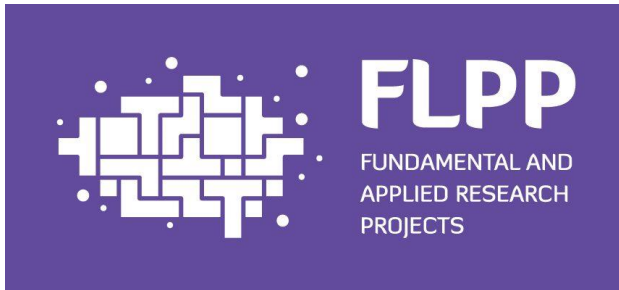




SMEs DIGITAL JOURNEY REPORT LATVIA 2021:

Mechanism of the Digital Transformation



UNIVERSITY OF LATVIA
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SMEs DIGITAL JOURNEY

REPORT LATVIA 2021:

Mechanism of the Digital Transformation

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PREFACE

The “Transform or Die” statement appears clearly in every study, report, forum and conference on how companies can remain competitive and relevant as the world turns digital. However, many business owners and managers do not understand what digital transformation means. The term "digital transformation" has become so widespread, so broad, that it is confusing. Does using social media to promote your products or moving to the cloud mean you are in a digital transformation? The answer is that it depends on what you want to achieve. **Digital transformation is a journey**, not a destination; it starts with the first step by creating a digital version of analog/physical things and leads to a shift in business activity, model, and competencies in order to make use of newly accessible technology, but it never ends. This process requires constant innovation and rapid response to change, as well as challenges and opportunities as they arise.

Digital transformation journey begins with the process of transforming information from a physical format to a digital version known as **digitization**. Digitization can improve efficiency if digitized data is used to automate processes and make it more accessible, but digitization is not aimed at optimizing processes or data. Companies cannot embark on a digital journey if they didn't go through digitization first. The next step is to use digital technology to change the business model and provide new opportunities for generating income and creating value, this is called **digitalization**. It is the process of moving to a digital business. Digitalization includes the process of adapting old business models to new technologies and unlocking the potential of digital technologies to collect data, identify patterns and make smarter business decisions (Malak, 2021). However, digitalization improves rather than transforms the existing business process, transforming the process from a human-driven event to a software-driven event.

Finally, **digital transformation** is the integration of digital technology across all areas of the business, revolutionizing the way you work and deliver value to your customers. Digital transformation is a process that changes the entire business model of companies and that needs to be supported by an ecosystem, a dedicated digital strategy and digital skills. It's also a cultural change that requires organizations to continually challenge the status quo, experiment, and get comfortable with failure (Rupeika-Apoga & Nedovis, 2016; The Enterprisers Project, 2021). Digital transformation is multi-

faceted and involves the use and applications of a broad range of technologies, for different purposes.

Since the onset of the COVID-19 pandemic, there has been a dramatic increase in the use of digital technology and online sales by SMEs. As the crisis continues, these changes will last for a long time and some investments will be irreversible. The digitalization process has continued at a rapid pace in recent years, but SMEs are lagging in the transition, despite the potentially huge benefits. The stakes are high because the SME digital gap has proved to weigh down on productivity and to increase inequalities among people, firms and places (OECD, 2021).

Given the universal importance of SMEs, it is extremely important to understand the real situation that Latvian SMEs face on their digital journey to ensure sustainable development. This report provides an overview of the status quo and the challenges that need to be addressed by Latvian SMEs on their digital journey. It is also the first report to undertake a comprehensive analysis of the digital transformation of SMEs in Latvia. This report is based on data collected from the **433 companies**, which are registered in Latvia and completed an online survey carried out during **February/March 2021**.

In this survey, we used a 7-point Likert scale, which is the most reliable of the Likert Scales as it captures the best sentiment of the respondent. In addition, it provides better accuracy on the results and is incredibly useful for the researchers, as well as providing more data points for processing statistical information.

Recently, several surveys have been conducted to study the situation in Latvia, however, all these surveys were mainly undertaken by using limited answers such as “yes” or “no” and “don't know”. The survey carried out by SEB Bank in December 2019 clearly showed that **a significant part of SMEs in the Baltic States is in no hurry to digitize their activities, since only a quarter of respondents sell goods or services on the Internet**. 55% of Estonian SMEs recognized digitalization as an important precondition for business development, while in Latvia and Lithuania this indicator was 47% and 51%, respectively (Škapars, 2020). The Latvian Information and Communications Technology Association (LIKTA) survey of industry associations shows that in 2019 only **8%** of association leaders admitted that SMEs in their industries have undergone **a complete digital transformation**, **20%** of associations indicated that **basic solutions** have been implemented, but the **vast majority or half** have implemented **only a few basic solutions** and **10%** of Latvian industry associations are **still**

thinking about implementing IT solutions (LIKTA, 2019). According to the Digital Economy and Society Index (DESI) 2020 Latvia has good ranks in connectivity, use of internet services and digital public services, however, the **digitalization degree of SMEs' businesses and e-commerce in Latvia lags far behind the EU average**, which makes us one of the least developed in the EU and Latvia has the lowest **degree of web sales to businesses and governments in the EU** (European Commission, 2020). In 2020, the Ministry of Environmental Protection and Regional Development of the Republic of Latvia (VARAM) conducted two surveys to assess the use of digital technologies in enterprises and to evaluate the digital transformation performance of SMEs. Also, these surveys confirmed that Latvian companies are not active users of new technologies, **since more than 90% have never used AI (artificial intelligence), big data and robotics**.

PORTRAIT OF THE SURVEYED COMPANIES

This report is based on data collected from the 433 companies, which are registered in Latvia and completed an online survey carried out during February/March 2021. The classification of Micro, Small and Medium-Sized Enterprises by size was based on the number of employees in the company in accordance with the applied methodology of the European Commission (EC, 2003).

Table 1 summarizes the distribution of SMEs by size, the share of surveyed micro-companies is 44%, small companies 42% and medium-sized ones 13%. The share of surveyed small and medium-sized enterprises is higher than the share of small and medium-sized enterprises in Latvia (5% and 1%, respectively).

Table 1 Distribution of companies by size	
Nr of employees	Nr of companies
Micro (1-9)	189
Small (10-49)	180
Medium (50-249)	56
Large (> 250)	8
Total	433

At the same time, the interest of micro-enterprises was lower, as in Latvia their share is 94% of the total number of enterprises. The share of surveyed large companies is 2% versus 0,2% in Latvia.

Enterprises participated in the survey represent various sectors of the economy. In terms of economic sectors, the structure of the surveyed enterprises is similar to the division of the Latvian economy. However, as many companies operate in different sectors of the economy, classification by economic sector is becoming less popular. Also, the surveyed companies operate in several sectors at the same time, and Table 2 shows the distribution of companies by main economic sector.

Table 2 Distribution of companies by sector	
Sector	Share of companies
Agriculture, forestry and fisheries	15%
Construction	7%
Manufacturing	7%
Transport and storage	5%
Trade, accommodation and catering	17%
Public services	14%
Other commercial services	36%
Total	100%

Business to consumer (B2C), business to business (B2B), and business to government (B2G) are three common types of business models. As can be seen from Table 3, 38% of SMEs use both B2B and B2C. The next most popular models are B2B with 25% and B2C with 19% separately. The use of all business models is also popular - 16%. Whereas the use of B2G models is less popular and usually complements B2B and B2C. The most popular business model for micro-enterprises is B2C, and for small and medium-sized enterprises it is B2B. This difference can be explained by different target audiences.

BM	Company size				Total
	Micro	Small	Medium	Large	
B2B, B2C	63	62	11	1	137
B2B	28	54	24	3	109
B2C	65	15	3		83
B2B, B2C, B2G	24	35	9	3	71
B2B, B2G	7	14	8		29
B2C, B2G	2			1	3
B2G			1		1
Total	189	180	56	8	433

For B2C companies, the target audience is a consumer, and for B2B companies, another company. **B2B companies** are supportive businesses that offer what other businesses need to work and grow. They offer the raw materials, finished parts, services or consultations that other businesses need to operate, grow and profit. The rise of B2B e-commerce solutions has changed the relationship between businesses and suppliers. As a product of the digital revolution, these companies sell products directly to other companies using **e-commerce platforms**, and exchange data and product or service updates. B2C has traditionally referred to shopping in malls, restaurants and commercials. However, the rise of the Internet has created an entirely new **B2C business** channel in the form of **e-commerce** or the sale of goods and services over the Internet.

Table 4 provides information on the turnover of SMEs in 2019/2020. The classification of SMEs in Latvia in terms of turnover differs from the EU classification. The share of micro-enterprises in the total number of enterprises according to the Latvian classification is 36% versus 63% according to the EU classification.

Turnover	Nr of companies
≤0,7 mln EUR	156
0,7 mln - 2 mln EUR	115
2 mln - 8 mln EUR	94
8 mln - 10 mln EUR	11
10 - 40 mln EUR	47
40 - 50 mln EUR	6
> 50 mln EUR	4
Total	433

There is also a big difference for small companies: according to the Latvian classification, their share is 48%, while according to the EU it is only 24%. The share of medium-sized enterprises is similar for both classifications - 13% versus 12%.

BM	≤0,7 mln	0,7 - 2 mln	2 - 10 mln	10 - 40 mln	>40 mln
B2B	22	45	33	7	2
B2B, B2C	41	40	34	20	2
B2B, B2C,B2G	23	13	15	15	5
B2B, B2G	7	6	12	4	
B2C	61	11	11		
B2C, B2G	2			1	
B2G					1
Total	156	115	105	47	10

The breakdown by business models and turnover (Table 5) indicates that B2C companies have lower turnover compared to B2B companies.

Position	Company size				Total
	Micro	Small	Medium	Large	
Executive director/ Chairman	35	40	21		96
Owner	121	48	8		177
Manager	18	58	18	6	100
Specialist	15	34	9	2	60
Total	189	180	56	8	433

Table 6 shows the position of the person who filled out the questionnaire. 41% of respondents are company owners and 4% of them are also CEOs or chairpersons.

The distribution of companies by size clearly shows that larger companies are more involved in the digital journey. This report mainly reflects the opinion of micro-enterprise owners, while for small and medium-sized enterprises it is mainly the opinion of executives and managers.

CURRENT ENGAGEMENT IN DIGITAL ACTIVITIES

40% of Latvian SMEs use phone calls and snail mail for communication in 100% of cases

The survey shows that traditional paper mail and phone calls are still commonly used. The share is even more significant among small enterprises - 47%. Only 3% of SMEs never or in less than 10% of cases apply traditional snail mail and phone calls (Figure 1).

Some areas of Latvian SMEs activities stay out of digitization and digitalization.

39% of SMEs organize paper document circulation in 90% of cases or more frequently (Figure2). Only 1% of SMEs never work with paper documents and 5% use them rarely- in less than 10% of cases.

12% of Latvian SMEs have completed the digitalization of invoicing, 36% apply electronic invoicing in 90% of cases (Figure 3). 11% of enterprises still practice electronic invoicing in 30% or cases or more infrequently.

FIGURE 1 SHARE OF SMEs USING PHONE CALLS AND SNAIL MAIL

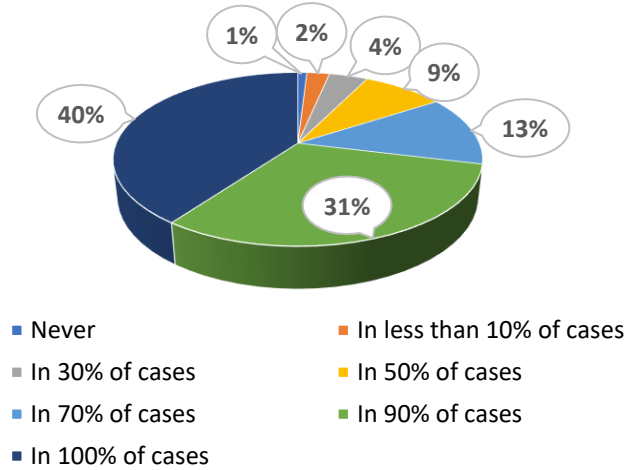


FIGURE 2 SHARE OF SMEs USING PAPER DOCUMENT CIRCULATION

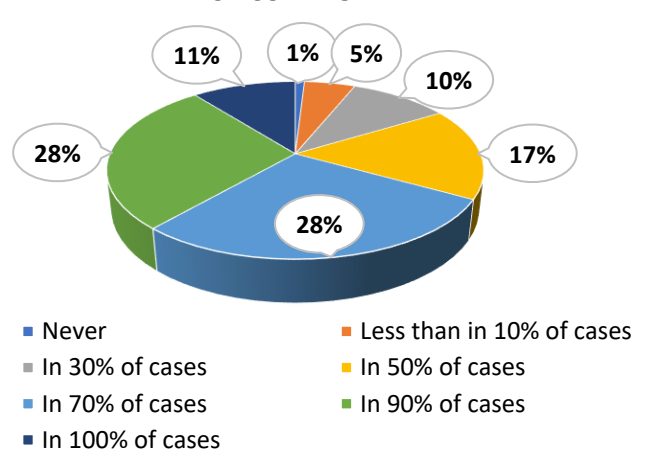
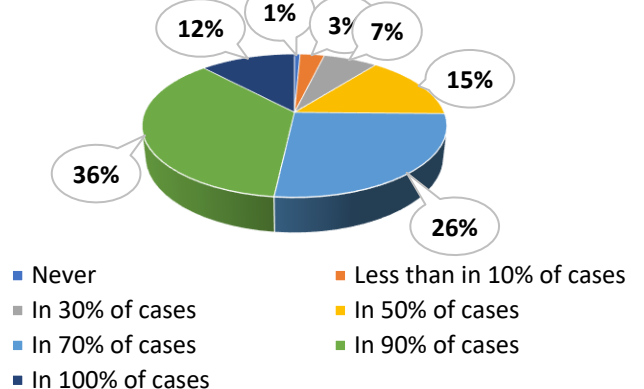
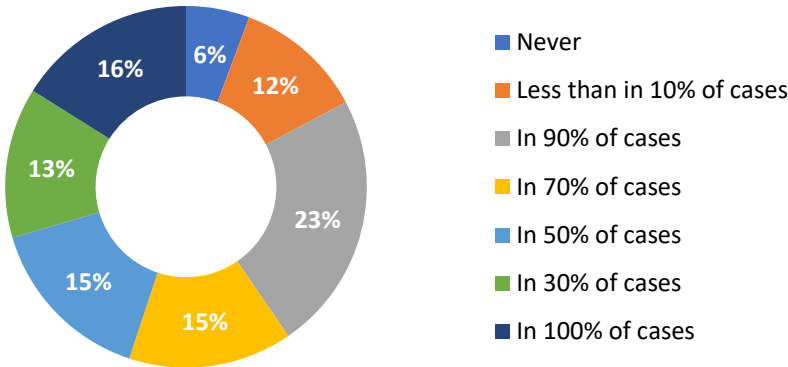


FIGURE 3 SHARE OF SMEs USING ELECTRONIC INVOICING



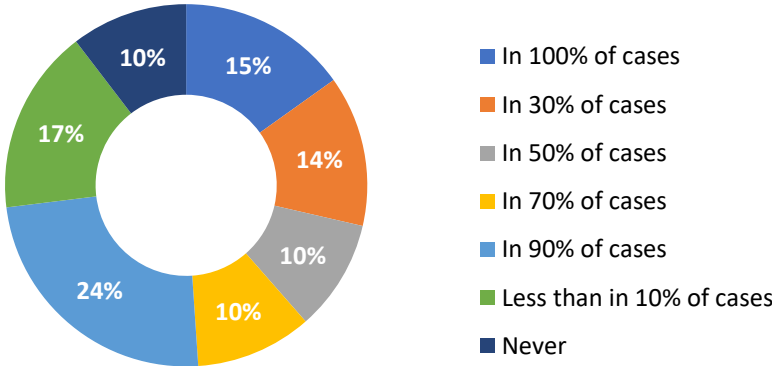
The results of the survey indicate reasonably widespread implementation of software to facilitate collaborative work. Only 6% of Latvian SMEs never apply software for this purpose, about 70% of enterprises use software at least in 50% of cases (Figure 4).

FIGURE 4 SHARE OF SMEs USING SOFTWARE TO FACILITATE COLLABORATIVE WORK



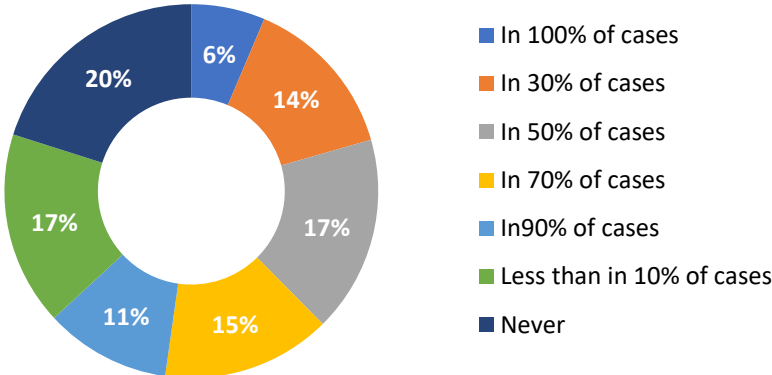
In comparison with the previous position, the share of SMEs, which never or in less than 10% of cases apply software to monitor production and other significant activities of an enterprise, is higher- 27% (Figure 5).

