

+ **SME**
DIGITALISATION
PLAN
2021-2025



ESPAÑA PUEDE.



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+ EXECUTIVE SUMMARY

1. EXECUTIVE SUMMARY

The significant role played by small and medium-sized enterprises (SMEs) is a major characteristic of the Spanish economy. Thus, companies with fewer than 50 employees, together with micro-SMEs and the self-employed, account for 98.99% of all companies and for 49.58% of employment in Spain¹. The proportion of SMEs is greater in Spain than in the EU as a whole, making their contribution to employment and to gross corporate value added approximately five percentage points above the respective European averages in 2018. The average size of companies is also smaller in Spain. Spanish companies, including those owned by the self-employed, have an average workforce of 4.4 employees (EU average: 5.9), which is less than half the corresponding figures in Germany (11.8) and the United Kingdom (9.4)².

In recent years, Spain's ranking in the main international indicators of digitalisation has advanced significantly, especially in terms of connectivity and digital public services, but the same is not true of companies' integration of digital technologies, an area in which Spain ranked 13 in Europe in 2020. According to the 2020 Digital Economy and Society Index (DESI), Spanish SMEs have yet to exploit the full potential of electronic commerce³. Spain is also below the European average in the use of cloud services and in the application of big data analysis by companies with more than ten employees (see Section 3.1.). In general, Spanish technology companies have little presence in the productive fabric, which hampers growth, internationalisation and economic productivity.

The urgent need for SME digitalisation has been accentuated by the circumstances arising from the COVID-19 pandemic, which has had a particularly severe impact on SMEs, due to their greater vulnerability than larger companies⁴. There is general consensus within the sector on the potential contribution of digitalisation, which will enable all companies, but particularly SMEs, to strengthen their resilience during the present crisis and in any future one (health-related or otherwise), and to facilitate a return to normal activity in the post-COVID-19 scenario. Furthermore, and where appropriate, digitalisation may form part of the corporate reinvention undertaken to exploit new opportunities. A clear example of the contribution of technology to sustaining economic activity is the current generalisation of teleworking, in response to the health crisis. Another is the search for new "low contact" business models based on digital technologies⁵.

The economic impact of the pandemic has accelerated technological change, making it even more essential for companies to adapt to new business models, new demands for environmental sustainability, new distribution channels and new ways of working, via digital tools, remote working, e-commerce and digital marketing.

¹ <http://www.ipyme.org/es-ES/ApWeb/EstadisticasPYME/Documents/CifrasPYME-septiembre%202020.pdf>

² According to the Eurostat Structural Business Statistics Survey.

³ DESI and the eSME Report term as SMEs companies with 10-249 employees. Companies in the financial sector are not included in these statistics.

⁴ See the OECD Note "Coronavirus (COVID-19): SME policy responses"

⁵ EC Communication "Europe's moment: Repair and Prepare for the Next Generation".

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0456&from=EN>

ESCP Business School "Rethinking businesses: collaboration, digitalization and sustainability as core pillars for future innovative and resilient companies"

<https://academ.escpeurope.eu/pub/IP%202020-30-EN.pdf>;

<https://www2.deloitte.com/global/en/pages/legal/covid-19/accelerate-digitization-increase-resilience.html>

Digitalisation will also produce a significant increase in the productivity of SMEs, but for this to happen two important drivers must be present: (1) digital training for workers; (2) the existence of cooperation and support clusters among the SMEs themselves, enabling them to take advantage of the multiplier effects of networking and digitalisation. These clusters are the prime focus of the Spanish Network of Innovative Business Clusters⁶. The implementation of intensive digital training programmes for SMEs, within the framework of the National Plan for Digital Skills and of support for these clusters, including their reorganisation and the upgrading of their functions and services, is essential for maximum impact to be achieved.

In addition, Spain must raise its level of entrepreneurial initiative, which is a key aspect of business creation. In 2019, Spain's rate of Total early-stage Entrepreneurial Activity (TEA) was 6.1%, and was below the EU average regarding the percentage of potential entrepreneurs, levels of initial entrepreneurial activity and the percentage of consolidated enterprises⁷. Spain only does reasonably well in the percentage of entrepreneurs starting new businesses, in which the Spanish figure is close to the average of the reference countries, and in the percentage of entrepreneurs who cease their business activity, in which Spain is well below the EU average. Another problem to be addressed is that of the gender gap in entrepreneurial initiatives, especially as concerns unequal access to finance, the size of the projects considered, their limited scalability and the business sectors addressed.

Therefore, in addition to promoting the digitalisation of all SMEs, this Plan incorporates support for digital entrepreneurship as the necessary basis for a more innovative, dynamic and competitive economy, in line with Spain's "Enterprising Nation Strategy".

Finally, digitalisation is of fundamental importance in the drive to close social, territorial and gender gaps. Accordingly, efforts to foster digitalisation must not create additional access gaps, a concern that is highlighted in the Sustainable Development Goals of the 2030 Agenda. The unequal impact of the COVID-19 pandemic on different sectors of the economy is having a particularly negative impact on women. Furthermore, digitalisation is provoking a dramatic transformation of employment and creating opportunities in areas where women are less present. These factors increase the risk of widening the gender gap. According to the latest DESI report, in Spain only 1.1% of working women are ICT specialists. Furthermore, while the number of ICT specialists has increased over the last five years, that of female ICT specialists has remained unchanged. In the digital field, there is a pressing need to promote the entrepreneurial spirit among women; in 2018, for example, only 15.6% of Spanish start-ups were founded by women⁸. In view of these considerations, the SME Digitalisation Plan pays special attention to reinforcing women's digital skills and to promoting female entrepreneurship.

⁶ <https://www.mincotur.gob.es/PortalAyudas/AgrupacionesEmpresariales/Paginas/Index.aspx>

⁷ Global Entrepreneurship Monitor 2019-2020 (GEM)

⁸ Barometer of entrepreneurship in Spain, December 2019. Source: ONTSI.

The challenge of promoting the digitalisation of SMEs is one of the ten priorities in Spain's Digital 2025 Agenda⁹, approved by the Council of Ministers on 23 July 2020.

This challenge also forms part of the lever of "modernisation and digitalisation of the productive fabric and SMEs", for sustainable and inclusive growth, detailed in the Recovery, Transformation and Resilience Plan, presented on 7 October 2020, inspired by the Agenda for Change, in the 2030 Agenda and in the UN Sustainable Development Goals. During the next three years, this Plan will mobilise 50% of Spain's resources in this area, reflecting the Government's view that the ecological transition, digital transformation, gender equality and social and territorial cohesion are the transversal axes that will underpin the comprehensive transformation of the national economy.

In the same direction, the drive to digitalise SMEs is reflected in the European Commission's strategies aimed at achieving the double ecological and digital transition of the European economy and society. These goals are set out in the EC documents "Shaping Europe's Digital Future"¹⁰ and "An SME strategy for a sustainable and digital Europe"¹¹.

Many programmes, both public and private, are currently in progress to digitalise the business fabric, as part of the collective effort to promote the digitalisation of SMEs. Chief among these is the Strategic Framework for the SME 2030 Policy, which was approved in April 2019. With respect to specific sectors, important initiatives include the Strategy for the Digitalisation of the Agriculture-Food and Forestry sectors and the Rural Environment, the National Industry Strategy "Connected 4.0", the 2017-2027 Strategy for the Internationalisation of the Spanish Economy, and the ICEX Spain Strategic Plan for Exports and Investments.

However, to date these programmes have had only limited impact, probably because they lack the scale and capillarity needed to impact significantly on the business sectors addressed. The absence of precise diagnosis and identification of the most appropriate instruments for each type of company and sector, as well as the dispersion of public aid efforts, may also have hampered the effectiveness of the initiatives.

The aim of the present Plan is to structure and support Government-sponsored actions to mobilise and optimise public and private investment in the digitalisation of SMEs, whilst reducing gender gaps, aligning priorities, obtaining economies of scale and synergies and developing common programmes, infrastructures and capabilities to contribute to the success of initiatives in this area. In this respect, the Spanish Independent Authority for Fiscal Responsibility (AiREF) has made valuable recommendations in its Spending Review reports¹². By concentrating on a limited number of programmes, it will be possible to take full advantage of the opportunities offered via the Next Generation EU recovery instrument¹³.

⁹ Specifically, Measure 26 in the Agenda.

https://www.lamoncloa.gob.es/presidente/actividades/Documents/2020/230720-EspanaDigital_2025.pdf

