

2021

SME DIGITALIZATION MONITOR

RESEARCH ON THE DIGITALIZATION LEVEL OF
TURKISH SMALL AND MEDIUM-SCALE ENTERPRISES

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EXECUTIVE SUMMARY

The period of physical distancing enforced by the Covid-19 outbreak is known to have led to profound changes in certain aspects of business life, especially with respect to the transition from face-to-face transactions to remote interactions as well as the increased difficulties regarding management of supply chains. Even though digitalization offers solutions to address such issues, various research studies, especially those aimed at SMEs, point out that the impact of the pandemic has varied depending on the circumstances of the company in question: while the pandemic triggered the initialization of digitalization processes in some cases, it sometimes caused the opposite effect, leading to contractions in new investments.

With this study on the private sector, INGEV probed into the digitalization level and needs of small- and medium-sized enterprises (“SMEs”) in Turkey. The study intends to reveal the extent to which companies can access the benefits of digitalization, especially during the ongoing pandemic period. The findings on possible gaps and areas of improvement are discussed in this report.

While the study showed that the tools such as e-mail usage, corporate social media account ownership and internet banking, which we might call “basic-level”, have been prevalent within the SMEs in general, more advanced elements of digitalization such as automation or virtual assistants, which offered crucial increases in productivity, had a very limited recognition and prevalence. According to the study, the three main obstacles preventing higher usage are:

- 1- **Competency Gap:** Total lack of awareness towards certain technologies or not knowing how to access them,
- 2- **Funding Gap:** Budgetary insufficiencies and low resource allocation
- 3- **Management Gap:** Lack of long-term and profound strategizing. Planning the digitalization strategy with the purpose of meeting the short-term customer needs only (such as marketing needs or order / complaint follow-up) or using digitalization only as a corporate image attribute to be communicated to the customers to “keep up with the rivals.”

In eliminating these hurdles, the study recommends that the private sector, sectoral associations, civil society and public institutions cooperate to take action in the following areas:

- Technology support and assistance to SMEs (especially the use of production technologies)
- SME Training Programs and Competency Development Support
- Integrating the Data Management Perspective
- Promoting the interaction between SMEs and data resources
- Strengthening the Digitalization via New Legislation and Arrangements
- Use of e-government and other public web platforms
- Establishment of Sectoral Digitalization Work Groups
- Financial Solutions and Incentives

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METHODOLOGY

Sample:

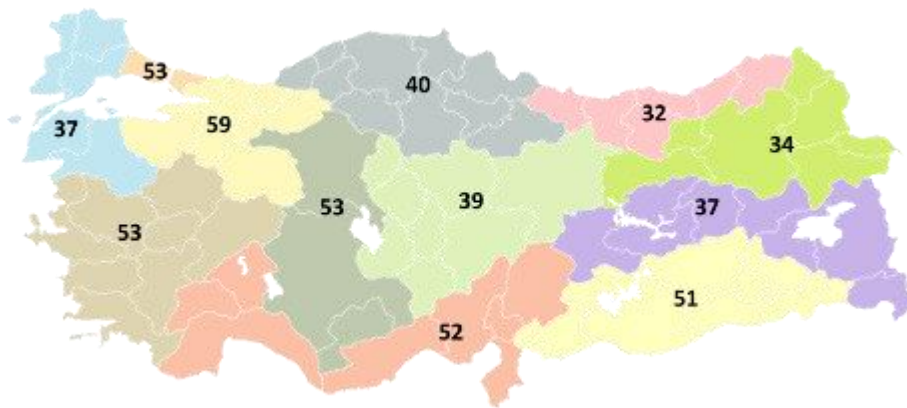
540

Local Firms

Location:

Turkey - 12 Regions
(TURKSTAT NUTS Level 1)

Distribution of Companies Interviewed, by Region



Distribution of Interviewed Companies by Number of Employees

1-9	10-49	50+
151	166	223

The study was carried out with the owners, partners, or senior managers of 540 companies. Interviews were conducted by telephone survey method (CATI) between 1-31 July 2021. Distribution of the companies to be interviewed by regions is based on Turkish Statistical Institute's Nomenclature of Units for Territorial Statistics, Level #1 (NUTS Level #1).