FIGURE 5 SHARE OF SMEs USING SOFTWARE TO MONITOR PRODUCTION, MANAGING INVENTORY AND SUPPLY OR OTHER ACTIVITIES



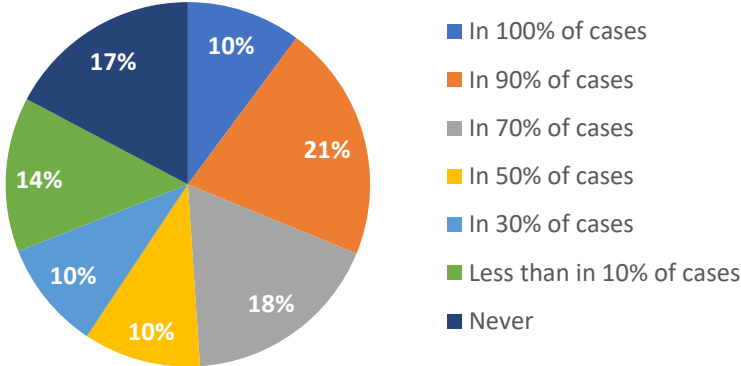
20% of Latvian SMEs are not involved in the activities of electronically buying or selling of products on online services or over the Internet, 6% fully participate in e-commerce (Figure 6). Approximately 50% of SMEs are engaged in e-commerce in 50% of cases or more frequently.

FIGURE 6 SHARE OF SMEs USING E-COMMERCE



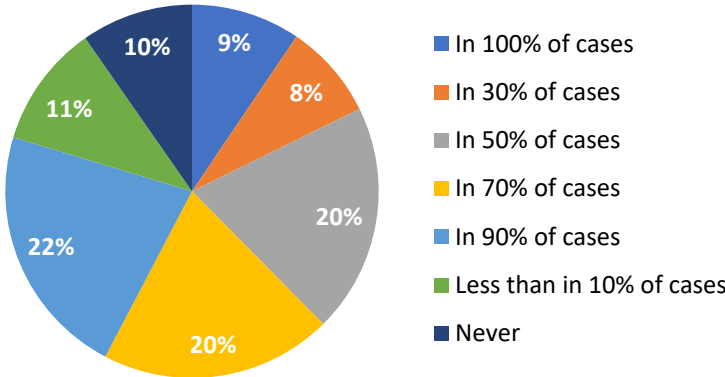
More than 30% of Latvian SMEs do not use or apply extremely minimally the opportunities provided by cloud computing (Figure 7). At the same time, 31% of enterprises implement Google Drive, iCloud, Dropbox, and others in more than 90% of cases.

FIGURE 7 SHARE OF SMEs USING CLOUD COMPUTING (GOOGLE DRIVE, ICLOUD, DROPBOX)



More than 70% of enterprises realize the significance of social media. This share of SMEs uses social media as the means of interaction at least in 50% of cases or more regularly (Figure 8).

FIGURE 8 SHARE OF SMEs USING SOCIAL MEDIA



The situation with the implementation of Big Data is completely different. 57% of SMEs never apply the concept, 14% of enterprises use Big Data in less than 10% of cases (Figure 9). In general, the experience of Big Data applications currently is not widespread.

FIGURE 9 SHARE OF SMEs USING BIG DATA

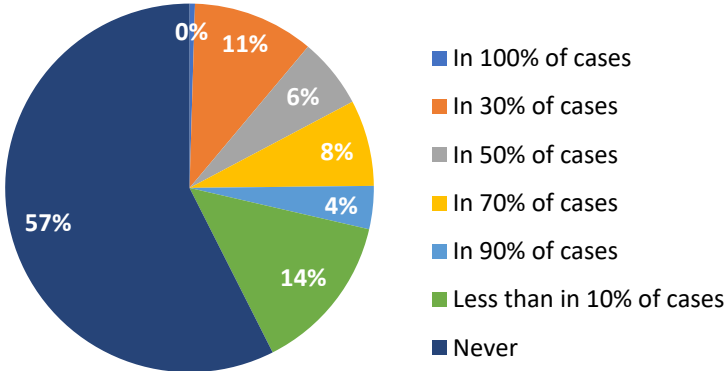


FIGURE 10 SHARE OF SMEs USING INTERNET OF THINGS

About 40 % of Latvian SMEs use the Internet of Things (IoT) in 50% of cases and more often (Figure 10). At the same time, 45% of enterprises use it very rarely or do not use it at all and only 8% of SMEs deal with the IoT usually- in 90% of cases or constantly.

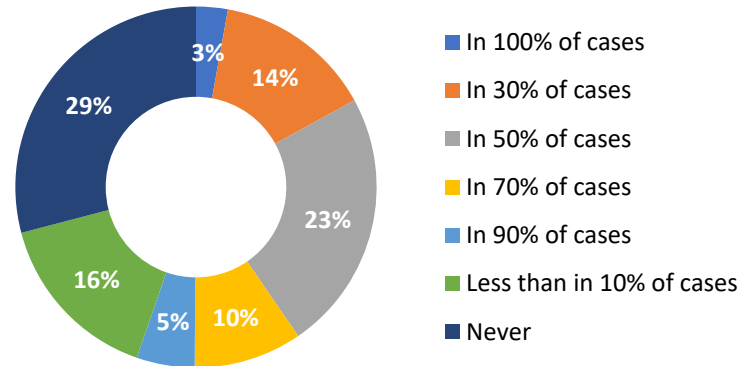


FIGURE 11 SHARE OF SMEs USING ARTIFICIAL INTELLIGENCE

About 4% of Latvian SMEs are the continuous users of the achievements of artificial intelligence. 58% of enterprises never apply it and in addition 14% take the advantages of artificial intelligence in less than 10% of cases.

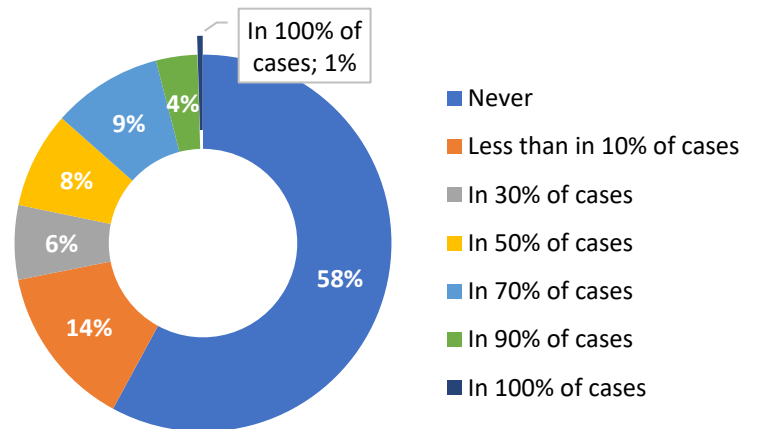
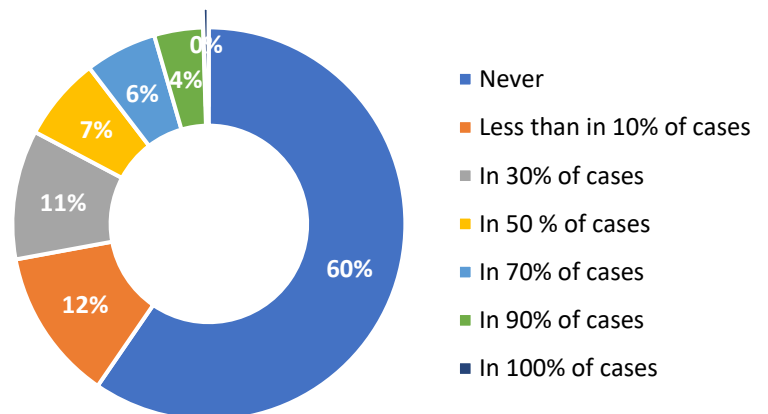


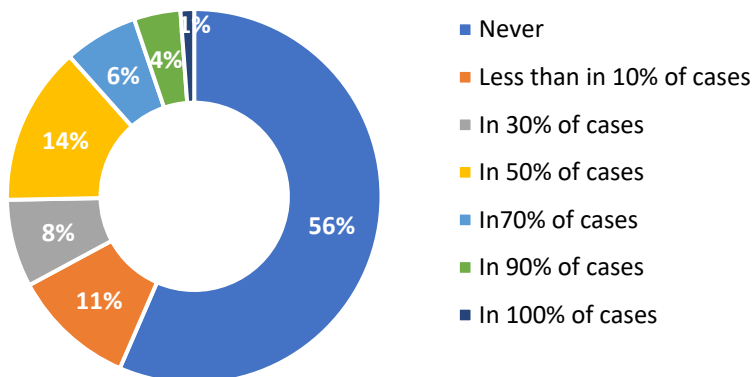
FIGURE 12 SHARE OF SMEs USING ROBOTS, DRONES

The intensity of application of robotic technologies and drones among Latvian SMEs is very low. 17% of enterprises use them in 50% of cases or more frequently, however, 60% do not use these technologies at all (Figure 12).



The implementation of blockchain technology is approximately at the same level. 67% of SMEs never use it or apply it less than in 10% of cases, only 1% of all enterprises apply it constantly and 25% of Latvian SMEs use it in 50% of cases and more usually.

FIGURE 13 SHARE OF SMEs USING BLOCKCHAIN TECHNOLOGY

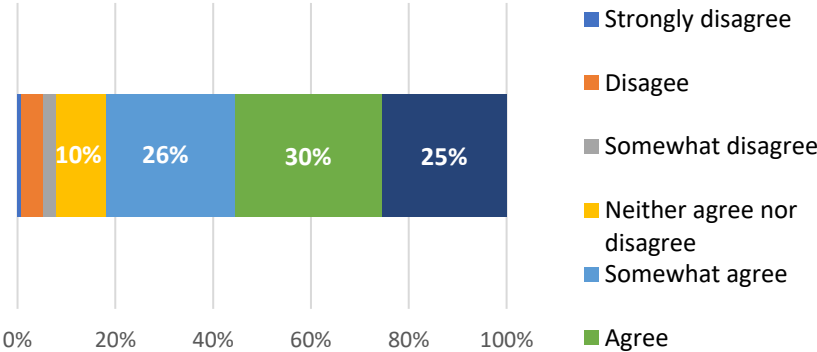


FOR WHAT PURPOSES LATVIAN SMEs USE DIGITAL SOLUTIONS

In this section respondents characterize different activities enabled by digital technologies at their enterprises.

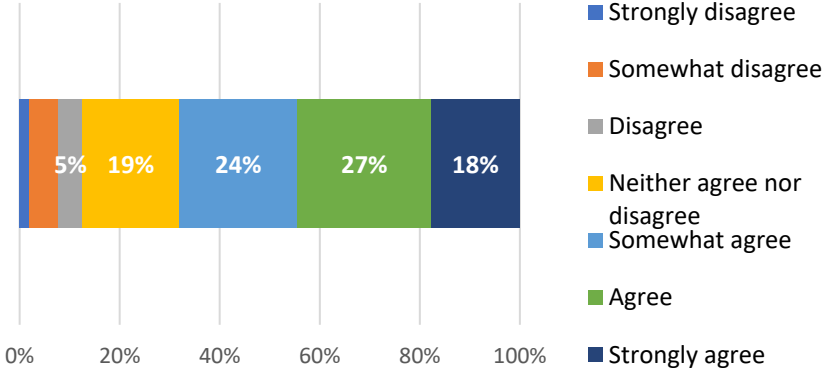
More than 80% of Latvian SMEs to some extent agree that IT solutions allow them to obtain, structure and process data (Figure 14). Average enterprise somewhat agrees that digital solutions are applied in most significant data activities.

FIGURE 14 DIGITAL SOLUTIONS ENABLE OBTAINING, PROCESSING, STRUCTURING DATA



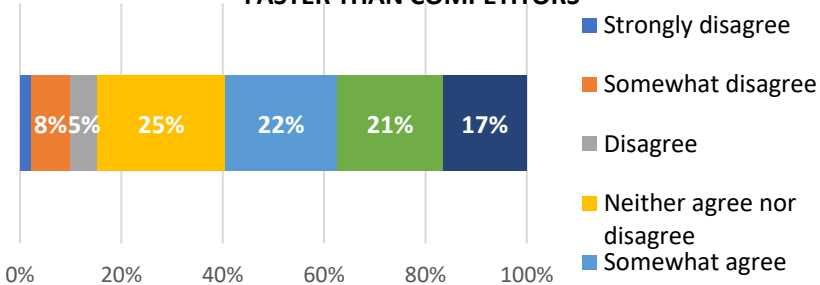
19% of SMEs do not have an opinion on the role of digital technologies in the assessment of current business processes and current decision making (Figure 15). 12% of all enterprises to some extent disagree with the statement.

FIGURE 15 DIGITAL SOLUTIONS ENABLE CURRENT BUSINESS ASSESSMENT AND DECISION MAKING



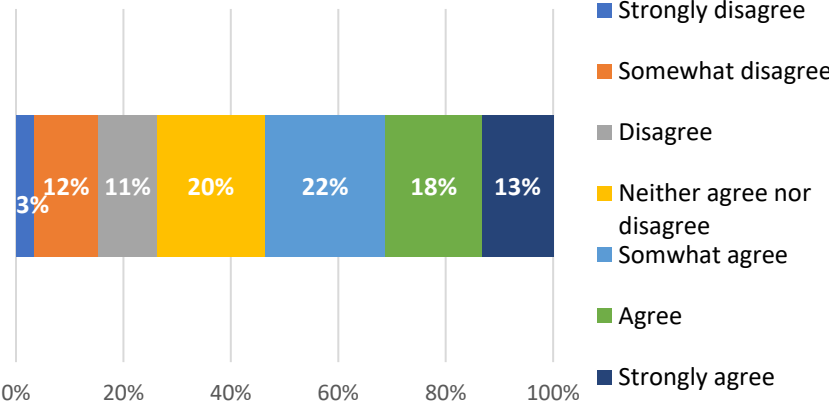
25% of enterprises are not ready to formulate their opinion on the significance of digital technologies in providing more intensive development than competitors achieve (Figure 16). However, 60% of SMEs to a certain extent appreciate the contribution of digital solutions to the competitiveness of SMEs.

FIGURE 16 DIGITAL SOLUTIONS ALLOW TO DEVELOP FASTER THAN COMPETITORS



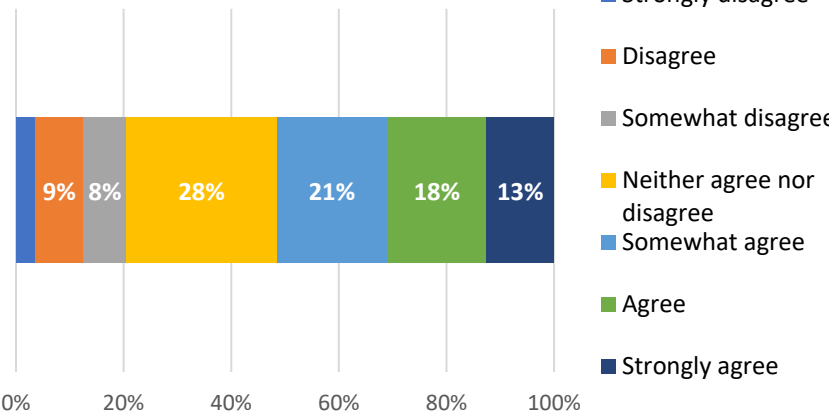
More than half of respondents, in particular 53%, to some extent agree that IT solutions allow them to create new value, products or new needs (Figure 17). Nevertheless, 36% to some extent disagree and 20% do not formulate their opinion about the role of digital technology in the above-mentioned processes.