¹⁰ <https://ec.europa.eu/digital-single-market/en>

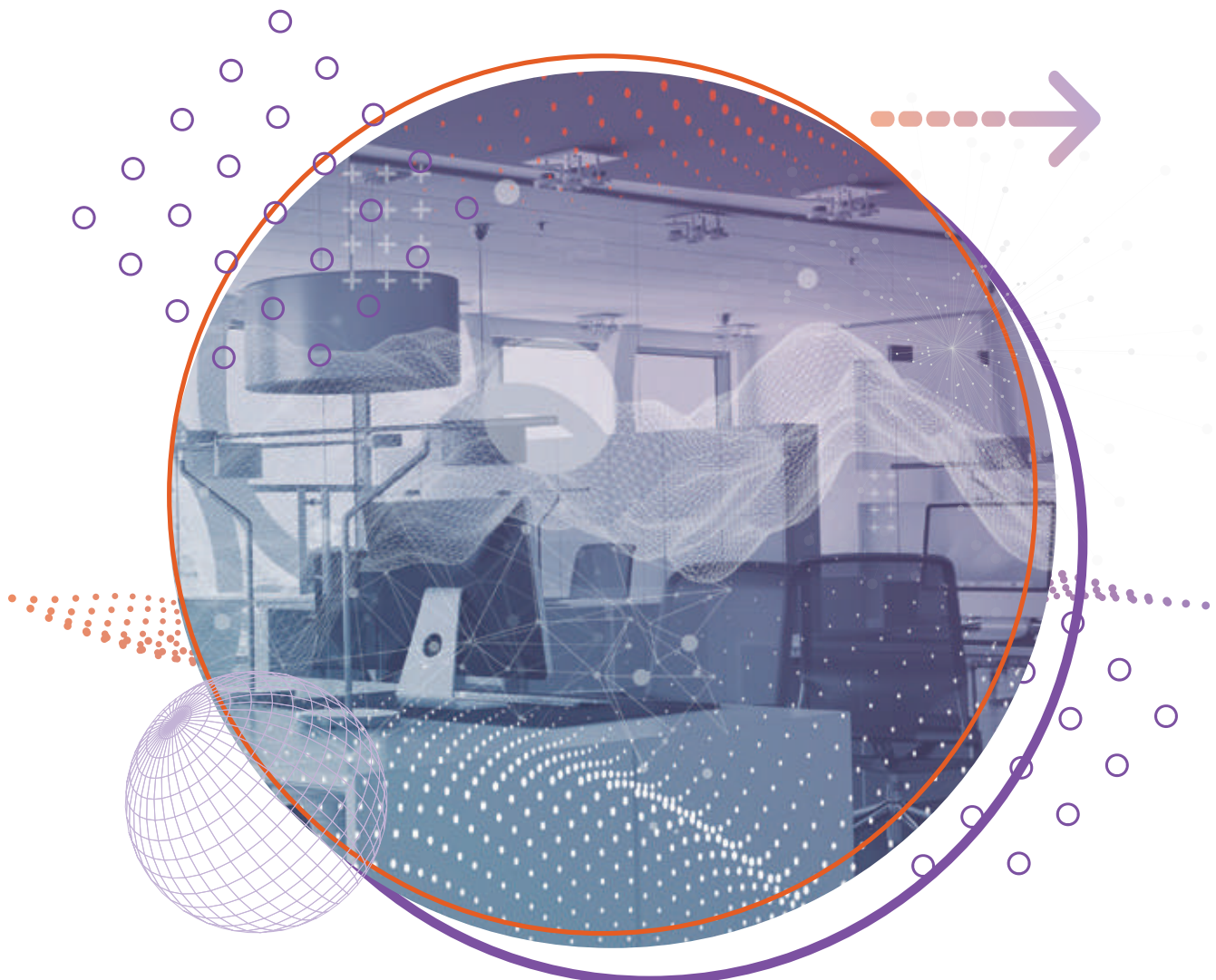
¹¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC010>

¹² <https://www.airef.es/es/spending-review/>

¹³ Temporary emergency instrument, created in response to the COVID-19 crisis to accelerate the sustainable recovery of the EU. Endowed with €750 billion (€390 billion in grants and €360 billion in loans), for specific programmes to develop the European Green Deal, digitalisation, resilience and the modernisation of the European single market, thus mitigating the immediate economic and social damage and helping preserve and create jobs.

To achieve a new, data-based economy, the entire business fabric must be reshaped to exploit the opportunities made available by digital technologies. Digitalisation will require companies, large and small, to transform themselves, adopting new processes, investing in new technologies and applying digital technologies to their business, thus increasing productivity, competitiveness and future profitability¹⁴.

Within the business fabric, there are notable differences in states of digital maturity and in digitalisation speeds. Accordingly, there are also different barriers to progress and different needs to meet. While large companies usually have the resources to implement technological change, smaller ones face many difficulties, in areas such as finance, information, technical training and access to suitable products under favourable conditions. As well as the driving power of big business to digitalise the country, SMEs must participate, too, in the projects addressed by the Recovery Plan, in order to achieve a real structural transformation and thus ensure the existence of a business fabric that is dynamic, productive, competitive and capable of making the most of opportunities and of adapting to an ever-changing global scenario.



¹⁴ https://www.eib.org/attachments/efs/eibis_2019_report_on_digitalisation_en.pdf

To systematically address the above transformation, from short, medium and long-term perspectives, the SME Digitalisation Plan addresses not only projects for immediate execution, based on the adoption of existing digital solutions, of minimal complexity and risk, but also programmes that are more innovative and oriented towards the medium term, and may be classed as “disruptive innovation”. The Plan proposes a significant public investment (of one billion euros) during the period 2021-2023 to launch a large-scale horizontal programme to provide SMEs with an existing digitalisation toolkit (enabling tools, training, website management, enterprise resource planning, customer relationship management systems, online selling, digital marketing systems, etc.). The Plan also envisages support for process automation, technological innovation and digital entrepreneurship. Finally, the Plan will promote the most complex and innovative models, those presenting greatest risk and incorporating disruptive solutions and intensive use of data, an area in which the internet of things, cloud services and artificial intelligence are all expected to play a leading role. Horizontal actions will be complemented by initiatives to promote digitalisation in industry, tourism and commerce.

In order to achieve the scale necessary to achieve a decisive advance in the digitalisation of SMEs, this Plan sets out five Areas for action and 16 specific Measures.

Area	Measures
1) Basic digitalisation for SMEs	Measure 1. Digital Toolkit programme Measure 2. SME connectivity voucher programme Measure 3. “Protect your company” programme Measure 4. “Acelera PYME” programme
2) Managing change	Measure 5. Management training programme Measure 6. Training programme for experts in the digital transformation of SMEs Measure 7. Agents of change programme
3) Disruptive innovation and digital entrepreneurship	Measure 8. Programme for disruptive innovation and the digital transformation of SMEs Measure 9. Programme to support innovative business clusters Measure 10. Programme to support digital innovation hubs Measure 11. Programmes to support digital entrepreneurship
4) Sectorial support for digitalisation	Measure 12. Active Industry programmes Measure 13. Digital tourism programmes Measure 14. e-Commerce programmes
5) Coordination, efficiency and reform	Measure 15. Integrated network of support resources for SMEs Measure 16. Digital certification for SMEs



+ THE SME
DIGITALISATION
CHALLENGE

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2. THE SME DIGITALISATION CHALLENGE

2.1 DIGITALISATION AS BUSINESS INNOVATION

Digitalisation is the process of innovation and change by which organisations incorporate digital technologies and services into their operations, either by automating processes with existing technologies or via innovation based on the introduction of more disruptive technologies (the Internet of Things, Artificial Intelligence, etc.), and the intensive use and exploitation of data (Big Data). Beyond the transformation of production factors (hardware, software, human capital, technological capital, etc.), digitalisation provokes changes in culture, organisation, business models, products and relationships (with other companies, with company representatives and with clients). Moreover, the process has a structural impact on productivity, the market, labour relations and, potentially, on company growth and on the wider economy, by extending the scale of efficiency and facilitating the exponential growth of business volume, on a scale that would be totally inaccessible with the traditional organisation and resources.

The digitalisation of an organisation must be adapted to specific circumstances, necessarily taking into account the initial level of digital maturity and the organisation's priorities and its investment and finance capabilities, as well as the digitalisation roadmap established with which to address development and deployment. It is important to note that digital technology is an instrument with which to achieve strategic goals, not an end in itself.

Each organisation must develop its own project and follow its own digitalisation roadmap. The specific route taken will depend on various factors, including the sector of business activity, the size of the company, its level of digital maturity, its location, the area of influence and activity, the potential competition, the business model adopted, available skills and talent, financial means and the organisation's management culture. In some cases, the transformation project will be comprehensive and in others, selective. Although in many cases the equipment and instruments available are relatively standardised and can be quickly incorporated, providing a good basis for digitalisation, this process necessarily produces changes in the company's governance and in its processes, and will require adaptation to its specific circumstances and needs¹⁵.

¹⁵ "White Paper for the digitalisation of SMEs: the new reality 2020-2025", prepared by the Spanish Confederation of Young Entrepreneurs (CEAJE), describes this scheme in detail, identifying the need to establish a personalised roadmap for each company with objectives / milestones for the short and medium term (2-5 years), based on a prior diagnosis of digital maturity, needs and opportunities, the market situation and available capacities. The digital culture and capabilities of the organisation's management are of crucial importance to the development of such projects.

For SMEs, digitalisation is a process of continuous, cyclical improvement and of adaptation to a changing environment. The results obtained must be monitored continuously, to adjust as necessary the development and deployment of the digitalisation measures adopted. In the future, the process must form part of the initial creation of the business project, but for this to occur, a culture of digital entrepreneurship must be promoted, so that newly-formed companies incorporate this component from the outset.

Supporting entrepreneurship, and start-ups in particular, is crucial to the development of the digital economy.

2.2 TRANSFORMATION DIMENSIONS AND CONTEXTUAL FACTORS

For successful digitalisation, SMEs must devise and implement an appropriate strategy, incorporating the following transformation dimensions, according to their goals, priorities and situation diagnosis:

- **Technical equipment, infrastructure and technology.** Investment and integration of hardware, software, technology, infrastructure and cybersecurity, especially the adoption of Cloud Computing, Big Data and AI resources.
- **Cultural change,** organisation and communication.
- **Customer experience.** Redefine relationships with customers and establish new channels of communication.
- **Skills training.** Develop digital skills for staff and the management team, and hire skilled workers in this field.
- **Products and services.** Adapt the business and develop new lines of activity, new products and new services.
- **Redesign and automate internal company processes,** increasing efficiency and productivity, and expanding the scale of operations.