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STUDY FINDINGS

Digital tools and services used by the companies were questioned as part of the study. To analyse the results more efficiently, these digital tools and services are addressed in this report under three main categories: (i) basic, (ii) intermediate and (iii) advanced levels. The digital tools for each category are shown in Table 1.

Table 1 - Levels of Digital Tools

LEVEL	TOOL
BASIS	E-mail Usage
	Internet Banking
	Mobile Banking
	Corporate Website
	Corporate Social Media Account(s)
	Electronic Invoice Usage
	Electronic File Storage (E-Archive)
INTERMEDIATE	Instant Stock Control
	Electronic Bill of Lading
	Electronic Commerce and Internet Sales
	Electronic Accounting Software
	Remote File Access
	Protection of Stored Data
ADVANCED	Vehicle Monitoring and Tracking Systems
	Cyber Security
	Virtual Assistant for Customers
	Search Engine Optimization
	Digital Marketing Solutions
	Automation and Robotics Technology
	3D Printing
	Big Data Management
Machine Learning Tools	

Findings of the SME Digitalization Monitor had 10 key implications:

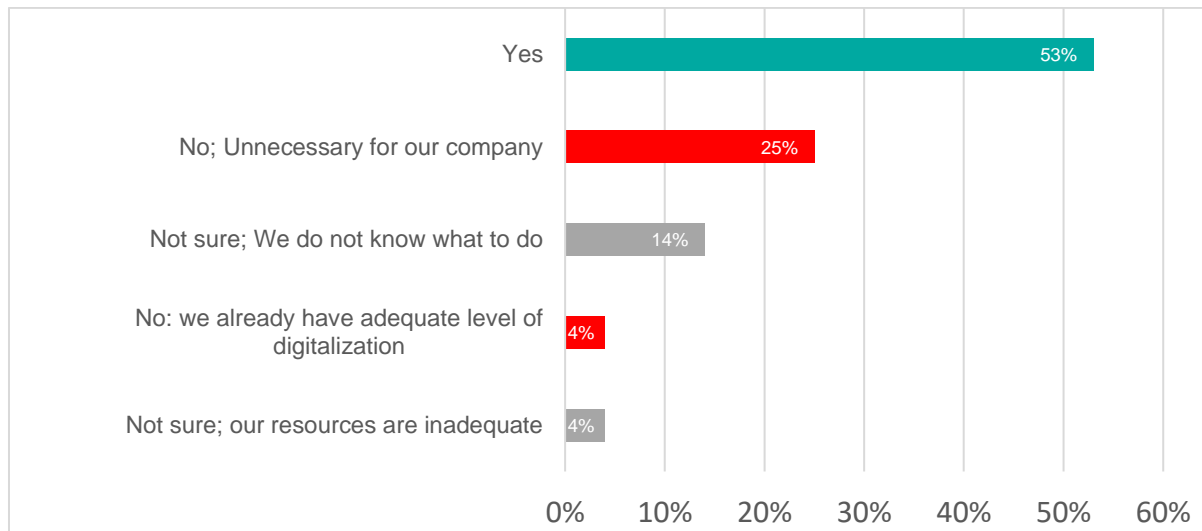
1- Digitalization is a very common necessity for SMEs.

One out of every two SMEs stated that further digitalization would be beneficial for them. On the other hand, 14 per cent of the SMEs mentioned they did not know how to utilize digital tools, and 4 per cent abstained by noting that they had insufficient budgets.

One out of every four SMEs thought that digitalization was unnecessary or useless for their companies.

Only 4 per cent of all companies interviewed stated that they had an adequate level of digitalization.

Graphic 1 - "Do you think your company will benefit from further digitalization?"



While these findings indicate that half of the companies express a need for digitalization, one in five SMEs are unsure due to various reasons such as the lack of knowledge or insufficient budget. The businesses in this group are likely to benefit from digitalization if they are supported for these shortages. Considering that, overall, thirty per cent are against further digitalization either because they think they don't need it or because they already make sufficient use of digital tools, it is understood that a great majority at approximately 70% are open to further digitalization.

2- Digital tools and services at the basic level are widely used.

When evaluated independently of their size, region, and industry, 85% of SMEs in Turkey make use of the basic digital tools.