FIGURE 17 IT SOLUTIONS ALLOW TO CREATE NEW VALUE/PRODUCT THUS CREATING NEW NEEDS



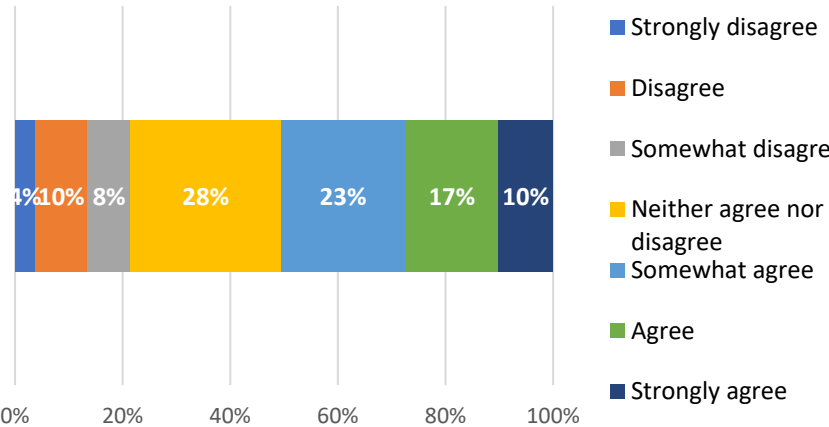
28% of SMEs are not ready to assess the contribution of digital solutions in the development of dynamic networks (Figure 18). However, 52% of enterprises to some extent agree with the statement.

FIGURE 18 IT SOLUTIONS ALLOW TO DEVELOP DYNAMIC CONSUMER NETWORK



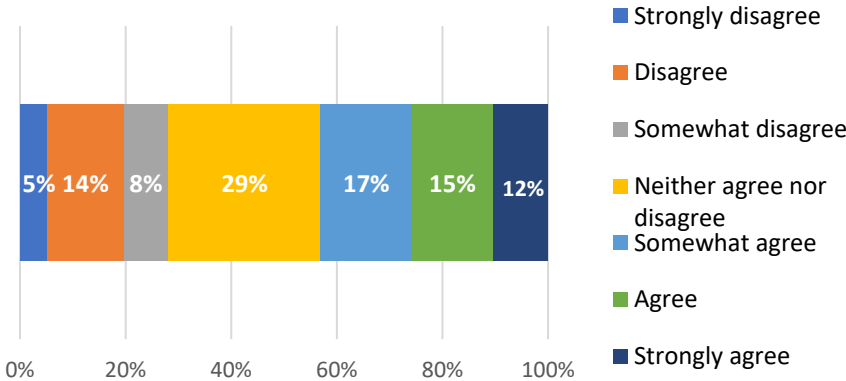
The same amount of SMEs- 28% do not define their viewpoint on the significance of IT solutions in the decision making process (Figure 19). Nevertheless, 50% of enterprises to some extent agree that digital technologies allow them to decide on the basis of testing and validation.

FIGURE 19 IT SOLUTIONS ALLOW TO MAKE DECISIONS BASED ON TESTING AND VALIDATION



27% of SMEs to some extent disagree that IT solutions provide them with the opportunity to work out and develop the strategy of digital transformation. Considerable share of respondents do not have a specific opinion on this statement- 29% of all enterprises (Figure 20).

FIGURE 20 IT SOLUTION ALLOW TO WORK OUT AND DEVELOP DIGITAL TRANSFORMATION STRATEGY



REASONS FOR DIGITAL TRANSFORMATION

73% of Latvian SMEs to some extent agree that the optimization of business processes and cost is the reason for the digital transformation of their company (Figure 21). 47% of respondents strongly agree or agree with the statement. Only 5% of enterprises strongly disagree or disagree with the statement, meanwhile, 17% of SMEs are not ready to specify their opinion on the reasons for the digital transformation.

62% of respondents to a certain degree agree with the statement that a desire to improve or change business model is their company's reason for digital transformation (Figure 22). In comparison with the previous statement, more enterprises to some extent disagree with such justification of digital transformation and 22% of respondents do not specify their viewpoint.

66% of Latvian SMEs in some measure agree that direct contact with customers or suppliers and interactions opportunities at all stages of the customer's life cycle is

FIGURE 21 REASONS FOR DT: BUSINESS PROCESSES AND COST OPTIMIZATION

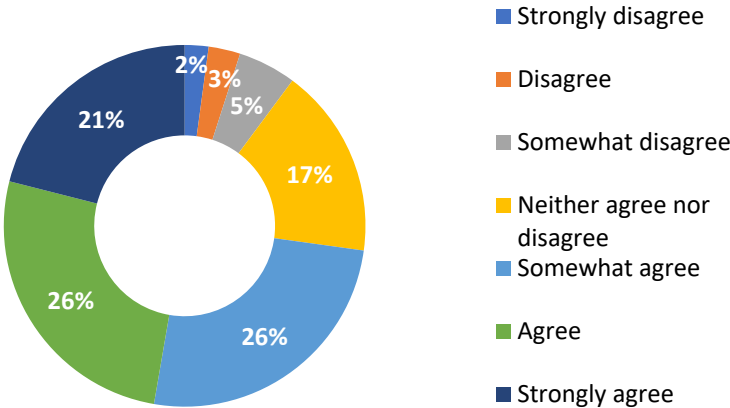


FIGURE 22 REASONS FOR DT: DESIRE TO IMPROVE/CHANGE BUSINESS MODEL

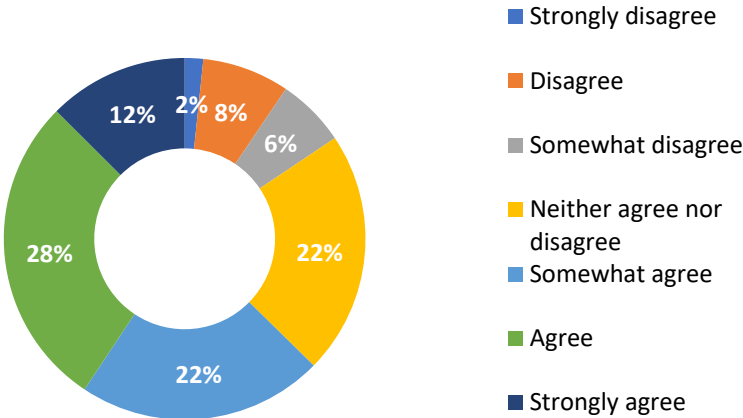
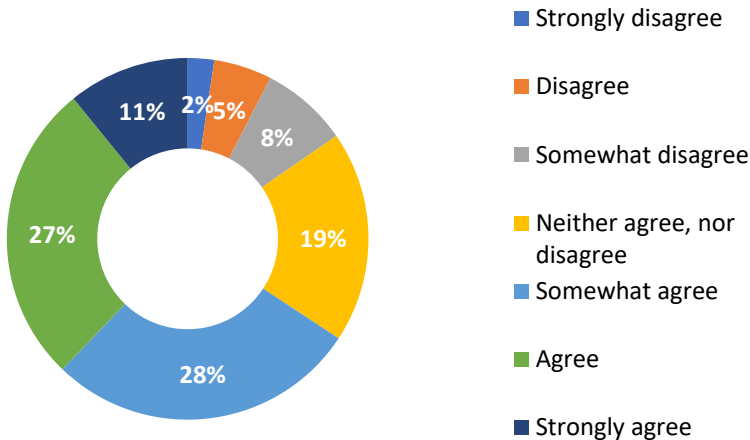


FIGURE 23 REASONS FOR DT: DIRECT CONTACT AND INTERACTION



the reason for their digital transformation (Figure 23). 15% to some extent disagree and 19% neither agree, nor disagree.

64% of enterprises to a certain extent agree with the statement that one of the reasons for the digital transformation of their company is its future development or expansion (Figure 24). 20% of the respondents do not define their viewpoint and 16% to some extent disagree.

Only 7% of Latvian SMEs agree that job creation is the reason for their digital transformation, about 40% of enterprises in some measure disagree with the statement and 24% of the respondents do not have a particular opinion (Figure 25).

FIGURE 24 REASONS FOR DT: FUTURE DEVELOPMENT/EXPANSION

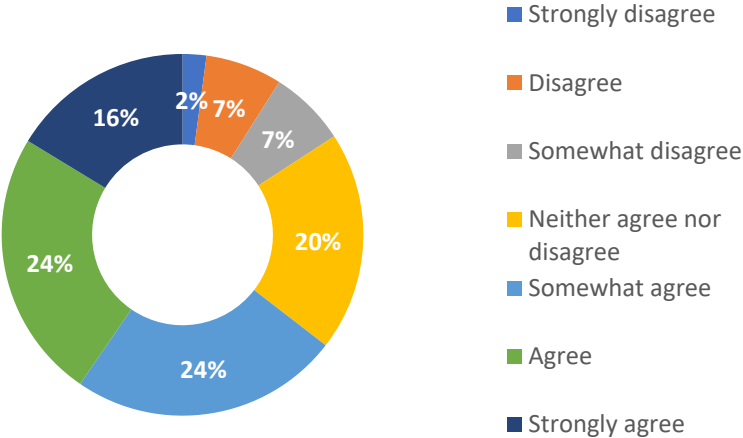
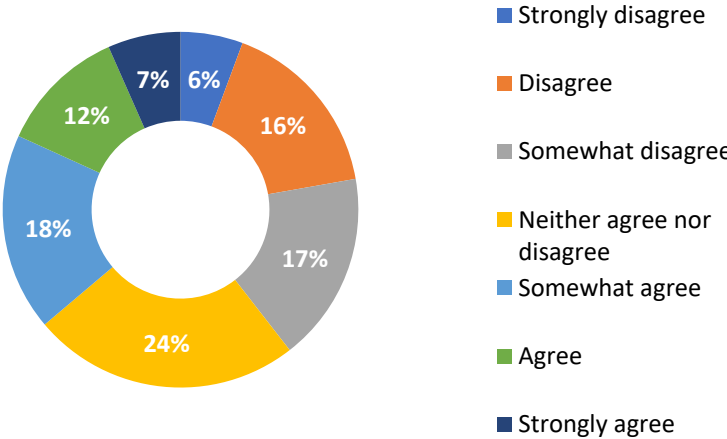


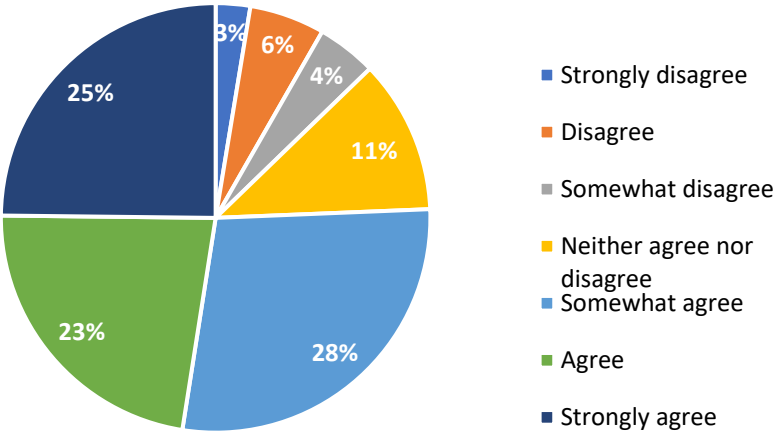
FIGURE 25 REASONS FOR DT: JOB CREATION



MAIN OBSTACLES TO DIGITAL TRANSFORMATION

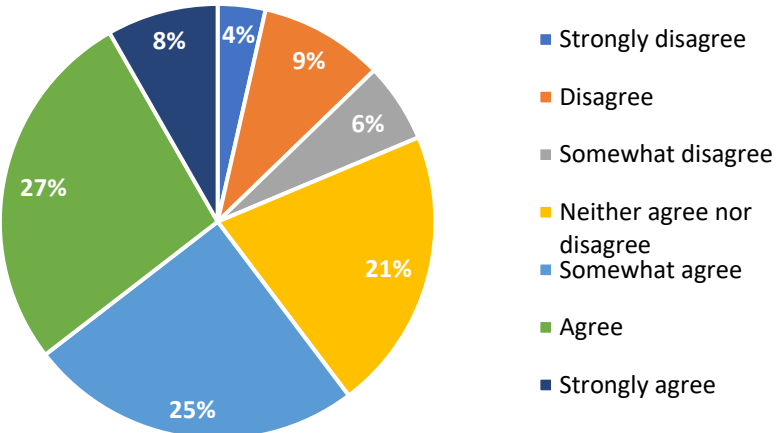
The majority of Latvian SMEs, in particular, 76% consider the lack of funding to be one of the key barriers to digital transformation (Figure 26). 13% of enterprises in some measure disagree with the statement and 11% don't formulate their opinion.

FIGURE 26 KEY BARRIERS TO DT: LACK OF FUNDING



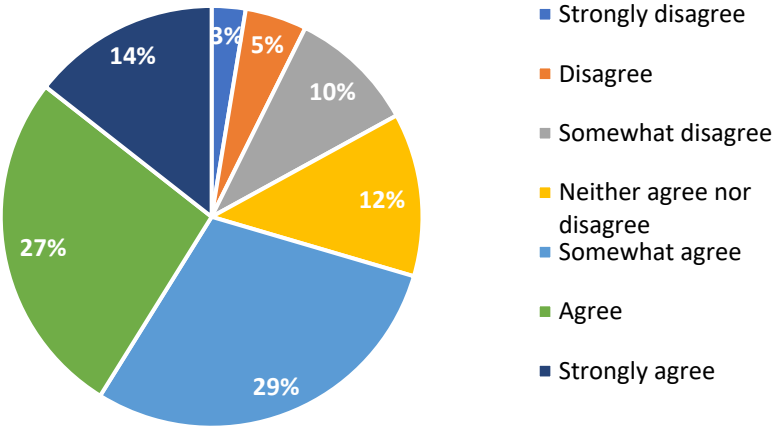
At the same time, security issues are identified as dangerous, but not as significant as the lack of financing. 60% of SMEs to some extent agree with the statement and 21% don't specify their attitude (Figure 27).

FIGURE 27 KEY BARRIERS TO DT: IT SECURITY ISSUES



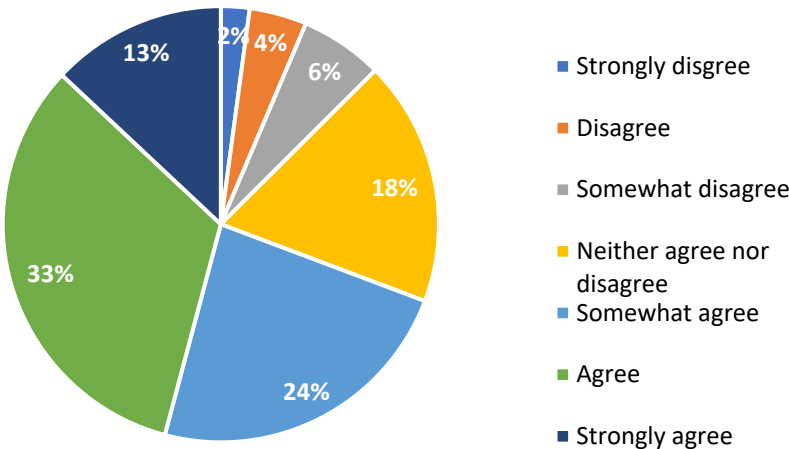
The risk of insufficient digital skills of employees is considered to be one of the key barriers to digital transformation by 70% of enterprises. But still, 18% of SMEs to a certain degree disagree with the significance of this risk.

FIGURE 28 KEY BARRIERS TO DT: INSUFFICIENT DIGITAL SKILLS OF EMPLOYEES



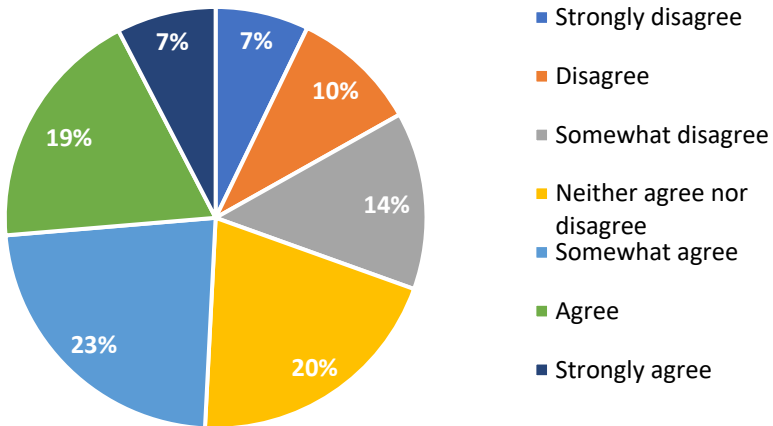
The same attitude is towards the risk of insufficient number of IT specialists. 70% of respondents to a certain extent agree with the statement, 12% disagree and 18% neither agree nor disagree (Figure 29).