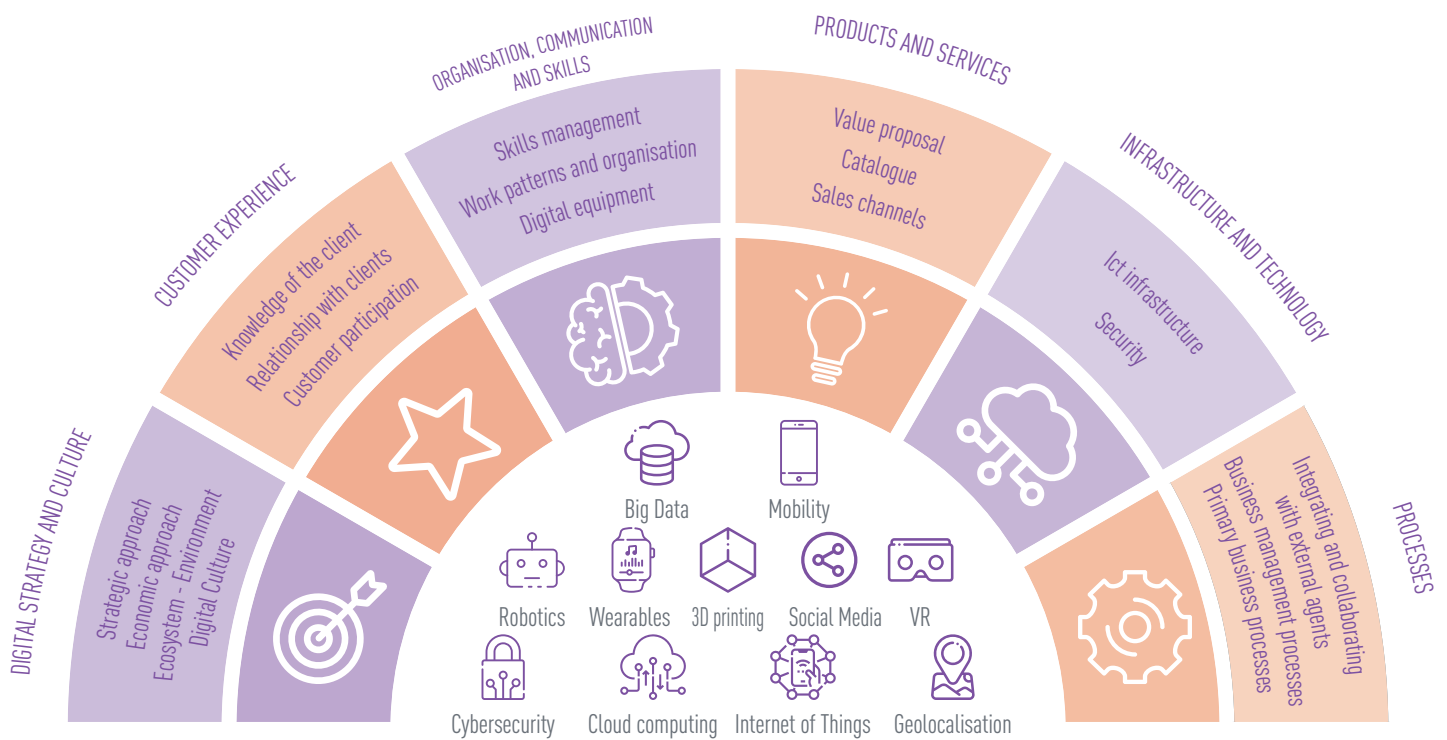


Figure 1.- Percentage of companies making use of e-commerce (Source: INE, 2019, Survey on the use of ICT and Electronic Commerce in Companies)

The digitalisation strategy and plans will also be subject to contextual factors, including:

- **Sector** and subsector of activity.
- **Size** of the company and its competitors.
- **Digital maturity** of the company and its competitors.
- **Location** of operation and market.
- **Impact** of the Covid-19 health crisis.



2.3 ENABLERS OF DIGITALISATION

In their strategies and plans for digitalisation, SMEs should consider the following enablers to ensure the success of their projects:

- An appropriate range of affordable, accessible, secure, simple, sufficient and competitive **digital products, services and infrastructure**, such as digital identity, digital archiving, cloud computing, big data and AI.
- A **workforce with the digital skills** required in today's labour market, plus the ability to attract and hire the skilled personnel needed.
- **High-speed connectivity** with adequate coverage for business activity throughout the country, with access to the Internet of Things and, where appropriate, 5G and related services.
- Easy and efficient **access to information** on available assistance, business networks and other initiatives supporting business modernisation and growth.
- Access to the **financing instruments** necessary for innovation, together with appropriate **tax structuring**.
- Access to networks of centres to promote **entrepreneurship, digitalisation and innovation**, such as the "Acelera PYME" programme and Digital Innovation Hubs¹⁶, in addition to business start-up incubators, entrepreneurial accelerators, business clusters, innovative business clusters and technology centres. All of these resources are of fundamental importance in ensuring access to digital technologies (especially advanced forms such as AI, supercomputing and cybersecurity) and their adoption by the business world.
- The development of **sectoral digital drivers**, propelling the digitalisation of the entire value chain in a given business sector or line of activity.

¹⁶ A Digital Innovation Hub (DIH) is an organisation or group of coordinated, non-profit organisations offering technological know-how and testing and experimentation facilities to enable the digital transformation of industry (mainly SMEs) and of the public sector, and promoting open innovation. DIH are composed, fundamentally, of technology centres, university laboratories, business clusters, industrial associations, business start-up incubators, innovation agencies, innovation centres, and knowledge and innovation communities (KIC).



The image features a large, detailed sculpture of a lion, likely a guardian lion, in a dark, monochromatic color. The lion is depicted in a seated or crouching position, with its head turned slightly to the left. The sculpture is set against a background of vertical lines, possibly representing a wall or a column. Overlaid on the image is a digital aesthetic consisting of a grid of small, light-colored dots and thin lines connecting them, creating a network-like pattern. This pattern is most prominent on the lion's body and the background. In the top left and top right corners, there are small, light-colored plus signs arranged in a grid. The title text is centered and consists of three lines: 'THE CONTEXT', 'OF PUBLIC', and 'INTERVENTION'. Each line of text is underlined with a thick, bright yellow horizontal bar. The overall composition is balanced and modern, combining classical art with contemporary digital design.

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THE CONTEXT OF PUBLIC INTERVENTION

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3. THE CONTEXT OF PUBLIC INTERVENTION

3.1 DIAGNOSIS OF THE SITUATION

3.1.1 The size of companies in Spain and their contribution to employment

In Spain, companies with fewer than 50 employees represent 99% of the total business fabric and 49% of business employment.

Companies (by size)	Companies (n)	Companies (%)	Business employment (%)
Without employees	1.588.443	55,25%	10,02%
Micro-companies (1-9)	1.109.769	38,60%	20,93%
Small firms (10-49)	147.550	5,13%	18,13%
Medium-sized firms (50-249)	24.334	0,85%	15,10%
SMEs (0-249 employees)	2.870.096	99,83%	64,18%
Large firms (≥250 employees)	4.783	0,17%	35,82%
Total	2.874.879	100%	100%

Table 1. Distribution of companies by number of employees
(Source: ipyme.org, October 2020)¹⁷

According to the European Commission, in 2018, SMEs composed a larger proportion of total companies in Spain than in the EU as a whole, contributing approximately five percentage points more to employment and to business gross added value than the European average. This difference is largely due to the effect of microenterprises, whereas larger SMEs present figures that are more in line with the European average¹⁸.

The average size of companies is also smaller in Spain. According to Eurostat, Spanish companies, including the self-employed, have an average workforce of 4.4 employees (EU average: 5.9) and are less than half the average size of those in Germany (11.8 employees) and the United Kingdom (9.4 employees).

¹⁷ <http://www.ipyme.org/es-ES/ApWeb/EstadisticasPYME/Documents/CifrasPYME-octubre2020.pdf>

¹⁸ <https://ec.europa.eu/docsroom/documents/38662/attachments/27/translations/en/renditions/native>

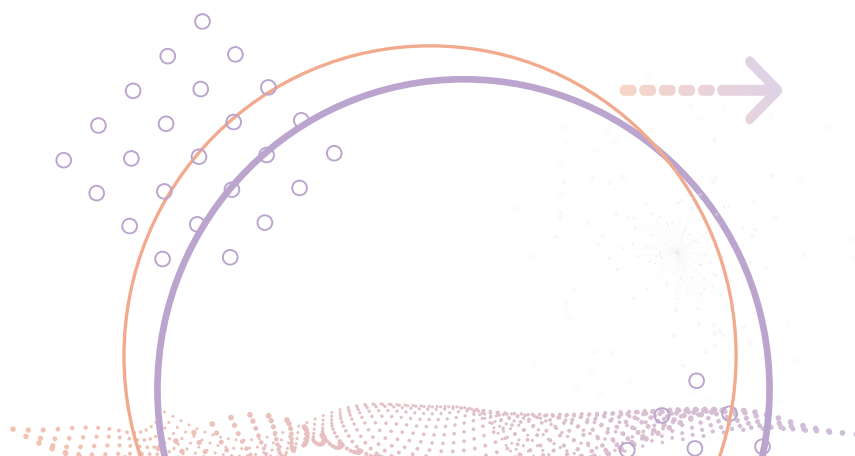
3.1.2 Situations of business digitalisation

The European Commission's SME Strategy for a Sustainable and Digital Europe¹⁹ includes the following paragraph: "But SMEs do not yet fully benefit from data, the lifeblood of the digital economy. Many are not aware of the value of the data they create, and are not sufficiently protected or prepared for the upcoming data-agile economy. Only 17% of SMEs have successfully integrated digital technologies into their businesses, compared to 54% of large companies⁷. Traditional SMEs are often uncertain in their choice of digital business strategy, have problems tapping large repositories of data available to larger companies and shy away from advanced AI-based tools and applications. At the same time, they are very vulnerable to cyber threats."