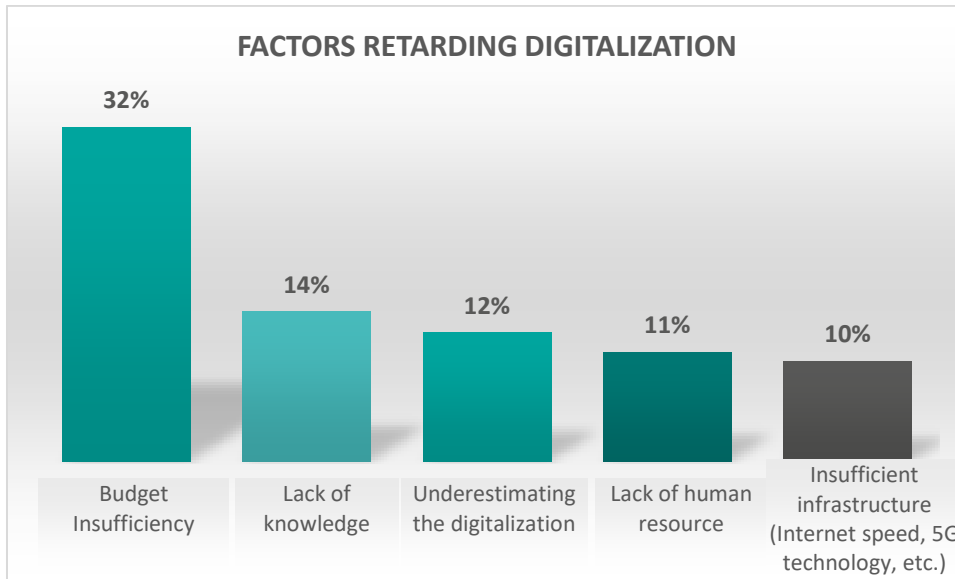
Basic digitalization refers to usage of corporate websites, e-mail, internet banking, mobile banking services, and social media accounts as well as use of e-invoice and e-archive services.

3- The biggest obstacles in Digital Transformation are budget and knowledge gaps.

Lack of funds stands out as the most important factor slowing down the digital transformation of SMEs. The second important factor is "lack of knowledge". However, "lack of budget" gets replaced as the top priority problem by "lack of information" for enterprises with higher number of employees (10 or more). The findings that (i) some SMEs that can allocate funds to digitalization do not really know how to start the digital transformation process, and that (ii) the SMEs lacking access to sufficient expertise on this issue cannot confidently predict how soon they will get the return on their investment on digitalization indicate the most important roadblocks towards higher digitalization.

While the "budget insufficiency" is more prominent especially in Trade & Retail and Textile sectors, "lack of information" becomes a comparatively higher priority problem in Service and Production sectors.

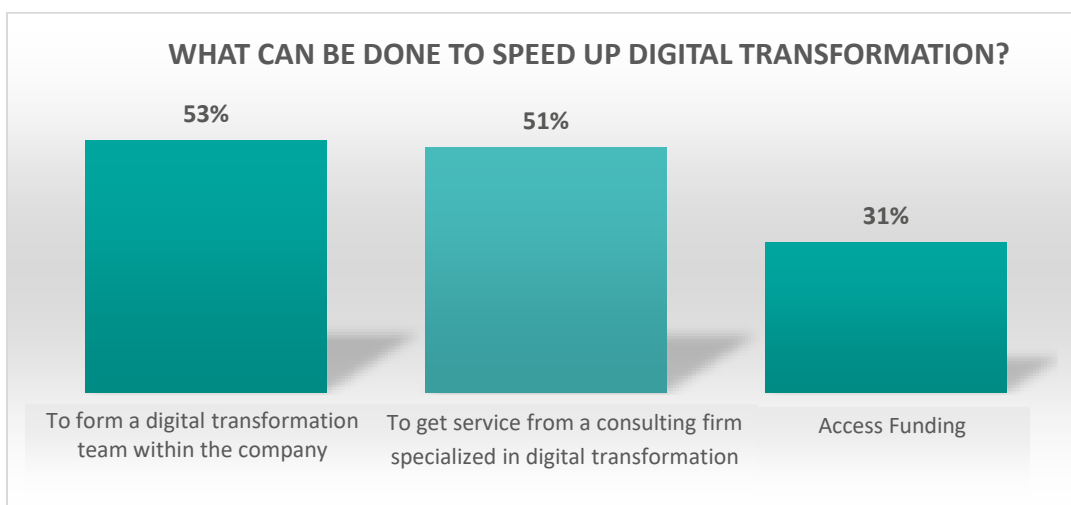
Graphic 2 - Barriers of Digital Transformation



What the SMEs need the most to speed up their digital transformation is the “consultancy of a specialist company” on digital transformation. This anticipation arises due to the concerns about both managing digital transformation investments properly and implementing the digital technologies in the most efficient way. This necessity is followed by “digital transformation team” to be formed within the company while “access to finance” is the third necessity that was mentioned most frequently.