FIGURE 29 KEY BARRIERS TO DT: LACK OF IT SPECIALISTS



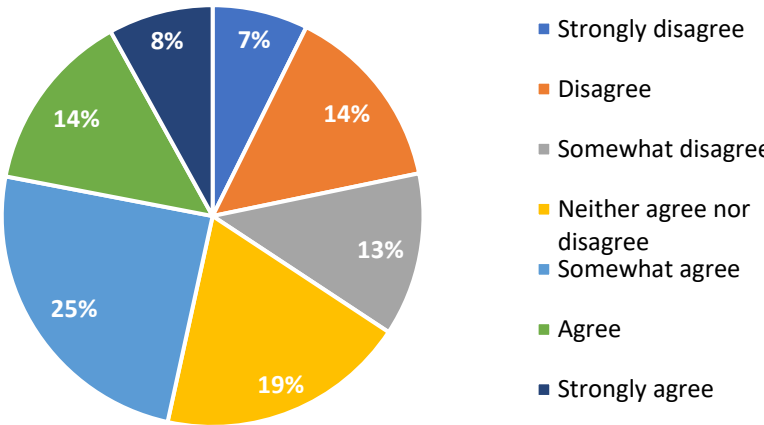
The internal resistance to change in some measure is the key barrier for 49% of Latvian SMEs (Figure 30). 31% of respondents to a certain degree disagree with the statement and traditionally 20% stay neutral.

FIGURE 30 KEY BARRIERS TO DT: INTERNAL RESISTANCE TO CHANGE



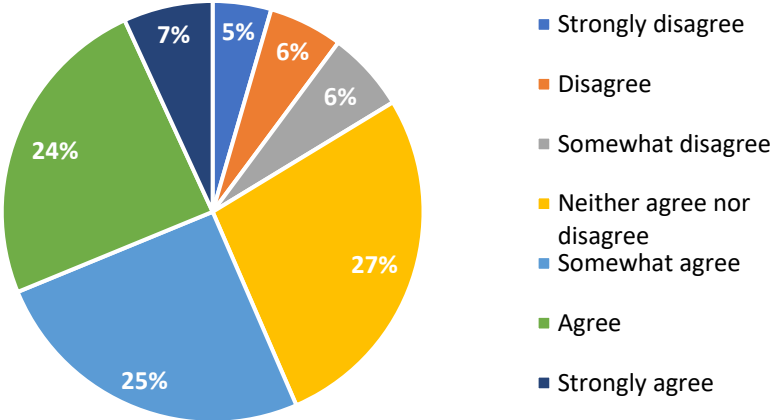
Lack of managerial awareness has approximately the same importance as the previous barrier. 47% of enterprises to some extent agree that this problem is the obstacle for them, however, 34% in some measure disagree with the statement (Figure 31).

FIGURE 31 KEY BARRIERS TO DT: LACK OF MANAGERIAL AWARENESS



More than half of the respondents, 56%, to a certain extent are not confident about future digital standards (Figure 32). However, 17% in some measure disagree and 27% are not ready to agree or disagree.

FIGURE 32 KEY BARRIERS TO DT: UNCERTAINTY ABOUT FUTURE DIGITAL STANDARDS



DEFICIENT DIGITAL SKILLS

FIGURE 33 LACK OF SKILLS: SOFTWARE USE AND DEVELOPMENT

59% of Latvian SMEs to some extent face the problems with software development and use skills (Figure 33). For 21% of enterprises this issue is not applicable.

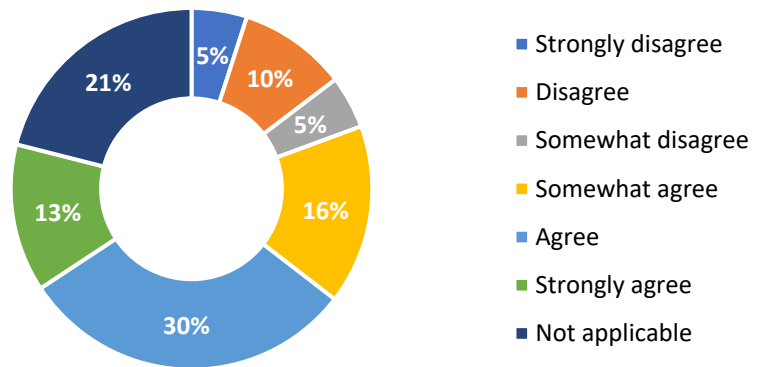


FIGURE 34 LACK OF SKILLS: MATHEMATICS AND ANALYTICS

For 14% of SMEs mathematical and analytical skills are not topical, nevertheless for 54% of respondents this risk in some measure is urgent (Figure 34). 32% of enterprises do not consider the lack of mathematical and analytical skills significant.

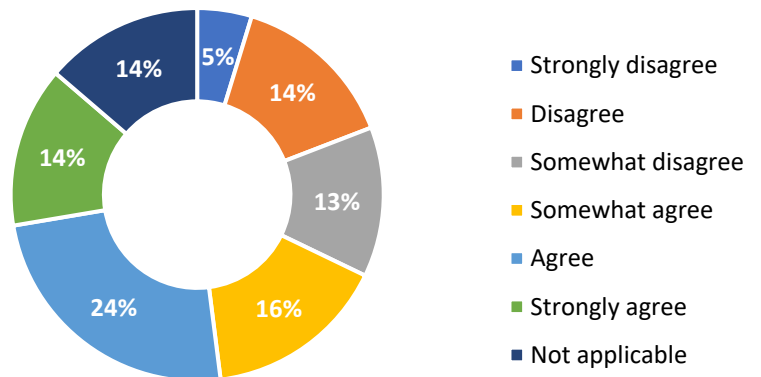


FIGURE 35 LACK OF SKILLS: WEBSITE DEVELOPMENT

61% of enterprises in some measure face the deficit of website development skills (Figure 35). For 12% of SMEs these skills are not actual and 27% of respondents to some extent don't feel the lack of related skills.

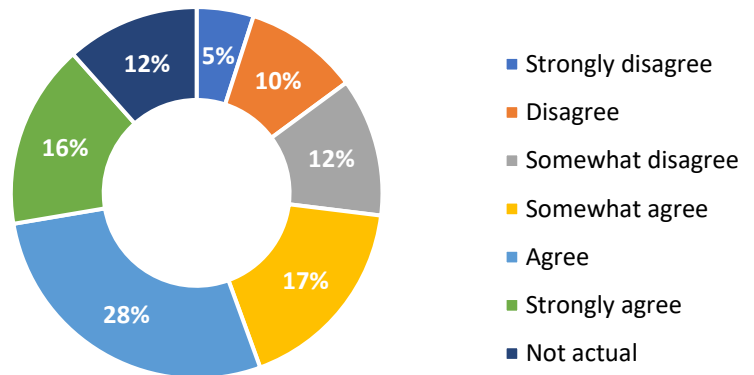


FIGURE 36 LACK OF SKILLS: DIGITAL PROJECT MANAGEMENT

60% of Latvian SMEs experience the lack of skills in digital projects' management (Figure 36). 17% of companies consider this problem to be irrelevant and 23% to a certain extent disagree with the statement.

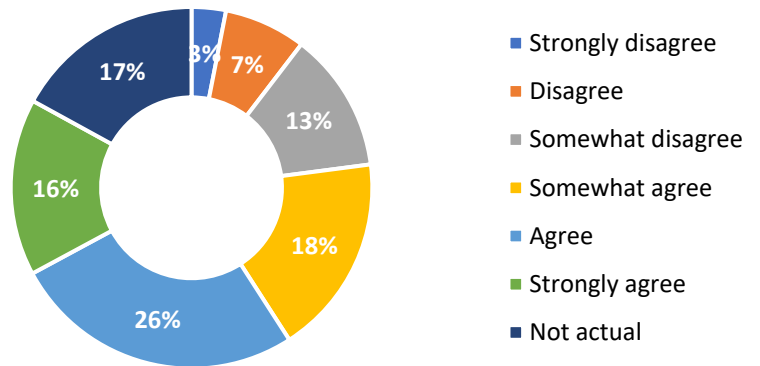


FIGURE 37 LACK OF SKILLS: DATA/DATABASE MANAGEMENT

32% of enterprises in some measure don't face the deficit of skills in data and database management (Figure 37). However, 57% of SMEs to some extent are affected by this problem.

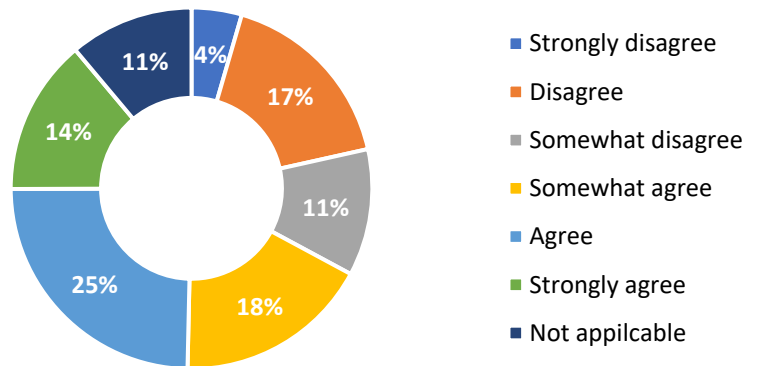
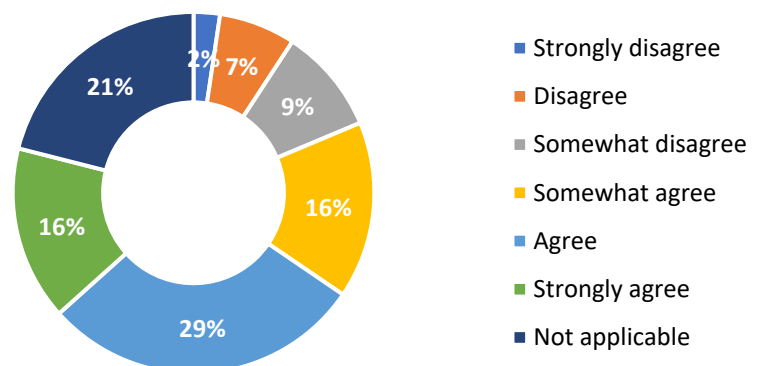


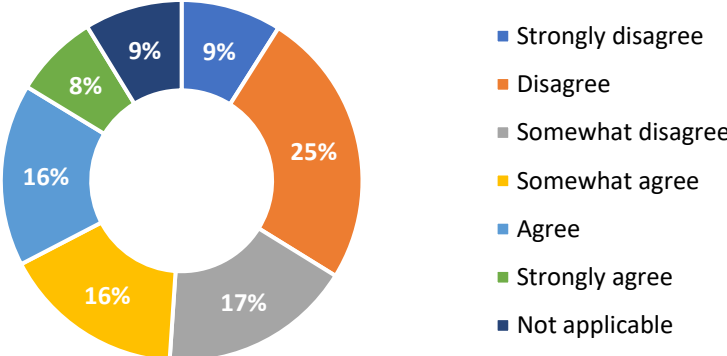
FIGURE 38 LACK OF SKILLS: DIGITAL STRATEGY AND LEADERSHIP

For 60% of companies the lack of digital strategy and leadership skills to a certain degree is significant (Figure 38). Nevertheless for 21% of respondents this problem is not topical.



As for the lack of data entry and processing skills, a much lower share of enterprises, in particular 40%, to a certain extent lacks these skills. Only 9% of respondents suggest data entry and processing skills are irrelevant and 51% don't meet the deficit of these skills.

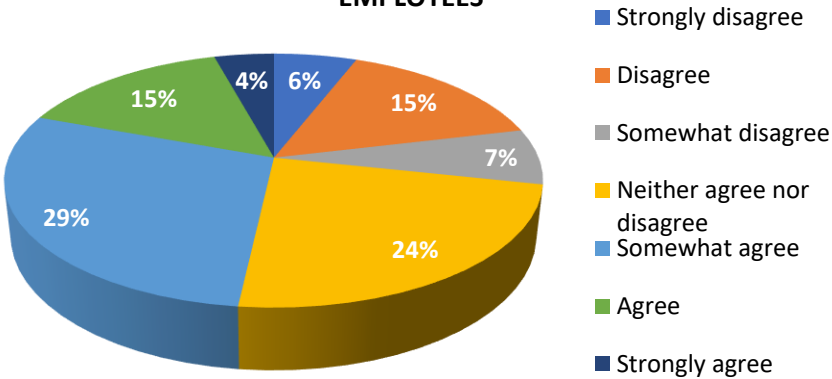
FIGURE 39 LACK OF SKILLS: DATA ENTRY AND PROCESSING



ACTIVITIES FOR ACQUIRING DIGITAL SKILLS

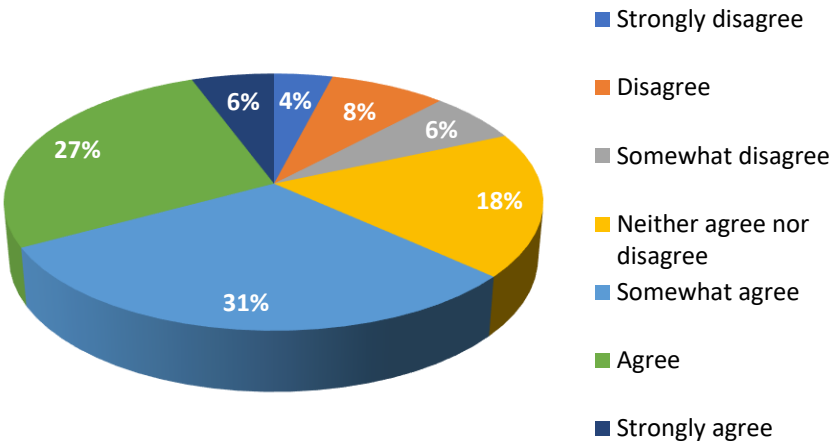
In order to acquire digital skills 48% of respondents hire new employees (Figure 40). 28% of companies don't implement hiring activities and 24% don't specify their position.

FIGURE 40 ACQUIRING DIGITAL SKILLS: HIRING NEW EMPLOYEES



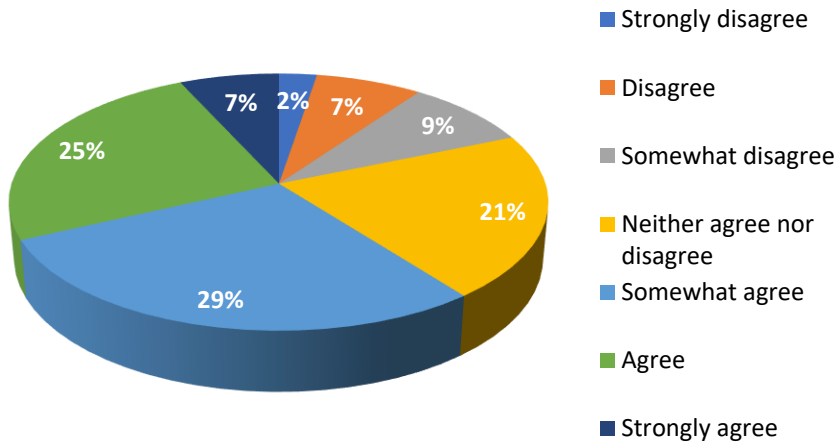
At the same time 64% of Latvian SMEs to a certain extent attract external specialists with the aim to raise the qualification of employees (Figure 41). 18% of companies don't practice such activities and 18% don't have a precise opinion.

FIGURE 41 ACQUIRING DIGITAL SKILLS: EXTERNAL SPECIALISTS RAISE EMPLOYEES' QUALIFICATION



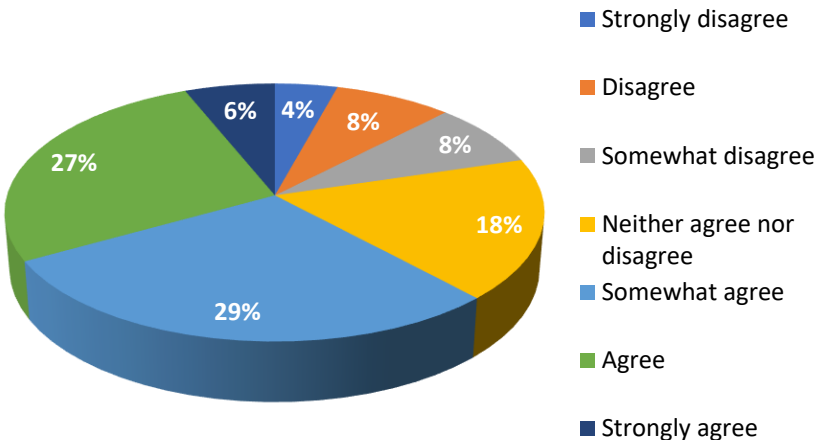
61% of SMEs in some measure carry out internal activities for raising employees' qualification (Figure 42). 18% of respondents don't practice this kind of internal activities and 21% don't determine their approach.