Since 2014, the European Commission has regularly reported on the digital progress of Member States, via the Digital Economy and Society Index (DESI)²⁰, which is composed of five dimensions: connectivity, human capital, internet use, integration of digital technology and public digital services.

Although Spain has presented generally good progress in the DESI, with very positive values in connectivity and digital public services, in 2020 and for the second consecutive year its score has fallen in the dimension of the integration of digital technology, relegating it to thirteenth place in the European ranking and below the EU average.

It should be noted that the DESI figures do not include companies in the financial sector. Moreover, and in line with the 2019 ePyme report "Sectorial analysis of the implementation of ICT in Spanish companies"²¹, prepared by ONTSI²², DESI considers SMEs to be companies with between 10 and 249 employees, and large companies, those with 250 or more employees.



¹⁹ <https://eur-lex.europa.eu/legal-content/ES/TXT/?uri=CELEX:52020DC0103>

²⁰ <https://digital-agenda-data.eu/datasets/desi/visualizations>

²¹ <https://www.ontsi.red.es/es/estudios-e-informes/Empresas/Informe-e-Pyme-2019-Analisis-sectorial-de-la-implantacion-de-las-TIC>

²² The EPYME report describes the following ten sectors, accounting for over 70% of the companies in Spain: industry, construction, sale and repair of motor vehicles, wholesale trade, retail trade, hotels and travel agencies, transportation and storage, information and communications, real estate, administrative and auxiliary services, professional, scientific and technical activities.

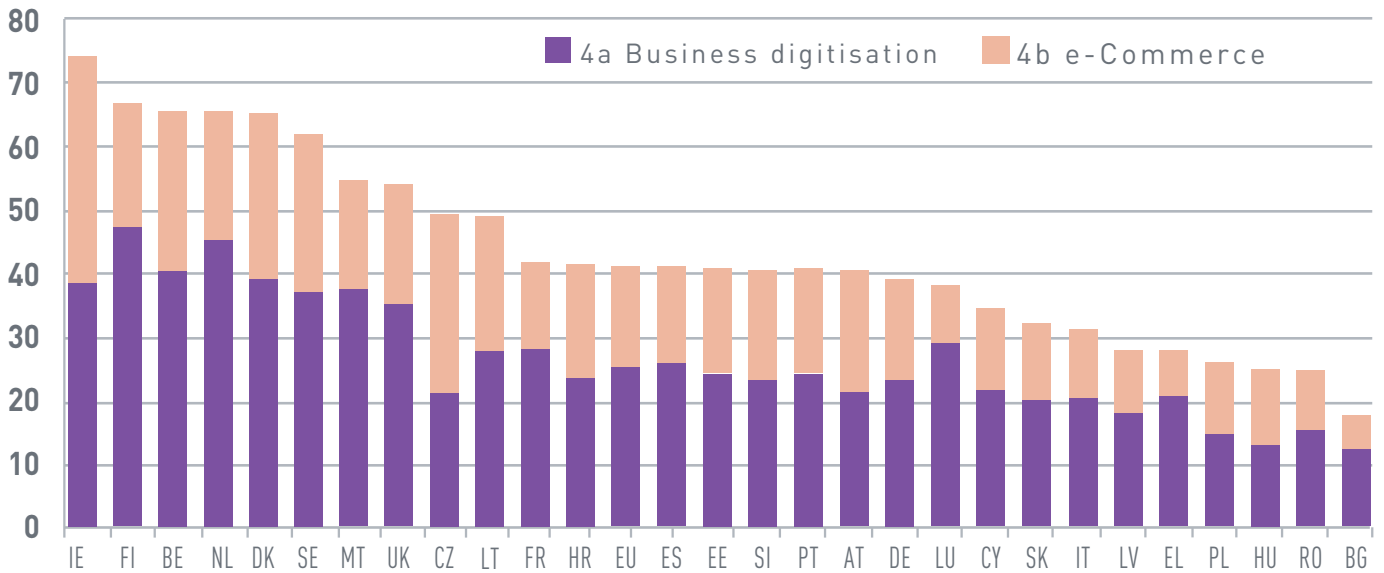


Figure 2: Integration of digital technologies in EU countries (DESI 2020)²³

Integration of digital technology

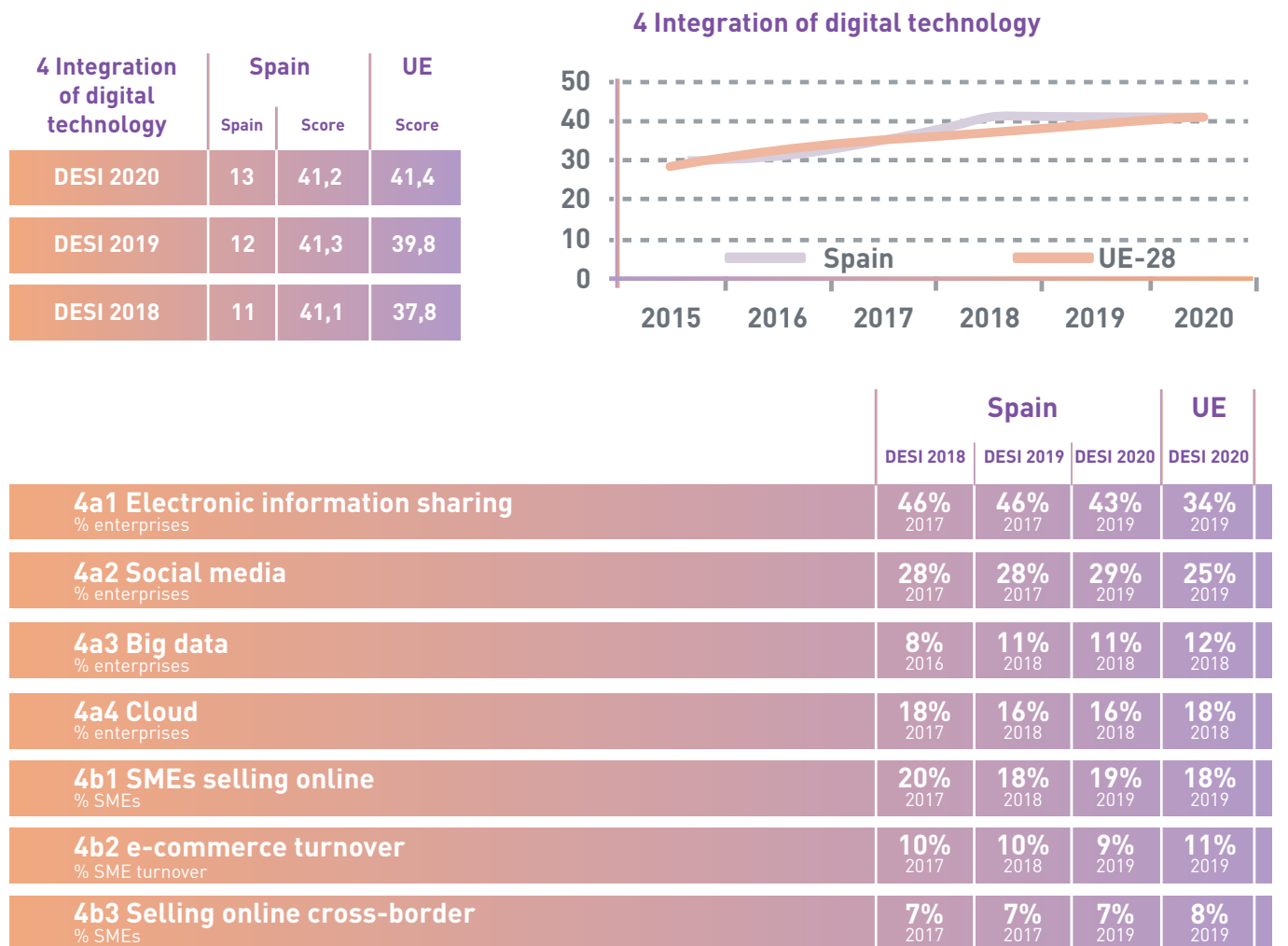


Figure 3: Dimension of Integration of digital technologies (DESI 2020)²⁴

²³ <https://ec.europa.eu/digital-single-market/en/integration-digital-technology>

²⁴ <https://ec.europa.eu/digital-single-market/en/scoreboard/spain>

3.1.3 e-Commerce

One of the conclusions of the DESI 2020 report is that Spanish SMEs have yet to exploit the full potential of electronic commerce. Although in 2019 the percentage of Spanish SMEs selling via e-commerce was slightly higher than the European average²⁵ (19% vs. 18%), the proportion of e-commerce with respect to the total volume of sales was below the European average (9% vs. 11%). Spain is also poorly positioned in the use made by SMEs of online sales with other countries (7% vs. the EU average of 8%).

According to the latest figures from the Spanish Institute of Statistics (INE)²⁶, although the proportion of SMEs selling via e-commerce rose by 4-5 percentage points in 2018 and 2019, the volume of e-commerce with respect to total sales only increased by one point among SMEs with 10-49 employees, and even decreased among those with 50-249 employees.

An INE Survey on the use of ICT and electronic commerce by companies²⁷ reported that 5.8% of micro-enterprises made use of e-commerce in 2018. However, this figure has since risen significantly, to 9.5% of all micro-enterprises in 2019.