Considering the sequence of necessities of the SMEs, it seems that not only will they need more knowledge and funds to move forward in the process of digital transformation; but they also need to manage knowledge and funds in relation to each other integrate the digital tools into their business most effectively.

Graphic 3 - Activities to Speed up Digital Transformation



31% of SMEs state that they need to “access funding” to speed up their digital transformation. Looking at the necessities that were mentioned together, half (52%) of SMEs that expect “access to funding” also wish to get support from a consultancy firm for digital transformation, while the other half (48%) states that they need to build a digital transformation team within the company. Therefore, it appears

that knowledge and budget management are regarded to be the two processes that must be carried out in conjunction with each other for effective digital transformation.

Table 2 - Intersection of Activities That Will Speed up Digital Transformation

Column Percentages Shown:	TOTAL	Establishing a digital transformation team within the business	Receiving services from a specialist consultancy firm	Access to funding
Establishing a digital transformation team within the business	53%		43%	48%
Receiving service from a consultancy firm specialized in digital transformation	51%	42%		52%
Access to funding	31%	29%	32%	

4- Levels of digitalization vary significantly according to business sector.

It is seen that the level of digitalization in the Manufacturing sector is higher than that of the Service, Textiles, and Trade & Retail sectors. It is understood that the Manufacturing and Industry sector benefits more from digitalization tools, especially advanced-level ones.

It is found that the textile sector falls behind in use of digital tools compared to other sectors. When we look at the advanced-level digital tools, it is revealed that the trade & retail sectors also fall behind the others. Service sector seems to have achieved an average level of digitalization compared to others. In particular, the textile industry is likely to have large scope for improvement in terms of production efficiency if the sector utilizes digital tools more prevalently.

Internet banking (91%) and **mobile banking** (88%) are used quite widely in all sectors. In addition, uses of **e-mail** (93%), **website** (85%) and **social media accounts** (81%) are also widely seen in all sectors. While **Instant stock control** is more prevalent in Manufacturing and Industry (73%) and Trade & Retail (74%) sectors, it is slightly less common in the Textiles (65%) sector. While remote vehicle tracking is more prevalent in the Production and industry sector compared to other sectors (63%), **E-commerce** usage (online ordering and sales) is higher (74%) in the Trade & Retail sector compared to other sectors.

Table 3 – Levels of Digital Tools by Sectors

	SME TOTAL	Services	Manufacturing and Industry	Textiles	Trade & Retail
Basic Level	85%	85%	87%	79%	84%
Intermediate Level	63%	60%	67%	53%	67%
Advanced Level	35%	35%	41%	28%	25%

5- The need for digitalization increases in proportion to business scale.

A general trend is that digitalization level goes up as the number of employees goes up. Regardless of their levels, each individual digital tool is used at higher rates by companies with 50 or more employees. The benefits of digital tools in organizing as well as tracking and monitoring business processes become more apparent as the business scale grows bigger.

The usage level of basic digital tools by SMEs with 1-9 employees falls behind that of larger firms. It is nevertheless seen that the gap in this category of tools is not as large as the those at higher levels (intermediate and advanced).

Even though the usage of E-invoice and E-archive is at a similar level among the **SMEs with 1-9 and 10-49 employees**, it is seen that it is **much higher among SMEs with 50+ employees**. It should be noted that the regulations regarding the use of these services make it more probable for larger firms to use them.

Although the use of e-ledger and e-waybill is **more prevalent among SMEs with 50+ employees**, it is still less prevalent than the use of E-invoice and E-archive systems. Looking at the data storage systems, it is seen that the usage level is about seventy-five per cent among the SMEs with 50+ employees.