FIGURE 42 ACQUIRING DIGITAL SKILLS: INTERNAL ACTIVITIES RAISING EMPLOYEES' QUALIFICATION



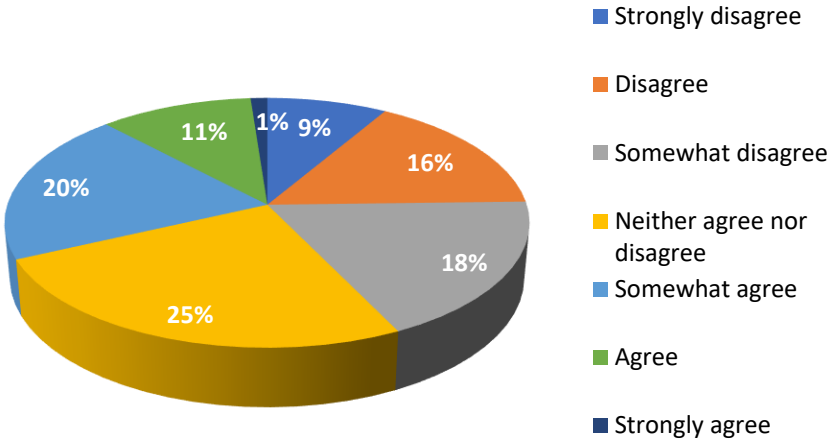
62% of respondents to a certain degree enforce outsourcing experience in order to acquire digital skills (Figure 43). 20% of companies are not involved in outsourcing efforts and 18% don't answer explicitly.

FIGURE 43 ACQUIRING DIGITAL SKILLS: OUTSOURCING



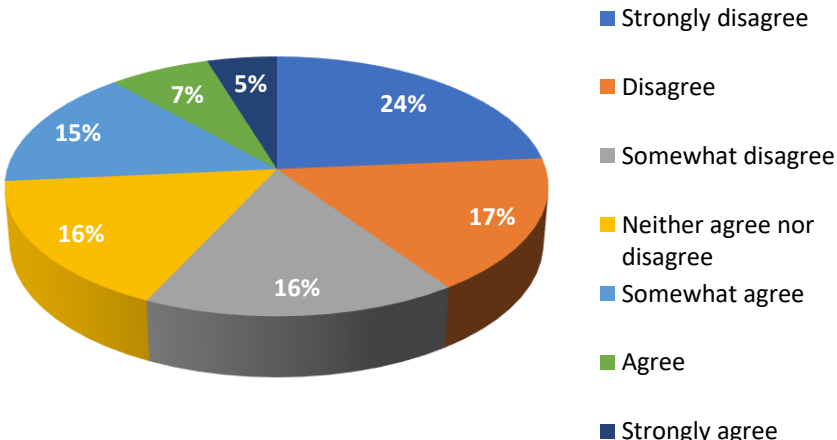
32% of companies to a certain extent implement temporary recruitment as a way of obtaining digital skills (Figure 44). 43% of SMEs don't use these measures and the entire 25% of respondents are not ready to formulate a specific opinion.

FIGURE 44 ACQUIRING DIGITAL SKILLS: TEMPORARY RECRUITMENT



Finally, 57% of Latvian SMEs in some measure disagree with the statement regarding avoiding any action for acquiring digital skills. However, 27% of respondents to a certain degree indicate inaction and 16% of companies stay vague.

FIGURE 45 ACQUIRING DIGITAL SKILLS: NO ACTIVITIES

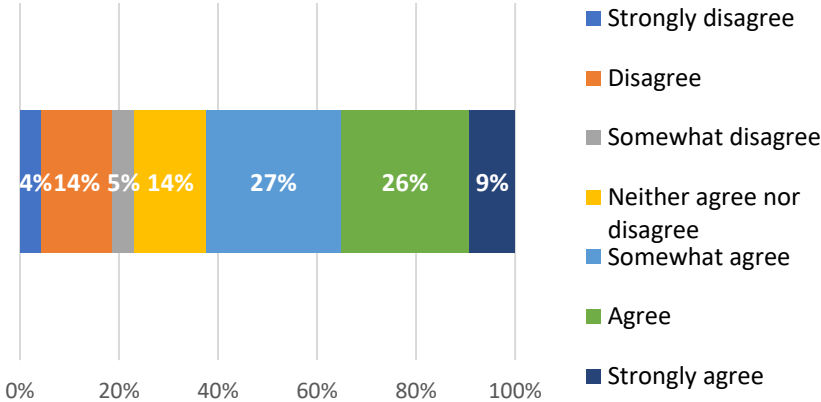


POTENTIAL RISKS OF DIGITAL TRANSFORMATION

In this section the respondents share their opinion on the potential risks of digital transformation to their own companies.

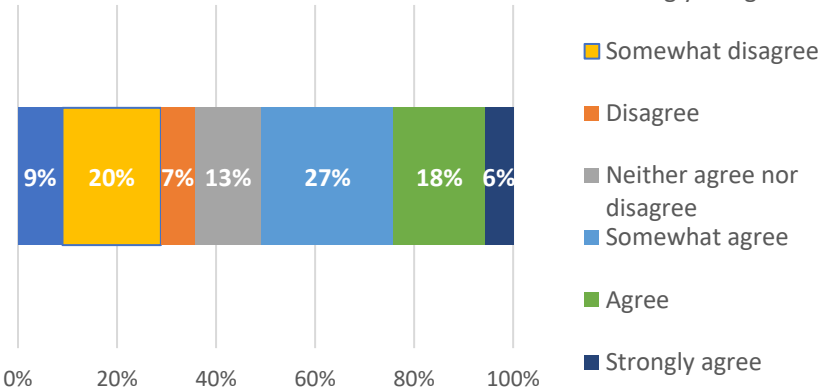
62% of Latvian SMEs to a certain extent believe in the significance of cyber threats in the process of digital transformation (Figure 46). 23% of enterprises don't consider cyber threats to be urgent and 14% of respondents stay neutral in the assessment of this risk.

FIGURE 46 DIGITAL TRANSFORMATION RISKS: CYBER THREATS



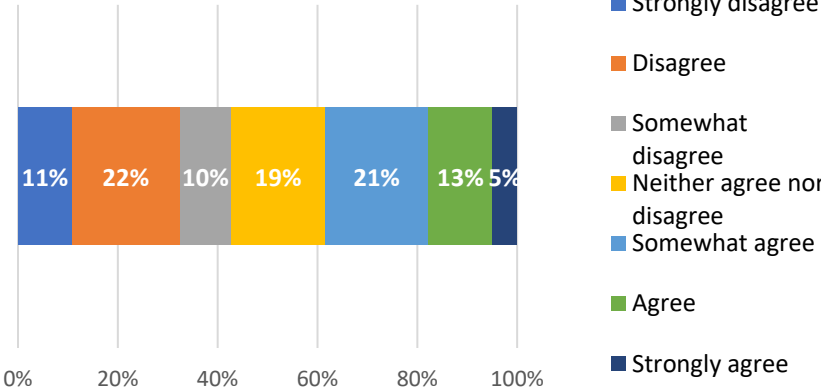
Fewer companies, 51% to some degree, recognize the disproportionate dependence on electricity and technologies as a risk to digital transformation (Figure 47). 36% of respondents in some measure disagree with the statement.

FIGURE 47 DIGITAL TRANSFORMATION RISKS: DEPENDENCE ON ELECTRICITY AND TECHNOLOGY



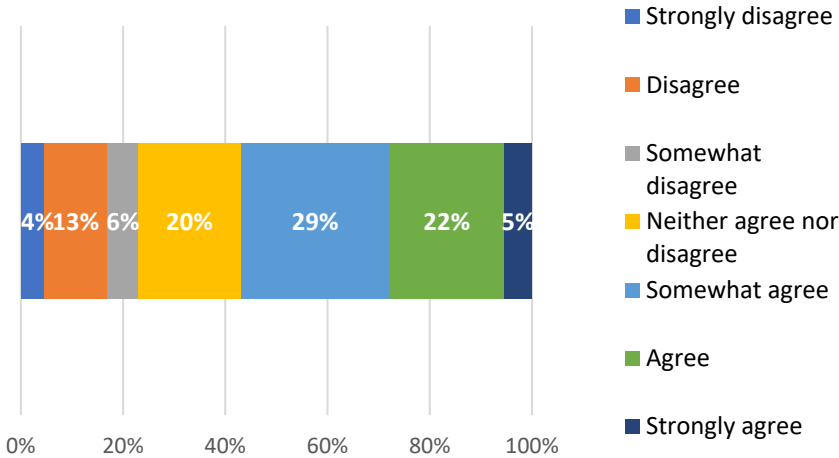
43% of Latvian SMEs to a certain extent don't expect the occurrence of information technology collapse, however, 39% of respondents in some measure believe in it (Figure 48). Only 11% of companies feel absolutely safe from this risk and 19% don't specify their opinion.

FIGURE 48 DIGITAL TRANSFORMATION RISKS: IT COLLAPSE



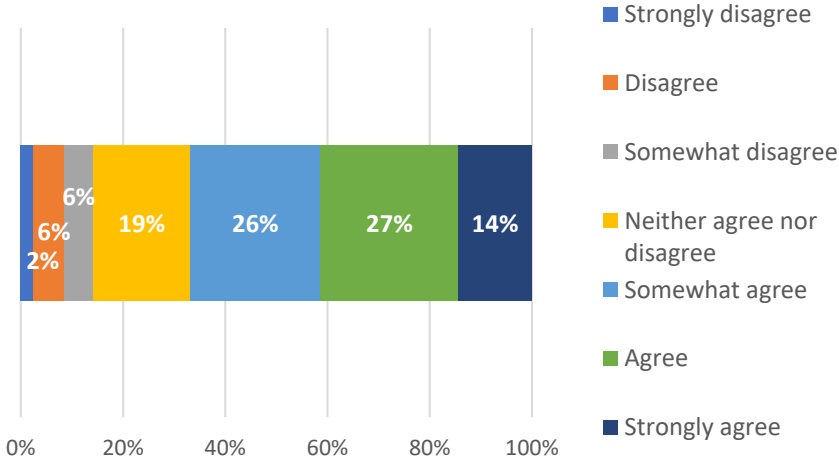
56% of enterprises to some extent perceive possible negative impact of digital bureaucracy and information overload (Figure 49). 23% of respondents to some degree disregard this risk and 20% neither agree, nor disagree with the statement.

FIGURE 49 DIGITAL TRANSFORMATION RISKS: DIGITAL BUREAUCRACY/INFORMATION OVERLOAD



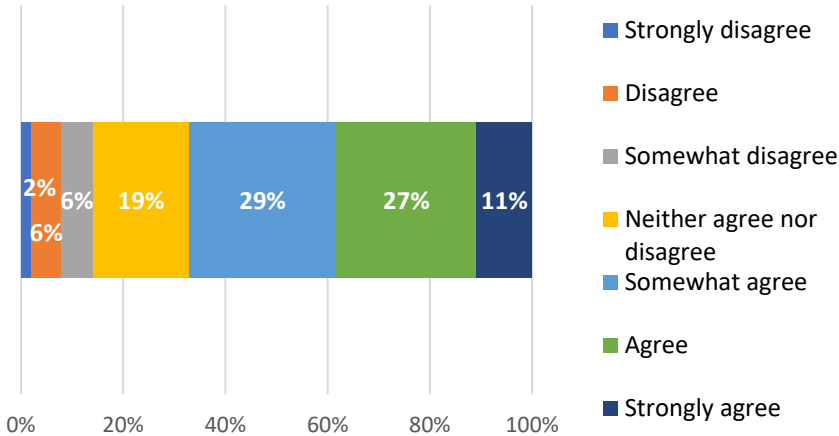
67% of Latvian SMEs to some extent are afraid of losing direct and human contact with their customers (Figure 50). For 14% of enterprises this risk in some measure is not essential, 19% of respondents remain neutral.

FIGURE 50 DIGITAL TRANSFORMATION RISKS: LOSS OF CONTACT WITH CUSTOMERS

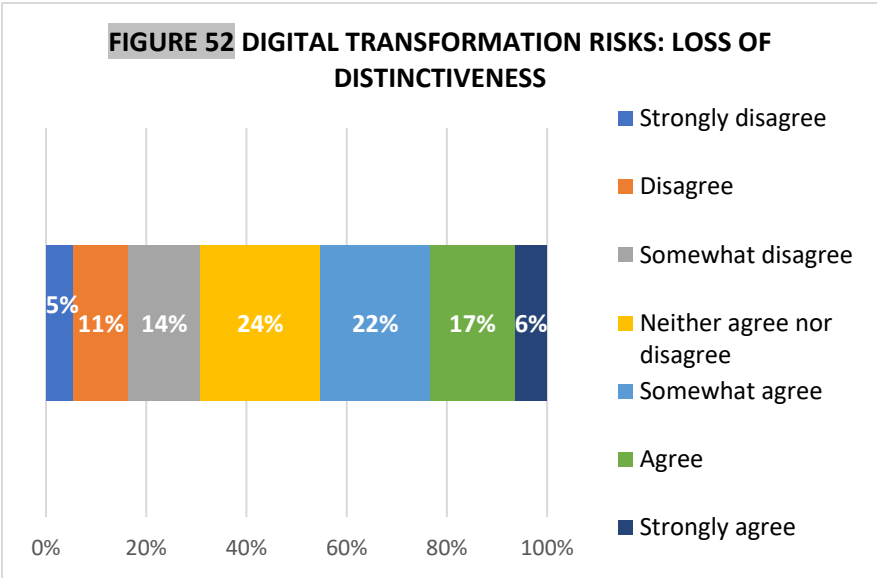


For 67% of companies the risk of regulatory requirements and restrictions to a certain degree seems significant, nevertheless, for 14% of SMEs to a certain extent it remains unimportant and 19% or respondents don't answer precisely.

FIGURE 51 DIGITAL TRANSFORMATION RISKS: REGULATORY REQUIREMENTS AND RESTRICTIONS



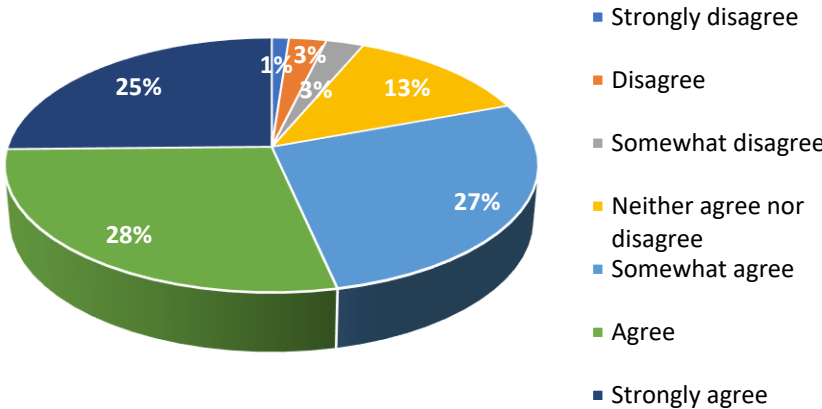
45% of Latvian SMEs to some extent are worried with the possibility of losing a unique point of sale and become similar to other companies (Figure 52). For 30% of respondents this risk in some measure is not topical and the entire 24% of enterprises don't determine their viewpoint.



POTENTIAL IMPACT OF DIGITAL TRANSFORMATION IN THE NEXT 5 YEARS

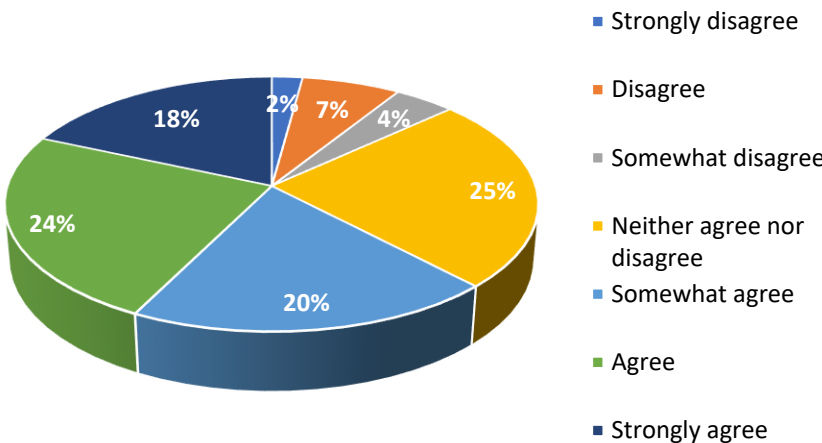
The majority of Latvian SMEs, 80%, to a certain extent realize that in the next 5 years they will have to apply digital technologies in order to remain competitive (Figure 53). Only 1% strongly disagree with the statement and 6% disagree or somewhat disagree.