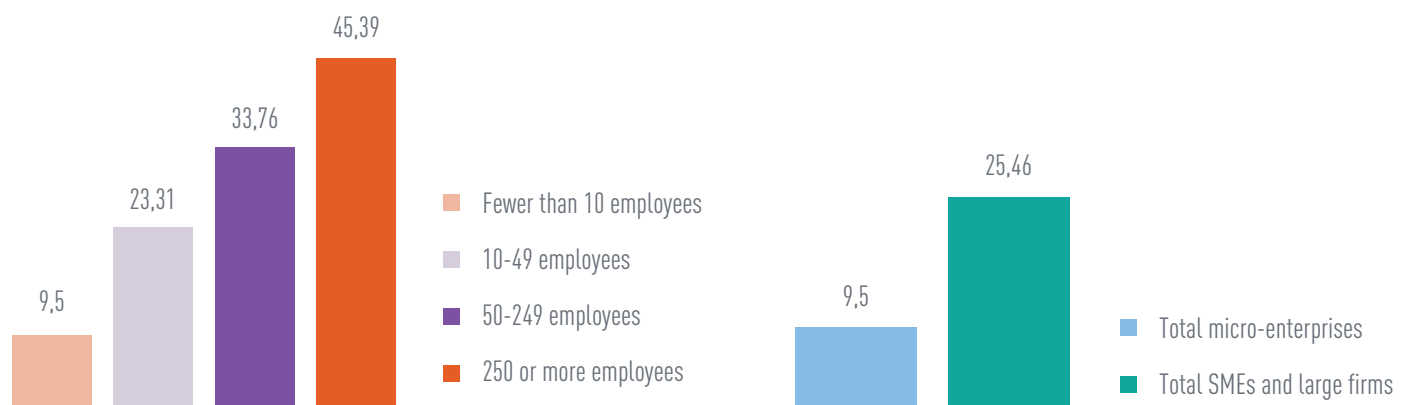


Figure 1: Percentage of companies selling via e-commerce
(Source: INE, 2019, Survey on the use of ICT and Electronic Commerce in Companies)

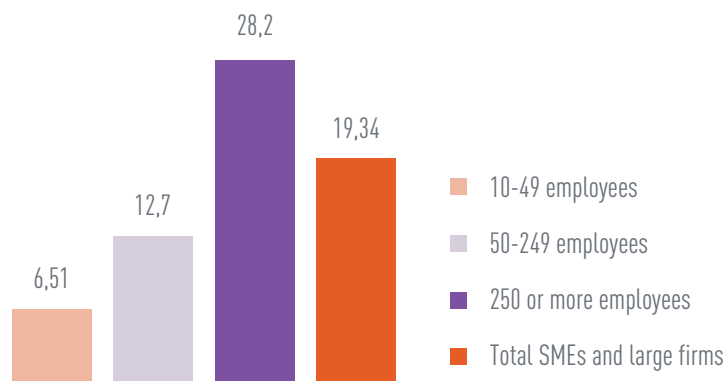


Figure 2: Percentage of sales via e-commerce with respect to total sales
(Source: INE, 2019, Survey on the use of ICT and Electronic Commerce in Companies)

²⁵ DESI uses the variable: % of companies whose e-commerce sales are $\geq 1\%$ of total sales.

²⁶ The INE uses the variable: % of companies that have made e-commerce sales with respect to the total number of companies.

²⁷ <https://www.ine.es/dyngs/10E/es/operacion.htm?id=1259931061252>

3.1.4 Cloud computing services

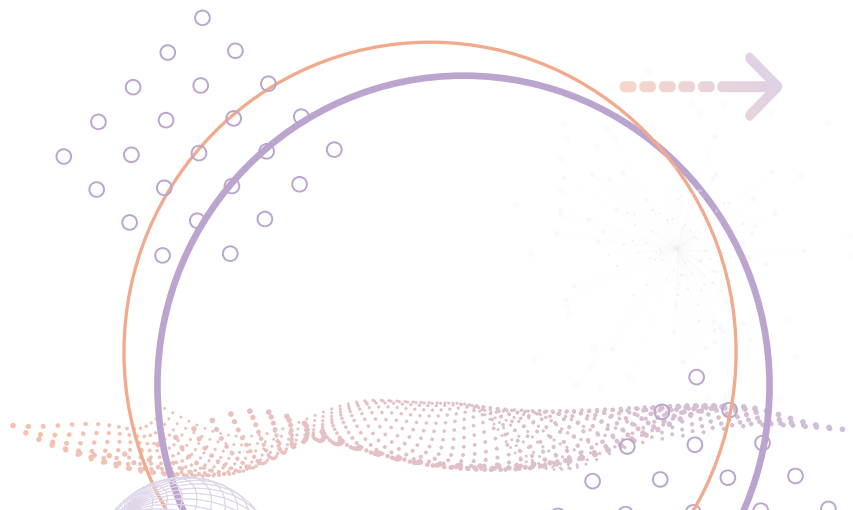
As stated in the DESI report, Spain is rated below the European average in the use of cloud computing services²⁸. Thus, in 2018 only 16% of all companies with ten or more employees used any of these services, in comparison with the EU average of 18%.

The latest INE statistics, corresponding to the first quarter of 2020, indicate little change, with a minimal increase over the previous year in the use of cloud computing services by Spanish SMEs. Like most technologies in the field of business digitalisation, the use of these services is strongly correlated with company size and their degree of adoption²⁹.

The percentage of micro-enterprises that had an internet connection and used some type of cloud computing service actually fell between the first quarter of 2019 and that of 2020, from 10.4% to 8.58%.



Figure 3: Percentage of companies that purchase a cloud computing service
 (Source: INE, first quarter 2020. Survey on the use of ICT and Electronic Commerce in Companies)



²⁸ DESI takes into account companies that purchase at least one of the following cloud services: database hosting, accounting software, CRM software, computing capacity. For their part, the INE and ONTSI use a broader definition of cloud services and limit the population of companies to those with an internet connection.

²⁹ The INE figures represent the percentage of all companies with an internet connection. The DESI figures represent the percentage of all companies.

3.1.5 Big Data

The DESI reports that in 2018, 12% of EU companies with ten or more employees carried out big data analysis, compared to 11% in Spain. The ePyme 2019 report highlighted that of all the key technologies in the field of business digitalisation, big data analytics is the least used by Spanish companies.

According to the INE, the proportion of companies with ten or more employees that perform big data analysis decreased from 11.24% in 2018 to 8.47% in 2020. As with the use of cloud services, there are large differences in this respect according to company size.

This negative evolution among companies with ten or more employees contrasts with the notable increase in this area among micro-enterprises, from 1.79% in 2019 to 3.09% in 2020.

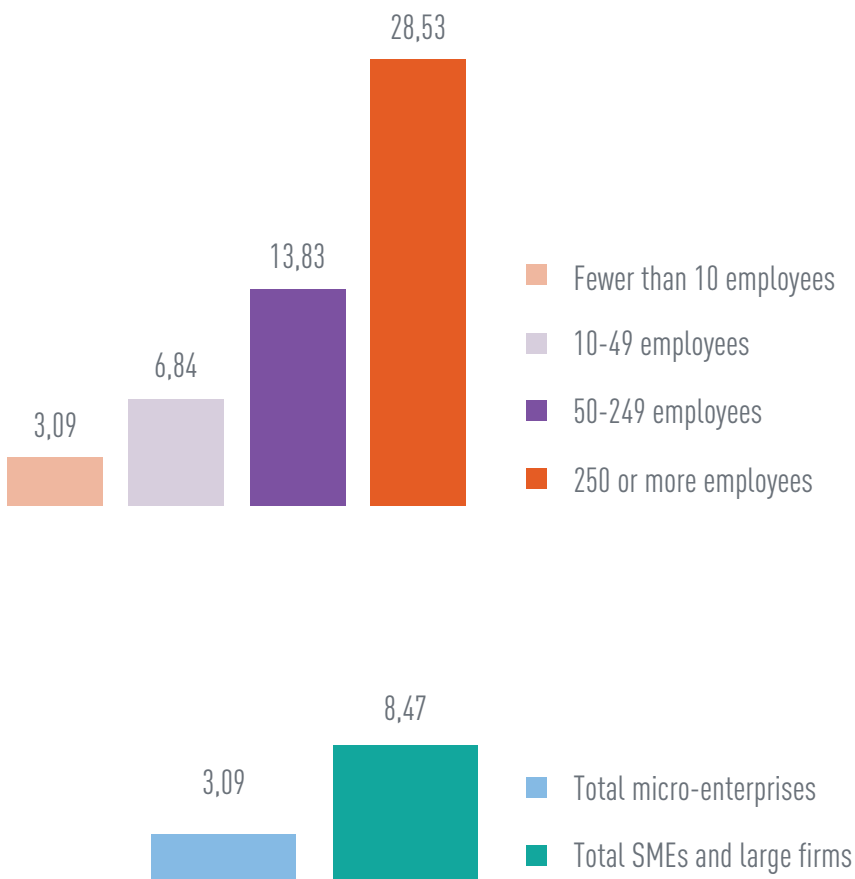
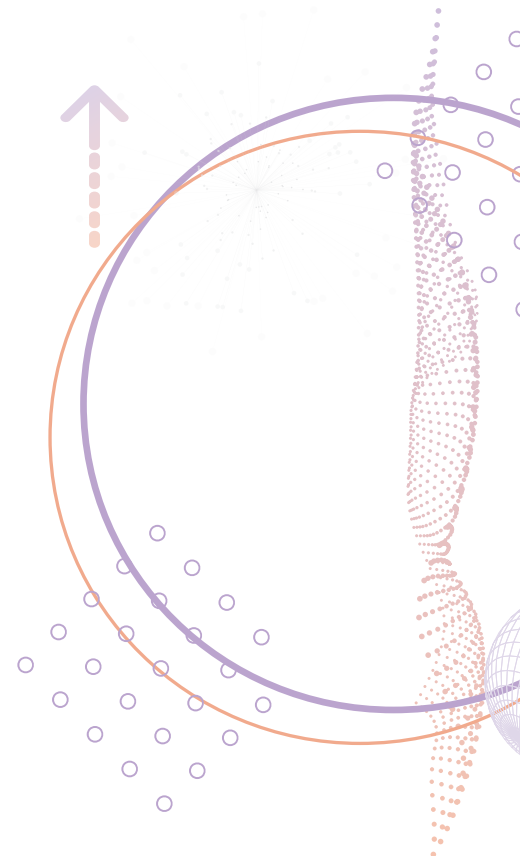


Figure 4: Percentage of companies that analysed Big Data
 (Source: INE, first quarter 2020. Survey on the use of ICT and Electronic Commerce in Companies)



3.1.6 Digital Skills and Human Capital

Successful business digitalisation depends to a very large extent on the company's digital skills and human capital. However, according to the DESI 2020 report, this is precisely one of the dimensions in which Spain present serious weaknesses (although it has in fact risen one place in the European ranking). Therefore, it is urgently necessary for Spanish companies to improve their digital skills, at all levels: basic, intermediate and advanced. In all these respects, Spain is below the EU average, as is also the case regarding the ratio of ICT specialists to total employment (3.2% vs. 3.9%). Moreover, the DESI 2020 report indicates that female ICT specialists constitute a mere 1.1% of total female employment in Spain, compared to the EU average of 1.4% and, moreover, that this figure remains unchanged.