Table 4 - Levels of Digital Tools by Number of Employees

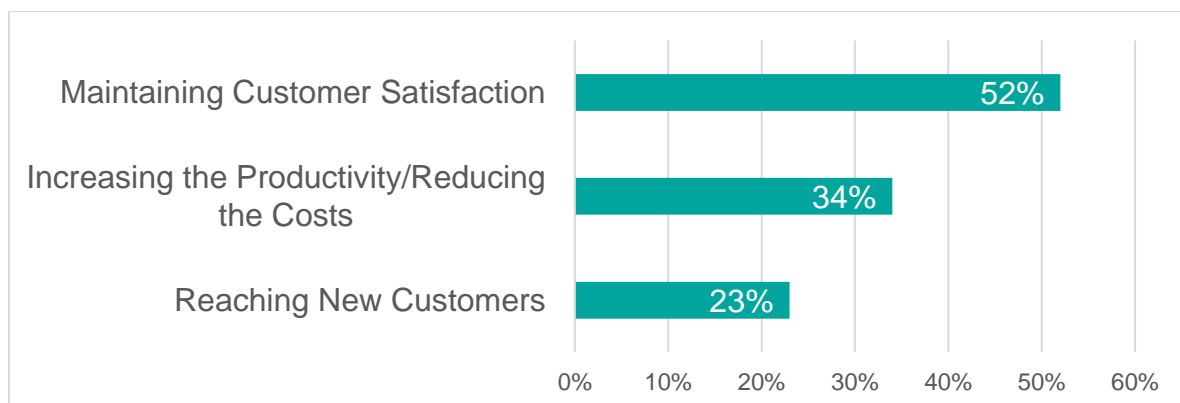
	SMEs OVERALL	1-9	10-49	50+
Basic Level	85%	79%	83%	90%
Intermediate Level	63%	52%	56%	76%
Advanced Level	35%	23%	31%	46%

6- Meeting the customer expectations is the most important factor for higher digitalization.

Three main benefits digitalization, as indicated by the SMEs, can be listed as follows: customer satisfaction, increasing level of productivity, and reaching new customers. “Customer satisfaction” emerges as the most frequently repeated benefit of digitalization (among all sectors). Customer satisfaction covers actions such as responding to customer demands quickly and keeping up with the competitors in terms of technology, etc. Most prevalent second factor had to do with productivity increases. The overall heading “productivity” also includes components such as higher profitability, cost reductions as well as planning and monitoring operations in the most efficient way. Overall “productivity increases” were stated by 34% of SMEs as the main factor for digitalization. Factors such as opening up to new markets, reaching new customers through social media or digital advertisements were stated by twenty-three per cent of SMEs in general.

On the other hand, when examined in terms of individual sectors, the differentiation in the motivations for digitalization is worth noting. While “maintaining customer satisfaction” stands out as a more important motivation for the Textiles and Trade & Retail sectors, “productivity increases” constitute a more frequently mentioned reason for the Manufacturing and Industry sector.

Graphic 4 - Expected Benefits from Digitalization



7- Profitability rise from digitalization is limited since prevalence of strategizing for the long-term is low.

When the answers are analysed collectively, it is believed that more than half of the SMEs (52%) engage with digital tools since they have become standard practice in their sectors. Productivity-increasing and cost-reducing aspects of digital tools are usually compatible with the use of technologies specified as “Intermediate-level” and “Advanced-level” in this research study. To benefit from such advantages, it is generally necessary to put more advanced tools into action with long-term investment, training, and implementation plans. Therefore, the results in Table 4 may come to mean that a smaller percentage of SMEs (34%) have developed strategies and plans suitable for going through the processes for accessing such benefits.

8- Covid-19 has strengthened the focus on digitalization processes.

