources and also will encourage to go further to implement specific business-line software.
 - **LIKTA:** This depends very much on the sector where SME is operating. The general Technologies for all SMEs could be: 1) use of cloud SERVICES 2) digital marketing and e-commerce 3) digitalization of management and production processes.
 - **RPR:** Cloud-based communication services.
 - **KPR:** E-signature, access to databases, public databases, social networks.
- **VPR:** Manufacturing planning software's (improves effectiveness), document management systems, warehouse management systems.
 - **ZPR:** Use of online marketing opportunities. More use of business analysis tools that allow to analyse the existing operational weaknesses and desired directions of activities.

7.4. How do you evaluate the support structures and programmes in place to support SME wishing to "go digital"?

- **EM:** The main focus in Latvia to support SMEs in the digital field is to **support their employees** in ICT and **digital skills development**, which is being implemented by the **EU structural funds**. Emphasized also other initiatives, such as, set up and **successfully running IT Cluster**, which is also involved in a cross-cutting ICT solutions development activities. A good example of IT cluster activity is the established **Riga's IT Demo Centre**, which serves as a platform not only for the ICT industry development in Latvia, but also as an environment that provides the opportunity for other sectors to get acquainted with generated in Latvia ICT solutions for company's digitization and use of ICT solutions for increasing productivity.
 - **ITCL:** Low.
 - **LIKTA:** There are some state support programs in Latvia. Some of them support upgrading /developing Digital skills, some are related to introduction of Digital Technologies.
 - **RPR:** Good at national level, average to insufficient at regional or local scale.

- **KPR:** Each support structure provides training and consulting. Some of the support structures necessary to improve the quality of the programs, some are very good, but there is a long process to login.
- **VPR:** We think, that there is not enough support systems, there was event time, when there were several limitations to get support for digital development (For example, in business incubators it was hard to get support for developing IT product prototypes).
- **ZPR:** There is no information on such support structures that offer such services.

7.5. In your opinion, what kind of non-monetary support is necessary to achieve a higher share of SME using digital technologies in their business activities?

- **EM:** These are **trainings, awareness campaigns** and dissemination of good practice on digital technologies, **online commerce** and so on, the possibilities and advantages.
- **ITCL:** Dedicated seminars to use specific e-government or othersolutions.
- **LIKTA:** First of all building awareness about benefits of using digital Technologies.
- **RPR:** Awareness-raising activities, on-site presentation, co-operation projects and other incentives.
- **KPR:** Good internet and consulting availability.
- **VPR:** Education, it is necessary to educate more about effectiveness, when some processes are digitalized, it is necessary to educate, how to calculate investment return from digitalization. Also, there is lack of information about IT SME's, which offers individual solutions for other SMEs. Unfortunately our market has divided into two parts. There are large and expensive ICT solutions for large companies and really small and sometimes too simple ICT solutions. We need more ICT companies, which can offer affordable services for SMEs located in rural areas.
- **ZPR:** To be more educated about the open-source products. Planning regions and others could reduce the "digital divide" for small businesses.

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