According to the latest INE figures, 18.4% of companies with more than ten workers employed ICT specialists in the first quarter of 2020, which is one percentage point more than in the same period of the previous year.

The employment of ICT specialists is closely linked to business size, as is clearly reflected in the latest INE figures, which show that only 2.46% of micro-enterprises employed ICT specialists, in comparison with 12.98% of SMEs with 10-49 employees, 39.53% of those with 50-249 employees and 67.74% of companies with more than 250 employees.



Figure 5: Percentage of companies that employ ICT specialists
 (Source: INE, first quarter 2020. Survey on the use of ICT and Electronic Commerce in Companies)

Finally, the proportion of companies with ten or more employees and which had female ICT specialists, with respect to all companies with ten or more employees and which had ICT specialists, decreased by over 10 points in twelve months, from 42.35% in the first quarter of 2019, to 32.01% in the first quarter of 2020, according to the INE.

3.1.7 Remote working

According to the Caixa Bank research centre³⁰, in estimates based on the method proposed by Dingel and Neiman (2020)³¹: “32.6% of all employees in Spain could potentially perform their work remotely. Generally speaking, the potential to work from home is somewhat higher for women, and increases with age and education level”.

According to the latest figures from the INE Labour Force Survey³² for the third quarter of 2020, 14.5% of the workforce worked from home for at least one day during this period (14% of employed men and 15.1% of employed women), and 10.3% did so for over half of the work days during this period (9.5% of employed men and 11.3% of employed women). However, these figures had decreased from the previous quarter, by over four percentage points.

In any case, the progress is remarkable compared to 2019, when, according to Eurostat³³, only 8.3% of employed persons worked from home, either occasionally or regularly. Moreover, the 2019 figures reflect a lower level of remote working in Spain than the EU average of 16.1%.

3.1.8 Innovation

According to the INE Business Innovation Survey³⁴, 20% of Spanish companies were innovative (in their products or processes) in the period 2016-2018. Specifically, 9.8% were product innovators and 17.5% introduced innovations into their business processes.

By size, 45.8% of large companies (250 or more employees) were innovative, compared to 19.3% of SMEs (10-249 employees).

	Total (%)	10-249 employees	≥250 employees
Innovative companies*	20,0	19,3	45,8
Product innovators*	9,8	9,3	26,9
Process innovators*	17,5	16,9	41,5

* Defined according to the Oslo Manual 2018³⁵

Table 2. Innovative companies 2016-2018, by size (% of all companies)

³⁰ <https://www.caixabankresearch.com/en/economics-markets/labour-market-demographics/covid-19-outbreak-boosts-remote-working>

³¹ https://bfi.uchicago.edu/wp-content/uploads/BFI_White-Paper_Dingel_Neiman_3.2020.pdf

³² <https://www.ine.es/dynt3/inebase/es/index.htm?padre=6833&capsel=6834>

³³ <https://ec.europa.eu/eurostat/web/microdata/european-union-labour-force-survey>

³⁴ <https://www.ine.es/dyngs/IOE/es/operacion.htm?numinv=30061>

³⁵ <https://icono.fecyt.es/sites/default/files/filepublicaciones/manualoslo2018.pdf>

Relatively few Spanish SMEs undertake innovative projects. Although Spain has a significant number of technology centres and platforms, according to the European Commission³⁶, only 6.4% of Spanish SMEs are active in innovative projects, versus an EU average of almost 12%.

3.1.9 Business start-ups

Spain currently has between 3,000 and 4,000 technology-based business start-ups. These companies provide the basis for the development of the digital economy, generating 1.05 million direct jobs and 1.16 million indirect jobs, and contributing 13.7 billion euros in direct taxes and 11.5 billion euros in indirect taxes, of which approximately 75% correspond to business payments³⁷. In 2018, only 15.6% of Spanish start-ups were created by women³⁸.

3.1.10 The outlook of business associations

The ePyme 2019 report, as well as providing quantitative indicators, discussed the use and integration of ICTs at the sector level from a qualitative perspective, analysing interviews with industry experts from each of the activity sectors described in the report. Among other opinions, these experts believe:

- Despite the growth in the use of ICTs among micro-enterprises, larger firms are advancing further and faster in this field. In particular, the use of more complex instruments is growing faster among larger companies.
- The integration of ICTs must be appropriate to the size and economic activity of companies, and so in many cases a bespoke approach should be adopted.
- Micro-enterprises and small companies need standardised technology solutions in the cloud, to be marketed as pay-per-use services.
- In many firms, in addition to insufficient financial capacity, a technological gap is caused by the lack of access to information on existing instruments, or non-awareness of their benefits, and hence the failure (with minimal exceptions) to make use of potentially valuable technological resources.

³⁶ https://ec.europa.eu/info/sites/info/files/2020-european_semester_country-report-spain_es.pdf

³⁷ Source: The Digital Economy in Spain. Adigital and Boston Consulting Group (2020).

³⁸ Barometer of Business Start-ups in Spain, December 2019. Data: ONTSI.

- In many cases, the incorporation of advanced technologies is a question of mentality and the attitude adopted towards digitalisation. According to most of the associations consulted, company size largely determines digitalisation capabilities, although vision and leadership are also essential factors, and these qualities alone may compensate for a lack of resources.
- The digitalisation of micro-enterprises requires three elements: solutions facilitating internal management and customer relations; an adequate online presence; and a feasibility analysis of e-commerce operations.
- Many micro-enterprises are still unaware of the possibilities and the worth of e-commerce platforms.
- Technological advances have transformed not only production processes, but all aspects of business, enabling access to different markets and expanding companies' field of operations.
- Among other areas, the application of technology allows companies to:
 - Improve the quality of the information they generate, facilitating access to this information via value-added services.
 - Avoid errors and optimise production processes, thus increasing efficiency and enhancing product quality.
 - Transform traditional value chains, modifying the role played by the agents involved and spurring them to adopt new business models.



3.2 INTERNATIONAL PRACTICES

The countries at the forefront of the integration of digital technologies have developed national digitalisation strategies that include specific programmes to promote the digital transformation of companies, citizens and public administrations. For companies, these strategies concern various areas, such as the use of disruptive technologies (for example, Artificial Intelligence), support for skills-enhancing centres and networks, fostering collaboration and innovation ecosystems, the development of digital skills (not only for businesses, but also in the academic world), the financing of specific programmes in key sectors such as energy, health and mobility, and programmes to raise awareness in the use of new technologies.

According to the 2020 Digital Economy and Society Index (DESI)³⁹, Ireland, Finland and Belgium occupy the first three positions in the dimension of corporate integration of digital technologies. Ireland is especially successful in the field of e-commerce, and Finland as concerns business digitalisation. Also notable is the evolution of countries such as Germany and France, which, starting from modest levels in 2015, have significantly increased their use of digital technologies.

In this respect, significant initiatives that have been taken include:

- Funding for **innovation projects in disruptive technologies**, such as the Disruptive Technologies Fund in Ireland, the AI Business Programme in Finland, the Future Centres (AI) programme in Germany, the AI4 Belgium programme, and the HVMC (high-value manufacturing catapult), Digital Catapult and UKRI (UK Research and Innovation) programmes in the UK.
- With regard to **skills-training centres**, as well as the EU Digital Innovation Hubs being promoted throughout the Union, other programmes that have been launched include the Technology Centre Programme in Ireland, the Skills of the Digital Era programme in Finland, the Mittelstand-Digital programme in Germany (highlighted as good practice in the “Monitoring progress in national initiatives on digitising industry” report), beDigital.Brussels and Digital Wallonia in Belgium and the Smart Industry Fieldlabs programme in the Netherlands.
- The development of **digital skills**, via the Future-oriented digital skills programme in Finland, the Skillnet Ireland programme and the Flexible Learning Fund and Digital Skills Partnership programmes in the UK.

³⁹ https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=67086

- **Awareness raising.** Among other objectives, the above-mentioned Digital Belgium and Digital Wallonia programmes are specifically oriented towards alerting and informing SMEs of the opportunities and benefits associated with digital transformation.
- In relation to **vouchers to finance investment in digitalisation**, the EU document “Voucher Schemes in Member States. A report on the use of voucher schemes to promote innovation and digitization⁴⁰” provides a brief analysis of this assistance, which is also intended for SMEs. The following countries have made use of this instrument for SMEs in recent years (2016-2019): Belgium (digital transformation and cybersecurity), Denmark (strengthening digital capacities), Germany (more than one voucher programme), Ireland (strengthening digital skills to foster e-commerce), Italy (strengthening digital skills), Slovenia (digital strategy preparation), Sweden (engaging services or hiring staff dedicated to strengthening the digital skills of SMEs).