FIGURE 53 IMPACT OF DT: WILL HAVE TO APPLY DIGITAL TECHNOLOGIES TO REMAIN COMPETITIVE



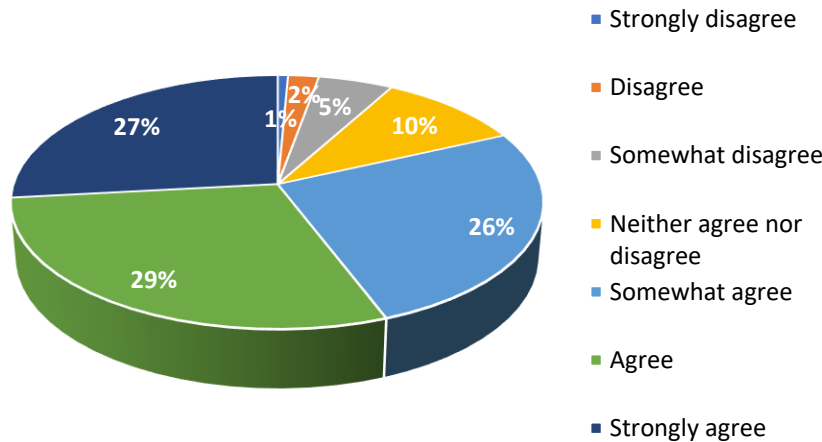
62% of respondents to a certain degree believe that digital technologies will have a positive impact on their companies (Figure 54). 25% are not ready to assess the possible effect and 13% of SMEs to some extent challenge positive income.

FIGURE 54 IMPACT OF DT: POSITIVE IMPACT ON COMPANY



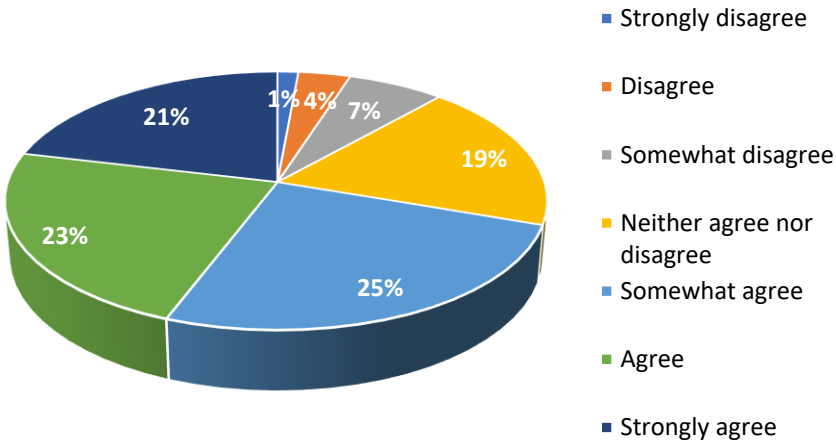
82% of enterprises to some extent recognize the increasing future need to improve employees' skills, amongst them 27% of SMEs strongly agree with the statement (Figure 55). However, 8% of respondents to a certain degree are sure that this kind of improvement will not be necessary.

FIGURE 55 IMPACT OF DT: NEED TO IMPROVE EMPLOYEES' SKILLS



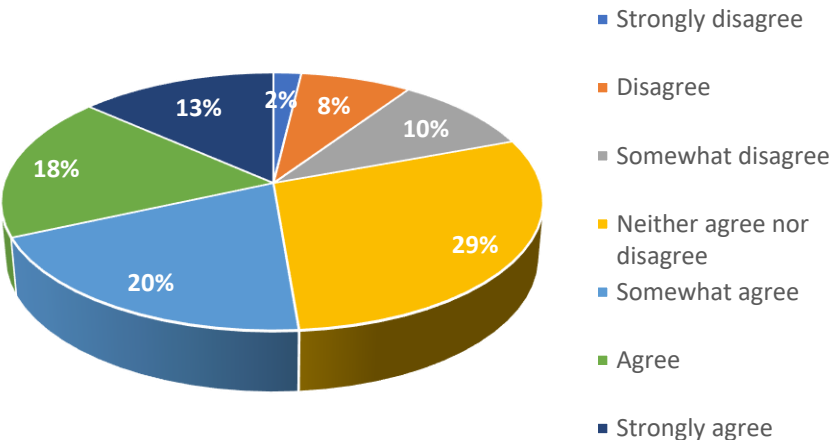
Only 1% of SMEs strongly disagree that digital transformation will make some processes and professions obsolete (Figure 56). 69% of respondents in some measure are aware of this prospect but 19% of enterprises still don't formulate their attitude.

FIGURE 56 IMPACT OF DT: OBSOLETE PROFESSIONS AND PROCESSES



29% of companies don't specify their opinion on the aspect of difficulties with hiring high level information technology specialists (Figure 57). At the same time, 51% of respondents to some extent agree that this risk is possible and only 2% strongly disagree with the statement.

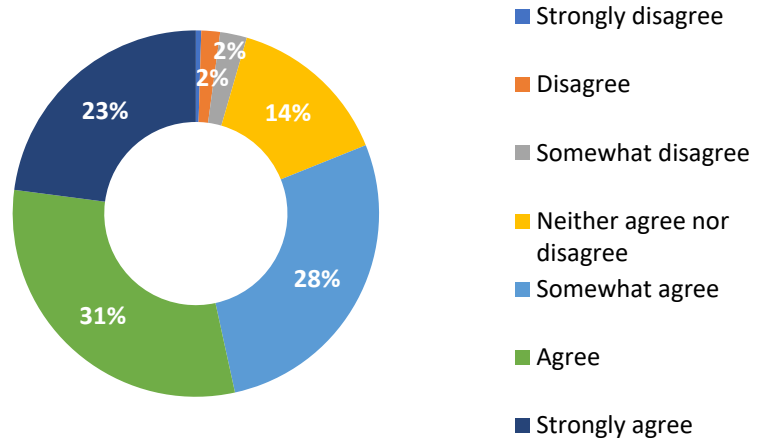
FIGURE 57 IMPACT OF DT: DIFFICULTIES WITH HIRING HIGH LEVEL IT SPECIALISTS



TYPES OF EXTERNAL /
PUBLIC SUPPORT
NEEDED TO PROMOTE
DIGITAL
TRANSFORMATION

FIGURE 58 PUBLIC SUPPORT AREAS: STAFF TRAINING

82% of respondents to a certain extent agree with the importance of external support in staff training activities (Figure 58). Only about 4% of Latvian SMEs don't need the external assistance in this area.



Rather high share of respondents, 71%, in some measure agree with the significance of cybersecurity promotion support (Figure 59). 20% of SMEs still don't define their opinion, at the same time, 9% of enterprises to some degree feel safe from this issue.

FIGURE 59 SUPPORT AREAS: CYBERSECURITY PROMOTION

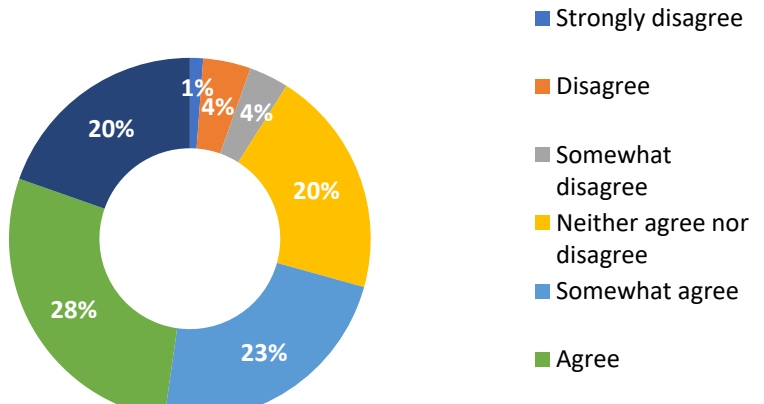


FIGURE 60 SUPPORT AREAS: INCREASE IN POTENTIAL WORKFORCE

69% of respondents agree that an increase in potential workforce to a certain extent should be supported externally, however, 10% of enterprises to some degree don't agree with the statement and 21% of SMEs stay neutral (Figure 60).

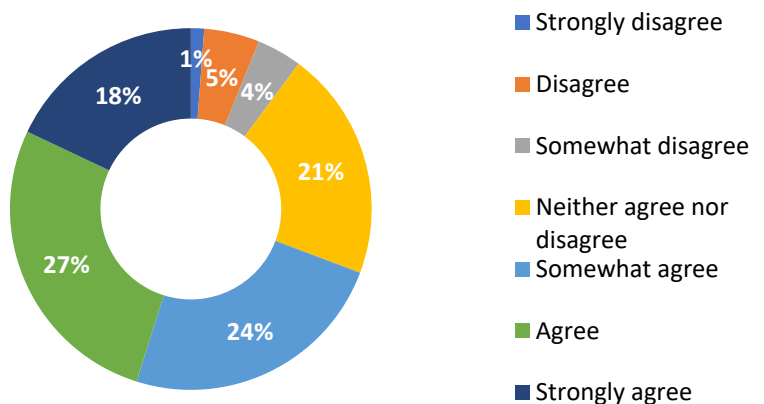


FIGURE 61 SUPPORT AREAS: RESEARCH AT COMPANY'S LEVEL

63% of enterprises to a certain degree need the external support to the research carried out at company's level (Figure 61). Entire 26% of respondents don't define their opinion and 11% to some extent disagree with the statement.

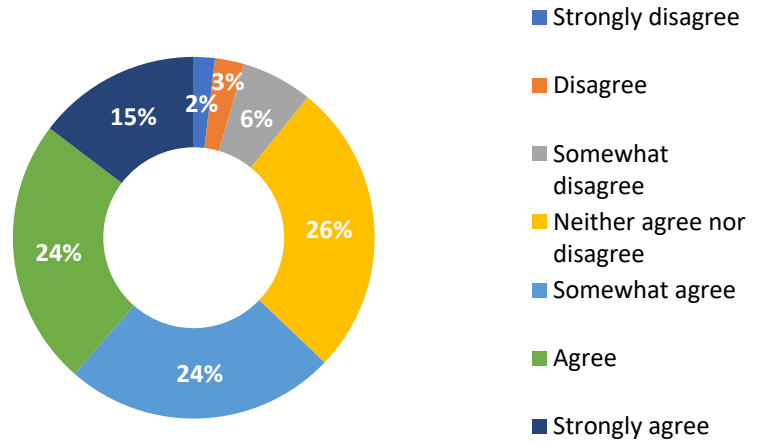


FIGURE 62 SUPPORT AREAS: MENTORING

Supporting mentoring is considered less necessary, 55% of SMEs in some measure need this kind of assistance (Figure 62). However, 30% can't formulate their viewpoint precisely and 15% to some extent disagree with the statement.

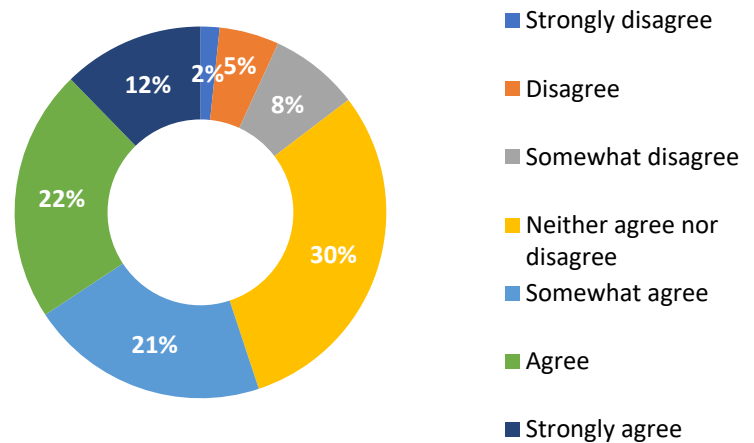


FIGURE 63 SUPPORT AREAS: TAX RELIEF

79% of companies to a certain degree would like to gain tax relief as a support to their digital transformation (Figure 63). Still, 6% of respondents disagree with the statement and 15% stay neutral.

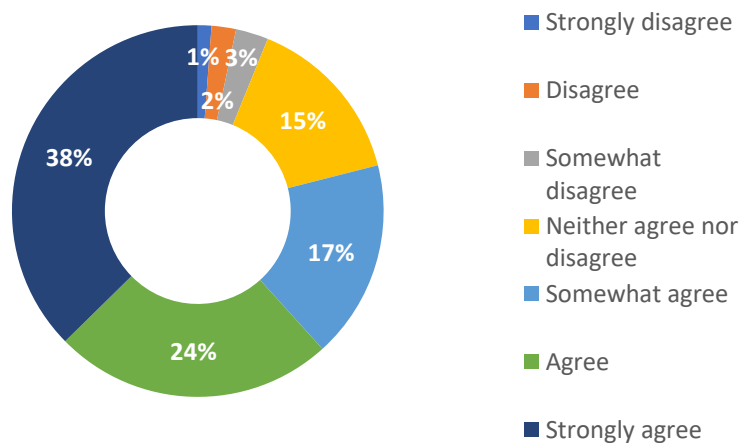
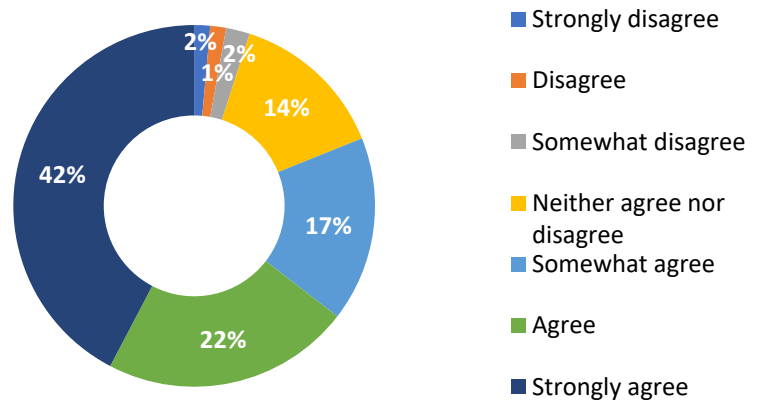


FIGURE 64 SUPPORT AREAS: DIRECT FINANCIAL SUPPORT

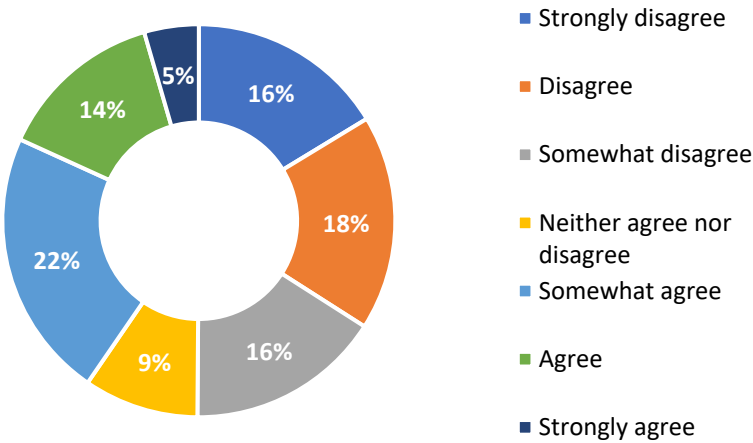
And finally, 81% of Latvian SMEs indicate the need for some amount of direct financial support (Figure 64). Only 5% of respondents in some measure disagree that this kind of support should be provided and 14% of enterprises as usually don't define their opinion.



COMPANY'S CAPABILITY TO PERFORM DIGITAL TRANSFORMATION

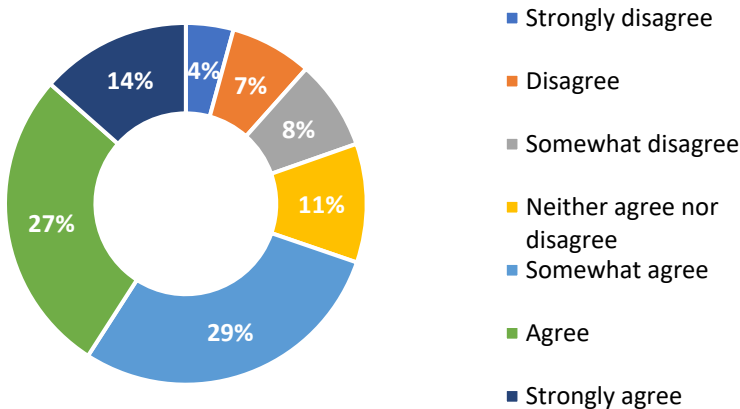
41% of Latvian SMEs are sure about the ability to complete their digital transformation somewhat independently (Figure 65). Half of companies are not sure of their independent success and only 9% of companies are not precise regarding this statement.

FIGURE 65 ABILITY TO TRANSFORM INDEPENDENTLY



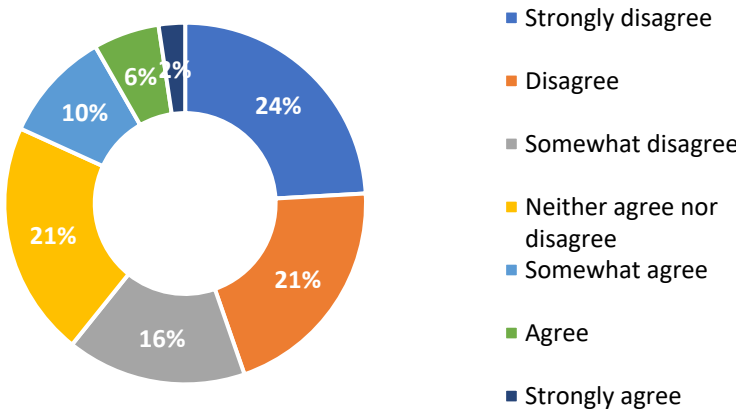
70% of companies to a certain extent specify the need for the EU and national aid (Figure 66). Meanwhile, 19% in some measure disagree with the statement and 11% stay neutral.