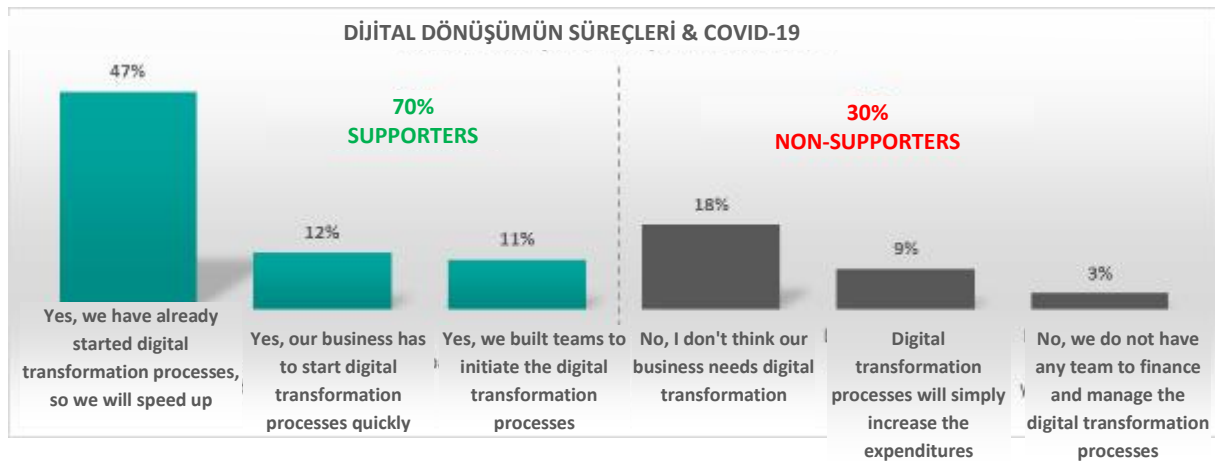
It is obvious that Covid-19 has had a major role in the attitudes towards digitalization. Seventy per cent of all SMEs participating in the study answered “Yes” to the question “Has Covid-19 changed your perspective on digital transformation?” Those who answered “No” remained at 30%. Looking at the in-group distribution of those who answered “No”, sixty per cent of this group stated, “our business needs no digital transformation” while thirty per cent thought “digital transformation will do nothing but increase the expenses of our business”. On the other hand, a ten-per cent segment of this group noted they did not have the “funding or team to manage the digital transformation process”, mentioning their attitude towards Digital Transformation has not changed after Covid-19.

A good part of the SMEs state that their approach to digitalization has changed positively towards “speeding up” following the pandemic. The SMEs that had no digitalization focus before the pandemic expressed that they acted after the pandemic to initiate the process, while those who had already started their digital transformation before the pandemic stated that they took steps towards speeding it up with the pandemic.

On the other hand, 30% stay away from digitalization due to several reasons. First, they think digitalization is not necessary in their work, that it will simply increase the costs. Others think they would not be able to manage the process, and that they would either waste their money or wouldn’t know how to spend it with respect to digitalization.

It has been observed that especially the SMEs with 50 or more employees, as well as those operating in the Services and Production and Industry sectors, are more keen on digitalization.

Graphic 5 - Post-Covid-19 Approach to Digital Transformation (DT) Processes

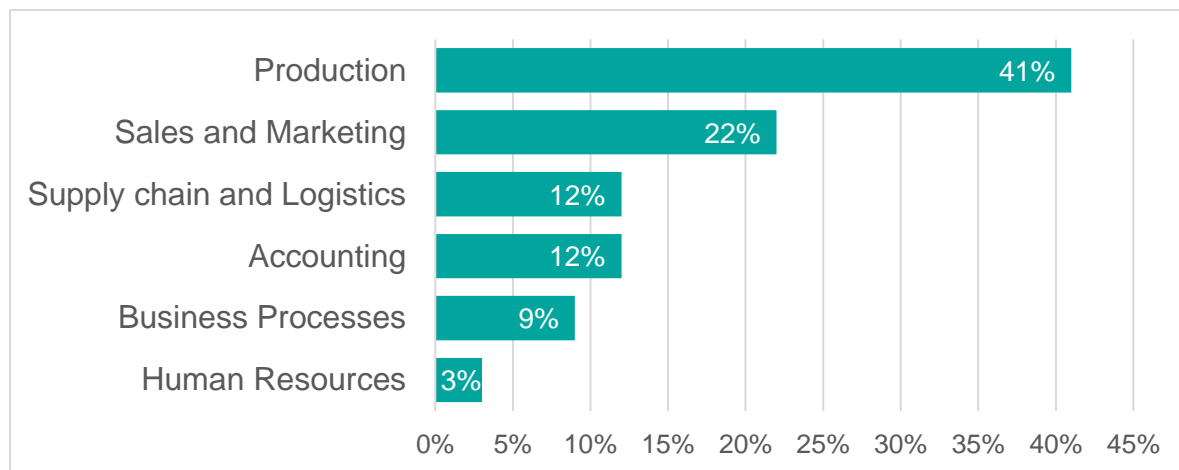


9- The greatest benefits of Digital Transformation will be achieved with support for the utilization of advanced production technologies.