Although the above report does not draw conclusions about the effectiveness of these vouchers, it does highlight their flexibility and ease of implementation, and recommends that they be considered either as an independent digitalisation measure or as part of a set of measures to address the DESI dimensions considered deficient.

In the field of entrepreneurship and gender equality, the WEgate portal⁴¹, promoted by the European Commission DG for the Internal Market, Industry, Entrepreneurship and SMEs, is specifically aimed at women entrepreneurs in Europe, and provides information on how to start and grow a business. In addition, it facilitates networking, provides access to new markets and new partners, describes success stories and enables targeted e-learning. In brief, this platform fosters the creation of networks and the exchange of good practices among women with entrepreneurial interests.

⁴⁰ https://ec.europa.eu/information_society/newsroom/image/document/2019-32/member_states_use_of_voucher_schemes_0D31F683-AA92-B7FF-684433BCBD8A4F3A_61225.pdf

⁴¹ <https://wegate.eu>

Finally, the European Commission document “**Digitalisation Support to SMEs**”⁴² draws the following lessons from the programmes launched to support the digitalisation of SMEs in five Member States (Belgium, Denmark, Estonia, Germany and Sweden):

- The importance of **strong commitment** by SMEs to the initiatives proposed.
- The advantage of having a **single point of contact** with the SME.
- The importance of the long-term **continuity** of the programmes, to ensure awareness of their existence and advantages.
- The positive impact of **raising awareness** by publicising the success stories and good practices of similar SMEs.
- The need to determine which type of **public policy instrument** best suits the aims pursued, in terms of amount, target population and range of services funded.
- The need to **evaluate the results obtained** by SMEs from the initiatives implemented.

3.3 ENABLERS AND PROMOTORS OF BUSINESS DIGITALISATION

In Spain, various strategies, programmes and initiatives, both public and private, are being implemented to enhance capabilities, infrastructure and resources and thus promote business digitalisation.

Government bodies involved in this project include the following: the Secretariat of State for Digitalisation and Artificial Intelligence, the Secretariat of State for the Economy and Business Assistance, the General Secretariat for Industry and SMEs, the Secretariat of State for Commerce, the Secretariat of State for Tourism, the General Secretariat for Agriculture and Food, the public business entity RED.ES, the National Institute for Cybersecurity, the School of Industrial Organisation and ICEX Spain Export and Investments.

The digitalisation of SMEs is also sponsored by the Spanish Chamber of Commerce, territorial Chambers of Commerce, business organisations and associations of self-employed workers, as well as large national and international companies. These agents represent a major force for public-private cooperation towards the digitalisation of SMEs and in the coming years will play an important role in mobilising public and private resources, contributing to the implementation of the Recovery, Transformation and Resilience Plan, the European programmes included in the Multiannual Financial Framework 2021-2027, and the Next Generation EU Recovery Plan.

⁴² https://ec.europa.eu/easme/sites/easme-site/files/dop_p2p_digital.pdf

3.4 AREAS FOR INTERVENTION BY DIGITALISATION PROGRAMMES

Programmes to support the digitalisation strategies of SMEs are channelled via different instruments in these three phases of the transformation process:

- **Discovery and diagnosis.** Deploying awareness-raising programmes, publishing guidelines, recommendations and success stories, and providing diagnostic tools and managerial training.
- **Transformation.** Preparatory programmes for digitalisation and its implementation, addressing one or more of the transformation dimensions.
- **Evaluation and monitoring.** Focused on the implementation and outcomes of the digitalisation plan.

In general, public-sector support may be provided through the following instruments:

(I) Advisory and consulting services.

(II) Training programmes.

(III) Investment financing instruments (for example, acquisition of infrastructure, connectivity vouchers, business services, or investment funds in start-ups or scale-ups);

(IV) The development of **digital tools** that companies can use directly (for example, in their relations with government bodies).

The above programmes will incorporate gender equality priorities in a transversal way, facilitating and promoting, through positive measures when necessary, the participation of women and of companies owned or headed by women. Similarly, close attention will be paid to the incorporation of young persons, especially in programmes to encourage the hiring of experts in digital transformation.

3.5 SUPPORTING THE ENABLERS OF DIGITALISATION

The enablers of digitalisation are a major aspect of Spain's Digital 2025 Agenda, with actions in areas such as connectivity, digital skills and cybersecurity, and their effective application will produce a **multiplier or accelerating effect** on other measures in this area.

In addition to the elements described in Component 13 of the Recovery, Transformation and Resilience Plan, regarding **investments and reforms in support of SMEs**, the Plan also addresses other important areas, such as those related to digital connectivity, cybersecurity and the deployment of 5G (Component 15), the National Artificial Intelligence Strategy (Component 16), the National Plan for Digital Capabilities (Component 19), projects to foster the digitalisation of productive sectors (Component 12) and the programme for the transformation and digitalisation of the agriculture-food and fishing sector (Component 3).

The Plan also highlights the need to promote a coherent digitalisation policy for the entire value chain in cutting-edge sectors, taking full advantage of the synergies and opportunities of new technological developments and data management. The Plan will support projects in areas such as the circular economy, energy efficiency and the decarbonisation of economic activities, in accordance with the National Integrated Energy and Climate Plan 2021-2030. Instruments will be developed to support the conservation of natural resources, biodiversity, groundwater, the oceans and the meteorological observation system. Digitalisation also facilitates information management, enhances our understanding of environmental issues, and contributes to the integration and systematisation of processes. Finally, digitalisation is an essential aspect of the modernisation of management. In other spheres, it also contributes to addressing the dangers of climate change and to the provision of a wide range of services in environmental protection.

In relation to the enablers of digitalisation, the Plan encourages the equal participation of women, both in access to financing and in their membership of enabler networks promoting entrepreneurship, digitalisation and innovation.



OBJECTIVES OF THE PLAN



4. OBJECTIVES OF THE PLAN

In view of the above diagnosis of the situation, the SME Digitalisation Plan addresses the following objectives:

- 1) **Create a set of scalable programmes for the basic digitalisation of SMEs**, via public-private cooperation.
- 2) **Promote entrepreneurial and managerial training in digital skills**, in order to enhance the transformation and productivity of SMEs, and to promote their growth and internationalisation.
- 3) **Boost disruptive innovation and entrepreneurship in the digital field**, encouraging SMEs and start-ups to take advantage of the opportunities offered by the green-data-driven digital economy.
- 4) **Establish sector digitalisation programmes** in line with the specific characteristics of SMEs in industry, tourism and commerce, within a context of ecological transition.
- 5) **Reduce the gender gap in digitalisation.**

To achieve these goals, four lines of investment action will be undertaken, to be applied via newly-designed programmes or by reinforcing and reorienting those already in place, together with a fifth axis of horizontal action with complementary measures aimed at coordination, efficiency and reform.

The five lines of action set out in the Plan, and the measures that will develop them, will promote the digitalisation of SMEs and contribute to achieving one of the specific goals of Spain's Digital 2025 Agenda: to raise the share of e-commerce in total business turnover from the current level of less than 10% to 25% by 2025.

Overall, **the Plan is projected to aid at least 1.35 million SMEs**, a figure that may rise to 1.5 million depending on the levels of aid to be determined. Among the companies addressed, particular attention will be paid to **the digitalisation of micro-enterprises** and the self-employed, via the Digital Toolkit Programme, which is expected to reach between 1.2 and 1.35 million of these businesses.

In addition, the Plan is expected to help Spanish businesses achieve Sustainable Development Goals 8 and 9 of the UN 2030 Agenda (Decent Work and Economic Growth; Industry, Innovation and Infrastructure), and to contribute indirectly to other SDGs.

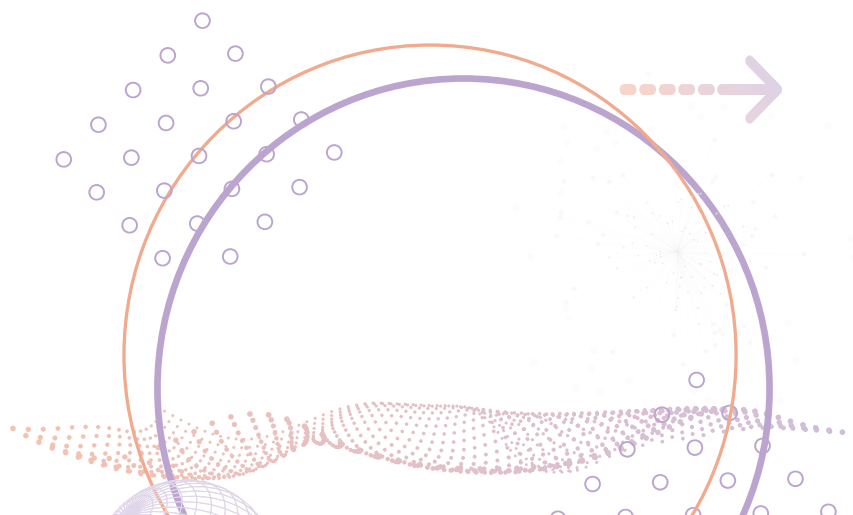
ACTION AREAS AND MEASURES



5. ACTION AREAS AND MEASURES

To achieve the scale necessary to achieve a decisive advance in the digitalisation of SMEs, a set of actions will be undertaken, mobilising public and private agents to implement a comprehensive catalogue of programmes, organised into four areas of action. The main initiatives foreseen are described below, although further actions may be incorporated at a later date.