FIGURE 66 ABILITY TO TRANSFORM ONLY WITH EU AND NATIONAL AID



Still, 18% of Latvian SMEs don't consider digital transformation to be their company's goal (Figure 67). 61% of respondents to a certain extent perceive digital transformation as a purpose for future development and traditional 21% of enterprises don't define their viewpoint.

FIGURE 67 DIGITAL TRANSFORMATION ISN'T COMPANY'S GOAL



CONCLUSIONS

Digital transformation is a journey, not a destination; it starts with digitization by transforming analog data and processes to digital and leads to the transformation of business models, and it never ends. Each company is unique, as is the scale and effort required to embrace this digital journey. A comprehensive digital transformation roadmap is the key to driving change in a coordinated and effective manner, whether you are a small company or a multinational enterprise.

Large companies are better positioned to take advantage of new technologies and turn them into smart companies (Pech & Vrchota, 2020), but what about small and medium-sized enterprises? SMEs are lagging behind in digital transformation, and the smaller the company, the less likely it is to adopt new digital business practises (Abel-Koch et al., 2019).

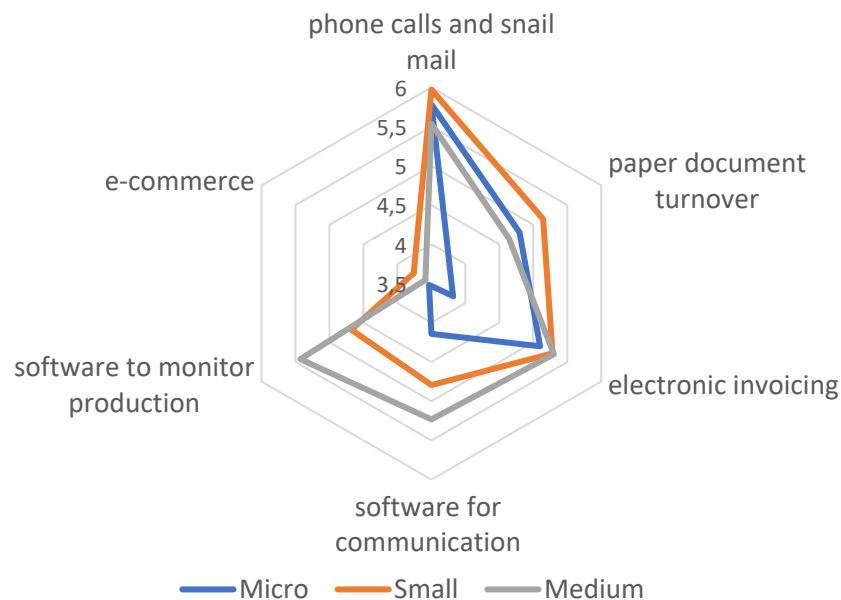
In this report, we assess the real-life situation faced by small and medium-sized enterprises in Latvia as they transform their businesses into digital to ensure sustainable development. We have summarized answers to questions such as: what technologies are used by companies and what opportunities they offer; what are the main reasons and obstacles to digital transformation; what companies are doing to acquire digital skills; what risks it entails; what kind of support entrepreneurs expect from the state and others. This report is based on data collected from the **433 companies**, which are registered in Latvia and responded to an online survey carried out during **February/March 2021**. We analyse the responses of the respondents and compare them with previous results in Latvia and other countries.

DIGITAL ADAPTATION

The first step in digital transformation is digitization. According to the survey results, the majority of SMEs **still use traditional phone calls and regular mail (86% out of 100%)** together with **paper documents (68% out of 100%)**, which means that the digital journey has not yet begun or is at a low level (see Figure 68).

While **electronic invoicing** represents the data **digitization process**. The rate of electronic invoicing is **74%**¹. Similar results are also shown in a 2020 VARAM study with 715 respondents, when 71% of companies used electronic invoicing without automatic processing. **The main reason companies don't electronically send invoices to customers is because most of the revenue comes from the cash register** (VARAM, 2020). OECD research on digital transformation showed that the average percentage of SMEs in OECD countries using electronic invoicing in 2015-2018 was 39%, with a small gap across companies' sizes (OECD, 2021).

FIGURE 68 WHAT IS YOUR COMPANY LEVEL ENGAGEMENT IN THE FOLLOWING ACTIVITIES?
1=never, 10=always (means).



¹ The percentage in this chapter shows the company's digital adaptation rate out of 100%

While the automatic creation of e-invoices is the next step - **digitalization**. According to a 2020 VARAM study of 51 respondents, only 10% of Latvian surveyed SMEs use automatic e-invoicing (DIGIBEST, 2020).

Activities such as using software to facilitate communication and collaborative work; to monitor production, managing inventory and supply or other activities and e-commerce are examples of **digitalisation**. The survey results show that the use of **software to facilitate communication and collaboration** varies significantly by company size, with medium-sized companies at **74%** and micro companies at only **52%**. The OECD study found that the average percentage of medium-sized companies using a customer relationship management system was 43% versus 26% for small ones (OECD, 2021). The results of the VARAM survey show that 58% of SMEs use electronic signatures, the Latvija.lv portal is used by 77%. As the main reason why, companies do not use electronic signatures, 77% of non-users indicated that they do not see such a need (VARAM, 2020).

The gap between firm sizes is wider when it comes to the use of **software for production monitoring, inventory management and supply management**: for medium-sized companies - **78%** and micro-companies - only **40%**. The OECD study found that the average percentage of medium-sized companies using a supplier-customer management system was 24% versus 13% for small ones (OECD, 2021).

As for **e-commerce**, the digitalization level is rather low - only **40%**. According to a VARAM study, 66% of SMEs place orders for goods or services electronically through websites or mobile applications. However, only 37% of SMEs automatically receive orders through e-commerce systems. **The main reason why companies have not implemented an automatic order acceptance system is that the activities of companies don't require this** (VARAM, 2020). OECD data showed that the overall situation in OECD countries was even worse, as the average percentage of SMEs using e-commerce was only 29% and 19%, respectively (OECD, 2021). The 2019 European SME Survey shows that the most common activity is electronic invoicing (60%), followed by the use of software to facilitate collaborative work (60%) and to monitor production processes (53%) (Abel-Koch et al., 2019).

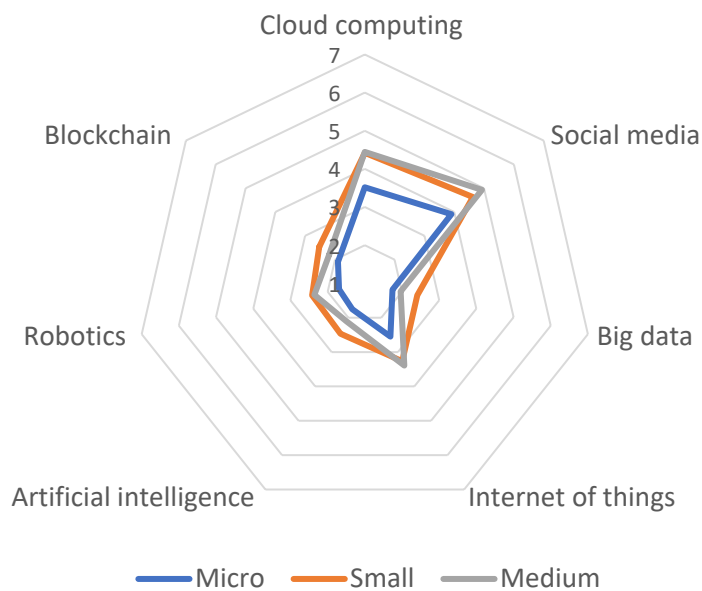
It can be said that Latvian SMEs still have great potential to use software to facilitate communication and collaboration, production monitoring, inventory management and supply management. Particular potential comes from e-commerce/online shopping, as online revenue growth increased

by 44% in 2020 and 39% increase in the first quarter of 2021 over the same period last year (McAdams, 2021).

Companies cannot embark on a digital journey if they don't embrace digital technologies. Figure 69 shows the level of digital adoption that reflects the company's digitalization process.

As the survey results show, technologies are most actively used in **social media** with a **56%** level of digital adaptation. Social media helps increase SME customer base, business visibility and outreach.

FIGURE 69 WHAT IS YOUR COMPANY CURRENT ENGAGEMENT IN THE FOLLOWING TECHNOLOGIES? 1=never, 10=always (means).



However, the gap in diffusion rates between micro (48%) and medium-sized companies (68%) is high - 20%. The OECD study provides data on the use of social media by small and medium-sized companies, 43% and 54%, respectively. VARAM research shows that 54% of companies have websites or social media accounts and 34% of SMEs paid for online advertising, including on social media, in 2019/2020. **82% of 200 SMEs that do not have a homepage think they are fine without it** (VARAM, 2020).

The next most popular technology **is cloud computing** with a **50%** level of adaptation. Cloud computing helps enhance IT systems and capacity. Latvia's performance is better than the OECD countries as a whole: 20% for small and 34% for medium-sized companies (OECD, 2021). VARAM

research shows that 42% of companies do not use cloud computing, and **74% of 355 companies do not use it because they do not find it useful** (VARAM, 2020).

The level of digital adaptation of other technologies is rather low.

To sum up, the level of digital adaptation is very different, depending on the area of action (see table 7).

Table 7 Digital adaptation		
Activity/Frequency	At least in 90% of cases	Never
Snail mail and phone calls	70%	1%
Paper document turnover	39%	1%
E-invoicing	48%	1%
Use of software to facilitate collaborative work	39%	6%
Use of software to monitor production and other significant activities	39%	10%
E-commerce	17%	20%
Cloud computing	31%	17%
Social media	31%	10%
Big data	4%	57%
Internet of things	8%	29%
Artificial intelligence	5%	58%
Robots, drones	4%	60%
Blockchain	5%	56%

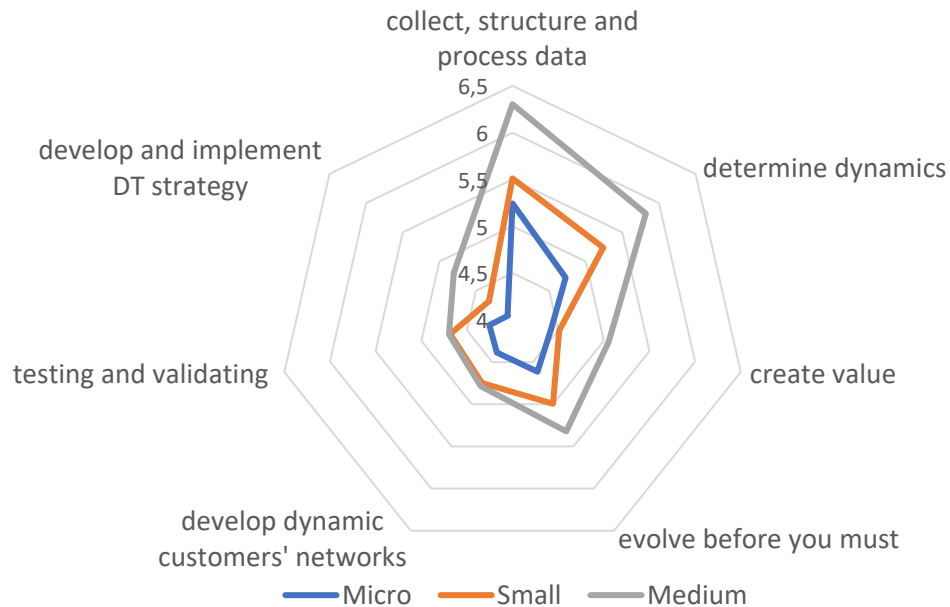
The survey shows that only 1% of respondents has fully digitized such activities as document turnover and communication. 48% of SMEs have almost completed their journey to e-invoicing. About 40% of enterprises commonly apply software in order to facilitate collaborative work and to monitor production and other significant activities, 31% use cloud computing and social media. As for more complicated technologies, the level of implementation completely differs: about 58% of Latvian SMEs never apply such solutions as big data, artificial intelligence, blockchain, robots and drones and only about 5% of all companies are the permanent users of these technologies.

SMEs are going through a certain journey of digital adaptation. They lag behind in all areas of digital technology, as micro-sized companies are less digitalized than medium-sized companies, which are less digitalized than large companies. SMEs start with digitalisation of general administration and marketing operations, as is the case with large companies. The next step is social media or engaging in e-commerce. However, as technologies become more sophisticated, such as big data and artificial intelligence, the ability of small companies to implement them is significantly reduced compared to larger companies.

PURPOSES AND REASONS FOR DIGITAL JOURNEY

Since the overall level of digital adaptation of SMEs is not high, a natural question arises: "Do SMEs believe in the potential of digital technologies?"

FIGURE 70 INFORMATION TECHNOLOGY SOLUTIONS ALLOW YOUR COMPANY; 1=strongly disagree, 7= strongly agree (means)

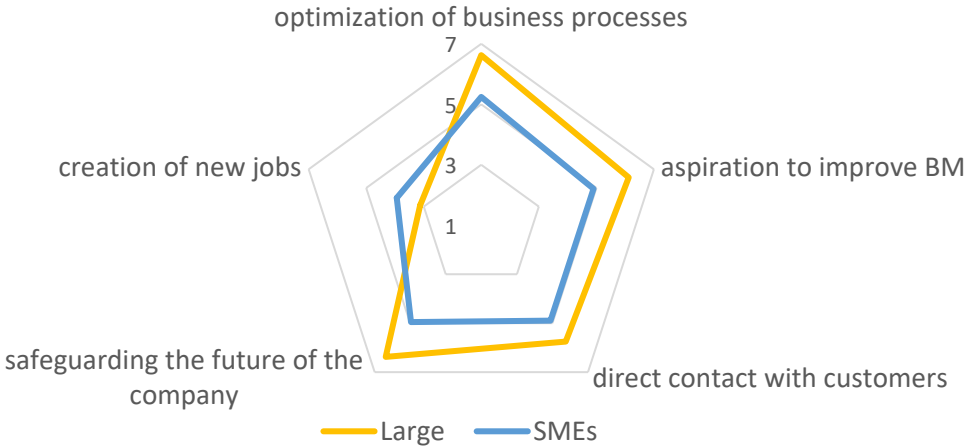


SMEs see the greatest potential in using technology for **collecting, structuring and processing data (80%)**, as well as for driving dynamics and **decision-making regarding the current business (72%)**, which are part of the digitalization process (Figure 70). While leveraging technology to **evolve before you must (68%)**, **development and implementation of a digital transformation strategy (56%)** and other activities are part of digital transformation. At the same time, large companies see the potential of technology in the **development and implementation of a digital transformation strategy** at 78%, and micro-sized enterprises - **only at 51%**. Latvian SMEs do not see much potential in using technology to create value by changing customer needs and tend to follow the industry instead. However, 10-28% of respondents can't formulate any precise opinion on the role of software implementation at their enterprises.

If we delve deeper into SMEs digital journey, then the main reason for the transition to digital transformation is **the optimization of business processes, procedures and costs (76%)**. The next

reasons are *aspiration to improve or change business model (68%)*; *direct contact with customers and suppliers, and better customer journey (67%)* and *safeguarding the future of the company or its expansion (69%)* (Figure 71). There is also a clear digital gap depending on the size of the company.

FIGURE 71 WHAT ARE THE MAIN REASONS FOR YOUR COMPANY'S DIGITAL TRANSFORMATION? 1=strongly disagree, 7= strongly agree (means)



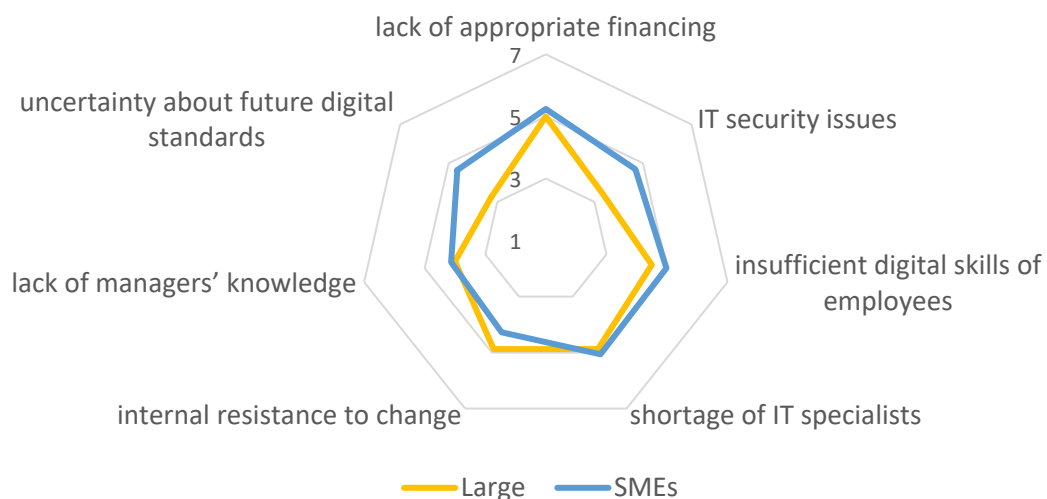
To sum up, such reasons as optimization of cost and business processes, desire to improve or change business model, future development and expansion, direct contact with customers and suppliers may be considered the leading factors for digital transformation of Latvian SMEs. Nevertheless, only 37% of respondents point out job creation as the reason for their digital transformation. Rather significant share of respondents, 17%-24%, is not ready to provide a definite viewpoint. Summarizing the potential for digital journey, survey results clearly show the digital gap between medium-sized, small-sized and micro-sized companies. The main reasons for digital journey are related to the digitalization process, while digital transformation paths are lagging behind.