The primary area in which SMEs wish to integrate digital tools into their businesses is “production”, followed by “sales and marketing.”

It is important to consider this finding together with the other key finding showing that lack of knowledge creates a barrier to digital transformation. Enterprises from a wide spectrum of business areas ranging from food production to agriculture, from textiles to manufacturing, have a strong interest in the technologies that will increase their productivity and efficiency. It is seen that, while advancing their production processes is a priority for SMEs, many of them don't know where and how to start. If they accessed the consultancy support of specialists along with the financial solutions that would facilitate their investments, they would possibly utilize advanced processes such as automation or data management, etc. more widely. Commercial benefits would then be better understood and disseminated among players in each sector. These advanced processes could thus be further spread. It is observed that SMEs have a strong demand and motivation to focus their efforts towards digital transformation.

Graphic 6 - The Operations Highly in Need of Digital Transformation



10- Reaching new customers is among the most important benefits of digitalization.

The second one of the areas for which digital transformation is expected to provide the greatest benefits is sales & marketing. As is known, digital marketing offers opportunities for accessing new markets, for gaining recognition by new customers, and for strengthening existing sales relations. Aspects such as search engine optimization, social media account management, digital advertising management, website design, and availability on e-commerce platforms have become more and more important after Covid-19. Any digital transformation support that might be given to micro- and small-scale companies could also play a role for helping them function more effectively in these new market conditions.

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RECOMMENDATIONS FOR ACTION

Based upon the findings of the study, it is recommended that the private sector, sectoral associations, civil society, and public institutions cooperate and act in the following areas to eliminate the hurdles related to the digitalization capacities of micro, small, and medium-sized enterprises:

- **Technology support and assistance to SMEs (especially in the use of production technologies):**
 - Identifying the problems and areas of development in different sectors, suggesting appropriate digital products by means of consultancy programs
 - Supporting the installation and implementation of these products
 - Promoting the public recognition of effective practices that provide profitability or productivity increases.

- **SME Training Programs and Competency Development Support:**
 - Developing and implementing on-the-job training mechanisms, especially for the employees,
 - Supporting the SMEs by means of mentoring practices to allow them to develop their own solutions.

- **Integrating the Data Management Perspective:**
 - Increasing the level of knowledge and usage related to the digital solutions intended to increase the efficiency by enabling the SMEs to assess their data more accurately.
 - Data in question can be related to aspects such as sales, customer relations, production, and supplier management.

- **Promoting the interaction between SMEs and sources of knowledge and information:**
 - Encouraging the communication between the SMEs and incubators, university technology transfer offices, and companies delivering digital consultancy services.

- **Strengthening Digitalization with New Legislation and Regulations:**
 - Strengthening the efforts towards the digitalization processes through improvement of the legislative framework. Relevant areas of regulation may cover the following topics:
 - Protection of trade secrets and intellectual property rights;
 - Enforcing the data protection regulations;
 - Ensuring awareness of digital security: detailing and disseminating the ways to deal with violations and threats,
 - Specifying additional standards or developing regulations specifically for each different business sector.
 - Standards and regulations that will facilitate the use of online financial bookkeeping and accounting technologies

- **Use of e-government and other public web platforms:**
 - Developing the regulations to promote the recognition or facilitate the use of such public websites.
 - Promoting electronic signatures, official electronic mail, electronic tax returns, and the public access to information resources on the Internet.

- **Establishment of Sectoral Digitalization Work Groups:**
 - Establishing advisory groups at the national or local level; determining, expanding, and promoting ethical and effective digitalization policies with the participation of specialists, sectoral associations, employers' organizations, entrepreneurs, academics, and local governments.
 - Pooling up expenses for online training programs or other digital services across the companies or other stakeholders, and purchasing such services in bulk, by way of such working groups. Ensuring efficiency and incentivizing digital transformation purchases that are suitable for joint use among the companies.

- **Financial Solution and Incentives:**
 - Granting tax incentives to companies that take steps in digitalization and offer on-the-job training to their employees; or covering certain expenses of such companies or enabling them to access various digital products and services at affordable prices.
 - Supporting human resource policies for recruitment of experts in the field of digitalization by offering employee grants for certain periods. This can also involve grants provided for procurement of consultancy services.



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**Digitalization Research on
Turkish Small and Medium-Scale
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