OBSTACLES FOR DIGITAL JOURNEY

The survey results show that SMEs are interested in the digital journey but there are many obstacles along their way. According to the survey by European Investment Bank, 16% of EU firms consider the available digital infrastructure as a major impediment to digitalisation (European Investment Bank, 2021b). Although access to finance is not a major impediment to investment in the European Union, it can be a barrier to the adoption of digital technologies, especially for small firms (European Investment Bank, 2021a).

The 2019 European SME Survey shows that the two main barriers to digital adoption are IT security challenges and the need to recruit and retain highly skilled digital expertise (Abel-Koch et al., 2019). DIGIBEST project study reveals that Latvian enterprises face a major problem on the strategic level taking into account that almost two thirds (71%) of enterprises don't have any corporate digitalization strategy, nobody has any cyber-security strategy and only 61% use available digital security solutions. Which signals about problems on the management, strategy and planning levels of enterprises (DIGIBEST, 2020).

FIGURE 72 WHAT ARE MAJOR OR VERY SEVERE OBSTACLES TO DIGITAL TRANSFORMATION OF YOUR COMPANY? 1=strongly disagree, 7= strongly agree (means)



Meanwhile, our survey highlights (Figure 72) that the main obstacle to digital transformation for Latvian SMEs is **the lack of appropriate financing (75%)**. Financing is a problem for all Latvian companies, but for small companies it is especially relevant with 82%. The next serious obstacles are

the lack of IT specialists in the external labour market - 71% and ***insufficient digital skills of employees-70%***. SMEs' increased awareness of the danger of security breaches adds an additional layer of complexity in the planning towards a more digital business. As a result, ***IT security issues (64%)*** and ***uncertainty about future digital standards (63)*** are also hampering the digital transformation of SMEs.

DIGITAL SKILLS

Comparatively significant share of SMEs, 59%-61%, perceive the deficit of the main digital skills accompanying digital transformation. Only in data entry and processing skills this share is substantially lower, 51% of respondents to a certain extent don't deal with inadequate data entry and processing skills (see Table 8).

Table 8 Missing digital skills		
Deficient skills	To a certain extent agree	To a certain extent disagree
Software development and use	59%	20%
Mathematical and analytical skills	54%	32%
Website development	61%	27%
Digital projects' management	60%	23%
Data and database management	57%	32%
Digital strategy and leadership	61%	18%
Data entry and processing	40%	51%

The majority of Latvian SMEs carry out at least some of the activities necessary for acquiring digital skills. Most frequent actions are outsourcing, attraction of external specialists and internal activities raising the qualification of employees. Temporary recruitment is implemented twice less often than other methods. Yet, 27% of respondents to a certain extent agree that their enterprises are not engaged in obtaining digital skills. We assume that some of these companies already comply with digital standards, but still, the share of 27% is relatively high (see Table 9).

Table 9 Measures to acquire digital skills		
Activities	To a certain extent agree	To a certain extent disagree
Hiring new employees	48%	28%
Attracting external specialists with the aim to raise the qualification of employees	64%	18%
Internal activities for raising employees' qualification	61%	18%
Temporary recruitment	32%	43%
Outsourcing	62%	20%
No activities	27%	57%

RISKS AND FUTURE

As the most significant digital transformation risks Latvian SMEs point out cyber threats, loss of contact with customers and regulatory requirements and restrictions. Less important but still considerable are the risks of disproportionate dependence on electricity and technologies and digital bureaucracy and information overload. The risks of IT collapse and loss of distinctiveness are less topical, furthermore, **43% of respondents to a certain degree don't believe in the possibility of IT collapse** and this confidence may be considered positive, because Latvian SMEs are more concerned regarding other risks of digital transformation (see Table 10).

Table 10 Risks of digital transformation		
Risks	To a certain extent agree	To a certain extent disagree
Cyber threats	62%	23%
Disproportionate dependence on electricity and technologies	51%	36%
IT collapse	39%	43%
Digital bureaucracy and information overload	56%	23%
Loss of contact with customers	67%	14%
Regulatory requirements and restrictions	67%	14%
Loss of distinctiveness	45%	30%

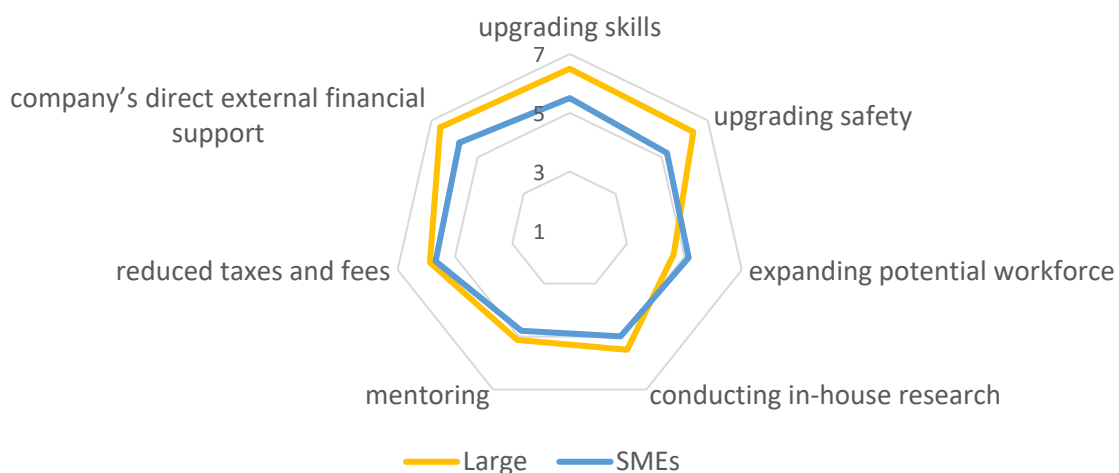
The majority of Latvian SMEs realize the future impact of digital transformation, 62% of companies to some extent believe in its positive effect. Nevertheless, **7-13% of enterprises still underestimate such significant aspects of digital transformation as the need to improve employees' skills and application of digital technologies in order to stay competitive.** And, 20% of respondents in some measure are sure that hiring high level IT specialists will not cause any problems (see Table 11).

Table 11 The future impact of digital transformation		
Impact	To a certain extent agree	To a certain extent disagree
Will have to apply digital technologies to remain competitive	80%	7%
Positive impact on company	62%	13%
Need to improve employees' skills	82%	8%
Obsolete processes and professions	69%	12%
Difficulties with hiring high level IT specialists	51%	20%

SUPPORT

Financial pressures are also confirmed by the survey results presented in Figure 73. Latvian SMEs **expect direct external financial support (86%)** and **tax incentives (84%)**. According to the 2020 VARAM survey, only 3% of 715 companies have used any of the government-funded support programs to implement digital solutions in the company or to train employees in IT technologies, **as most companies (54%) do not consider this a necessity, while 43 % do not have sufficient information** (VARAM, 2020).

FIGURE 73 WHAT KIND OF ACTIVITIES SHOULD BE EXTERNALLY SUPPORTED FOR SUCCESSFUL DIGITAL TRANSFORMATION? 1=strongly disagree, 7= strongly agree (means)



Half of respondents to a certain degree are sure that their opportunities to complete digital transformation independently are limited. Up to 70% of Latvian SMEs would be able to complete the journey only with the EU and national aid, yet, 18% of enterprises in some measure agree that digital transformation isn't their goal. However, it wouldn't be correct to call these companies unsustainable, probably they are those, who have successfully completed their digital transformation (see Table 12).

Table 12 The ability to take digital journey		
	To a certain extent agree	To a certain extent disagree
Independently	41%	50%
Only with EU and national aid	70%	19%
Company doesn't follow this goal	18%	61%

To sum up, the main barriers in SMEs digital journey are not technological or human, but financial.

The survey results highlight that the top obstacle is the lack of adequate funding, and if in Europe this problem is mainly faced by micro-enterprises, in the case of Latvia it is

a problem for companies of all sizes, including large companies. Only then do SMEs face the challenges of accessibility and capability for human capital. The top problems of Latvia differ from other countries (Abel-Koch et al., 2019; Aggarwal, 2021; Bule et al., 2021; Checchinato et al., 2021), such as IT security challenges and the lack of digital infrastructure are in 3rd place for Latvian SMEs, while in other countries they play the first violin.

RECOMMENDATIONS

FOR SMES:

Digital transformation is a journey. For each business, the desired destination will be unique and the path different, resulting in an individual digital transformation roadmap.

FIGURE 74. DIGITAL TRANSFORMATION ROADMAP



However, the main elements of a digital roadmap include:

- **A clear vision of what you want to achieve.** A well-articulated vision that resonates with employees, partners, and customers will help ensure that everyone is aligned and fosters patience and understanding when the path to change is not always smooth and there are some rough spots.
- **Strategy on arrival at destination.** What are the key areas of your transformation that you consider important? Are you planning to change everything at once or in stages? Lack of a clear and unified strategy or an imperfect strategy is an obvious mistake that companies often make.

- **Key actions to take.** The key activities will be different for each company. These can be technology projects, organizational restructuring, supplier ecosystem changes, or business process modifications.
- **Milestones.** Your digital transformation roadmap should include descriptions of intermediate target states that you will achieve as you progress.
- **Focus on the journey ahead.** While overall strategy should be clearly defined, we all know that most paths to outcome are not straightforward. The digital journey is successful because the people involved respond to feedback and inflection points along the way, rather than ignore those data points, trying to focus only on the “end of the game”.

The road to digital transformation is not the “fashion statement”, it is the key to sustainability. The survey shows that lots of business owners and managers still have the internal resistance to change, up to 20% of companies are not ready to specify their attitude towards the importance of different aspect of digital journey. Thus, the digital journey should be started with understanding the inevitability of digital transformation and overcoming the hope for the future remaining unchanged.

FOR POLICYMAKERS:

The SME digital lag arises from a range of factors and barriers, including SME lack of information and awareness, skills gaps, insufficient capital or missing complementary assets such as technology itself or organizational practices (OECD, 2019). Smaller businesses often face more difficulties in adapting to changing regulatory frameworks, dealing with digital security and privacy issues or simply accessing quality digital infrastructure (Laidroo et al., 2021; Rupeika-Apoga & Thalassinou, 2020). A substantial share of MVU is not implementing any digital technology and has no plans to start investing in digital transformation.

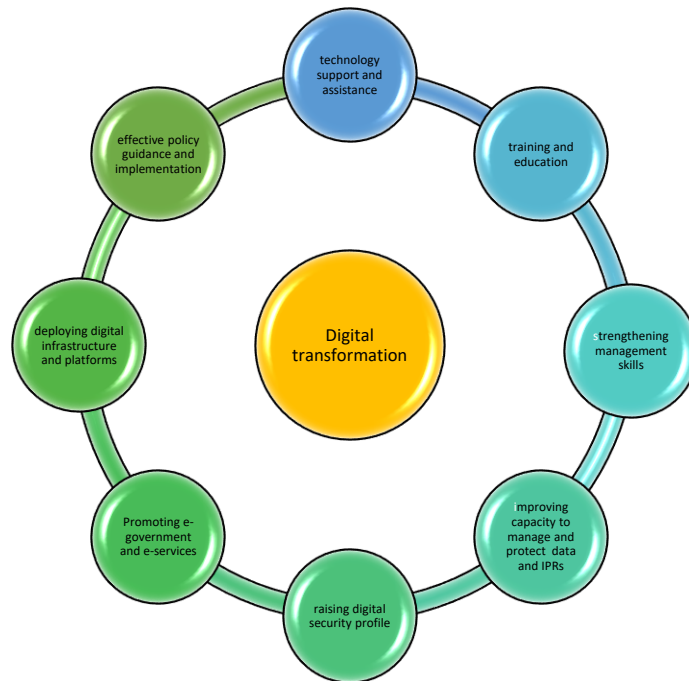
Progress always has negative consequences. One of the greatest challenges of digitalization is the decline in demand for labour. The absolute majority of Latvian SMEs don't point out job creation as the goal for their digital transformation, on the contrary, their main aim is optimization of cost and business processes, thus, labour force optimization may become a part of this journey. At the same time, a significant share of Latvian SMEs is not ready to pay for their transformation and expect some certain types of support, including direct financial assistance and tax relief. In the context of widely discussed digital tax, support provision will become the question of achieving balance between promoting digital transformation and minimizing its negative impact.

At present most of public projects are concentrated on supporting public sector digitalization which undoubtedly provides better opportunities also for SMEs. Still, worth mentioning very serious intentions to develop extremely significant solutions for SMEs, such as eIDAS, eCMR, KYC and others, as well as the establishment of the Digital Innovation Hub with regional offices and digital maturity test. These commitments should be continued and expanded to (see Fig. 75):

- Providing SMEs with technology support and assistance.
- Engaging SMEs in training and education.
- Strengthening management skills in SMEs.
- Improving SMEs capacity to manage and protect their data and IPRs.
- Raising SMEs digital security profile.
- Promoting e-government and e-services for SMEs.
- Deploying high-quality digital infrastructure and platforms (OECD, 2021)

- Effective policy guidance and implementation for digitalization is especially needed since the COVID-19 crisis may exacerbate the digital disparity between firms.

FIGURE 75. DIGITAL TRANSFORMATION SUPPORT



Providing SMEs with technology support and assistance through:

- targeted financial support (consultancy vouchers, grants),
- technology extension programmes covering different steps of digital transformation process, starting from diagnosis and self-assessment tools to e-business solutions, guidance and package of learning material focused on most topical technology areas such as Big Data Analytics, IoT, Cloud, eCommerce, security, games, 3D Printing, Mobile Technology/Computing or combinations of two or more of technology areas.

Engaging SMEs in training and education, thus accelerating the development and commercialisation of innovative, market driven, product, solutions and services for the global market through:

- organization of events or workshops for SMEs and startups,
 - arrangement of national competition that awards the best digital initiatives designed in the country.
- The awards given include recognition of the best content in different areas, for example, social inclusion content, productive leisure content, content for tech SMEs, information security solution, educational content, e-government initiative and government content,

- by reducing training costs (e.g. tax incentives, subsidies) and promoting workplace training (e.g. via employers networks and associations, or intermediary “brokers”, apprenticeships programmes) or by pooling training investments.

Strengthening management skills in SMEs through training, workshops, coaching programmes and by raising demand for these programmes.

Improving SMEs capacity to manage and protect their data and IPRs through awareness campaigns, or providing them with guidance on useful digital security measures, toolkit, auditing, assurance framework, protocols and certification schemes, and training opportunities.

Raising SMEs digital security profile through initiatives including legislation; certification schemes and education and awareness campaigns to encourage uptake; incentives to develop business solutions and “security by design”; and the mainstreaming of SME policy considerations in national digital security strategies.

Promoting e-government and e-services for SMEs through one-stop shops and digital portals (e.g. for information provision, or assistance, certification or simulation online, the “only once principle”); e-invoicing, e-signature and electronic submissions (e.g. tax administration and compliance by default); adoption of new digital technologies in public services (e.g. blockchain, AI); and through open government data etc...

Deploying high-quality digital infrastructure and platforms (OECD, 2021), making them extensively available for SMEs, especially in the ICT sector which has high capability in attracting foreign investments.

Effective policy guidance and implementation for digitalization is especially needed since the COVID-19 crisis may exacerbate the digital disparity between firms. “The Guidelines for Digital Transformation 2021-2027” released by Ministry of Environmental Protection and Regional Development (VARAM, 2020) are the appropriate foundation. Being a cross-sectoral planning document, it sets out national priorities for digital transformation, as well as basic principles for aspects of digital transformation that should be taken into account when planning and implementing sectoral development policies. In order to achieve certain goals and tasks set in the Guidelines, it is necessary to assess the need and make changes in the legal framework, as well as to control the compliance of digital transformation public support activities with the Guidelines.

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