Area	Measures
1) Basic digitalisation for SMEs	<p>Measures 1. Digital Toolkit programme Measures 2. SME connectivity voucher programme Measures 3. “Protect your company” programme Measures 4. “Acelera PYME” programme</p>
2) Managing change	<p>Measures 5. Management training programme Measures 6. Training programme for experts in the digital transformation of SMEs Measures 7. Agents of change programme</p>
3) Disruptive innovation and digital entrepreneurship	<p>Measures 8. Programme for disruptive innovation and the digital transformation of SMEs Measures 9. Programme to support innovative business clusters Measures 10. Programme to support digital innovation hubs Measures 11. Programmes to support digital entrepreneurship</p>
4) Sector-by-sector support for digitalisation	<p>Measures 12. Active Industry programmes Measures 13. Digital tourism programmes Measures 14. e-Commerce programmes</p>



Two complementary horizontal measures, aimed at **coordination, efficiency and reform**, will also be applied, to enhance the efficiency of the skills-training networks set up to support SMEs and to implement certification schemes acknowledging the digitalisation success achieved by SMEs.

Area	Measures
5) Coordination, efficiency and reform	Measures 15. Integrated network of support resources for SMEs Measures 16. Digital certification for SMEs

BASIC DIGITALISATION FOR SMES

1) DIGITAL TOOLKIT PROGRAMME

The aim of this programme is to promote a scalable, high-impact, public-private collaboration mechanism to facilitate/accelerate the digitalisation of SMEs, especially micro-enterprises and the self-employed, via the implementation of a set of basic digitalisation resources (the Digital Toolkit), appropriate to each company's initial situation and specific needs.

The set of basic digitalisation resources will allow companies to implement e-commerce effectively, to digitalise relations with the Administration and with customers, to develop paperless internal processes, and introduce e-invoicing, digital marketing, etc. The solutions derived from the Digital Toolkit resources are fundamentally service-oriented.

Various public-private collaboration instruments will be deployed to ensure the optimum provision and use of these resources, in order to achieve the maximum impact in the shortest possible time. Efficient mechanisms, providing the necessary capillarity, will be activated to reach small companies and self-employed workers throughout the country. This process will be carried out in conjunction with the *Acelera PYME* offices and with other public and private business support networks.

The Digital Toolkit programme, developed by the Secretary of State for Digitalisation and Artificial Intelligence, in collaboration with the private sector, will invest three billion euros during the period 2021-2023.

2) SME CONNECTIVITY VOUCHER PROGRAMME

This programme will provide financial assistance for the SMEs taking part in public digitalisation programmes to invest in connectivity.

The vouchers provided will be time-limited and are intended to enable companies with an internet connection to incorporate basic digitalisation packages and thereby increase their productivity, in areas such as remote working, communication with customers and suppliers and the incorporation of new technologies.

The Connectivity Vouchers programme is coordinated and applied by the Secretariat of State for Telecommunications and Digital Infrastructure, in the framework of the Plan for the Connectivity and Digital Infrastructures of Society, Economy and Territories, and will invest 50 million euros during the period 2021-2023.

3) "PROTECT YOUR COMPANY" PROGRAMME (CYBERSECURITY)

Under this programme, a set of awareness-raising, education and training actions in the field of cybersecurity, together with related services and tools, will be offered to companies, especially SMEs and micro-enterprises.

The programme will develop content, services and tools for the safe digitalisation of SMEs, and will be made available through the "Protect your company" section of the www.incibe.es portal, expanding the assistance provided in this area.

The "Protect your company" programme has been developed by the National Institute for Cybersecurity (INCIBE) and will invest 42 million euros during the period 2021-2023.

4) "ACELERA PYME" DIGITAL TRANSFORMATION PROGRAMME

The aim of the "Acelera PYME" Digital Transformation programme is to help SMEs incorporate ICTs into their production systems and value chains. It consists of three main actions: Acelera PYME offices, the web platform and associated services.

- 1) A network of Acelera PYME offices** will be created, in collaboration with Chambers of Commerce, professional associations, business associations and technology centres that provide advisory services to SMEs and help promote technology demand. This network will be structured by means of a call for tenders and a collaboration agreement with the Chambers of Commerce of Spain.

2) The **web platform** will provide SMEs with a dynamic means of supplying content, sharing best practices for the use of digital resources and diagnostic tools. In short, it will function as a digital meeting point for SMEs.

3) Among the **associated services** provided, the network will organise workshops and seminars throughout Spain on topics related to digital transformation, thus complementing the territorial coverage of the offices.

As part of the design and development of this programme, the necessary synergies and efficiencies will be identified within the framework of Measure 15 of the Integrated Network of Support Capacities for SMEs for Innovation, Digitalisation and Entrepreneurship, with particular reference to the Support for Digital Entrepreneurship programme.

The “Acelera PYME” programme has been developed by the public business entity RED.ES and during the period 2021-2023 it will invest 26.4 million euros in the three actions described.

SUPPORTING THE MANAGEMENT OF CHANGE

5) MANAGEMENT TRAINING PROGRAMME

The objective of this programme is twofold: on the one hand, to **promote managerial training** in the digital administration of SMEs (e-commerce, resource planning systems, customer relationship management, process automation, marketing, digital positioning, etc.) in order to improve productivity and enhance possibilities for growth and internationalisation.

In addition, the programme seeks to **reduce the digital divide between men and women**, increasing the number of female specialists in ICTs. Women have scant presence in this sector, not only in employment but also in training; according to data from the Ministry of Education for 2018, only 7% of undergraduates study technological degrees, and of this minority, only 28% are women. This imbalance poses a major challenge as concerns women’s adaptation to new demands in the labour market. Furthermore, very few women initiate business start-ups and only 20% of senior positions in large technology companies are held by women. In consequence, there is an urgent need for training programmes to be established for female managers in this sector.

The Management Training Programme will be carried out by the Secretariat of State for Digitalisation and Artificial Intelligence, in collaboration with the School of Industrial Organisation, within the framework of the National Plan for Digital Skills, and will invest 256 million euros during the period 2021-2023.

6) TRAINING PROGRAMME FOR EXPERTS IN THE DIGITAL TRANSFORMATION OF SMEs

The aim of this programme is to train young experts in the digitalisation of SMEs, as agents of change in digital transformation. The programme design will incorporate existing public-private initiatives providing compatible training in this area, and will promote the necessary coordination and collaboration.

The aim of this programme is to train young experts in the digitalisation of SMEs, as agents of change in digital transformation. The programme design will incorporate existing public-private initiatives providing compatible training in this area, and will promote the necessary coordination and collaboration.

7) “AGENTS OF CHANGE” PROGRAMME

The aim of this programme is to provide financial support for SMEs to hire digital transformation experts to develop a digitalisation plan and accelerate digital transformation, thus acting as agents of change within the company. Some of these agents will receive specific training under the Digital Transformation Expert Programme.

The programme will be conducted by the Secretary of State for Digitalisation and Artificial Intelligence, and will invest 300 million euros during the period 2021-2023.

DISRUPTIVE INNOVATION AND ENTREPRENEURSHIP

8) DISRUPTIVE INNOVATION FOR DIGITAL TRANSFORMATION IN SMEs

The aim of the programme is to promote disruptive innovation in SMEs, spurring them to redesign processes and develop new products, services and business models based on the intensive use of data and the adoption of key technologies for digitalisation, such as cloud computing, big data, artificial intelligence and blockchain, to be applied in production sectors.

The programme will target innovative, technology-based companies active in any productive sector that need to finance digitalisation projects, and will be deployed throughout the sector value chain. The investment will be implemented through calls for grant applications, in a competitive system.

The programme will be applied by the Secretariat of State for Digitalisation and Artificial Intelligence, in collaboration with the public business entity RED.ES, and will invest 100 million euros during the period 2021-2023.

9) PROGRAMME TO SUPPORT INNOVATIVE BUSINESS CLUSTERS

This programme will support the business innovation and competitiveness strategies carried out by clusters of companies, generally SMEs, which without such collaborative formulas would be unable to raise productivity via digitalisation.

Various lines of support will be provided to finance the start-up and development of coordination and management structures for Innovative Business Clusters (IBC), including feasibility studies and innovation activities (by the IBC itself or via cooperation among individual members).

As part of the design and development of this programme, the necessary synergies and efficiencies will be identified within the framework of Measure 15 of the Integrated Network of Support Capacities for SMEs for Innovation, Digitalisation and Entrepreneurship.

The programme will be applied by the General Secretariat for Industry and SMEs, and will invest 115 million euros during the period 2021-2023.

10) PROGRAMME TO SUPPORT DIGITAL INNOVATION HUBS

The aim of this programme is to support the development of digital innovation hubs (DIH), or "one-stop shops", through which SMEs will be able to access the information, services and facilities they need to carry out digital transformation successfully.

Among their basic functions, the DIH will provide advisory and intermediation services to help users define and locate the technological solutions that best suit their needs. Moreover, they will provide facilities whereby users can test the operation of the technologies recommended before investing in their acquisition, together with complementary services such as training in digital skills, and will provide information on investment financing. Finally, the DIH will participate in networks of similar institutions, in Spain and/or the EU, thus expanding the range of services available.

As part of the design and development of this programme, the necessary synergies and efficiencies will be identified within the framework of Measure 15 of the Integrated Network of Support Capacities for SMEs for Innovation, Digitalisation and Entrepreneurship.

The programme will be applied by the General Secretariat for Industry and SMEs, and will invest 42 million euros during the period 2021-2023.

11) PROGRAMMES TO SUPPORT DIGITAL ENTREPRENEURSHIP

Among the priorities of Spain's Entrepreneurial Nation Strategy is the promotion of digital entrepreneurship and fast-growing start-ups. Among others, it includes the following measures:

- **The National Entrepreneurship Office (NEO):** a virtual platform that will act as a meeting point, coordinating and advising SMEs, the self-employed and newly-created companies in all matters concerning digital entrepreneurship.
- **Support for the start-ups by female entrepreneurs:** a programme aimed at promoting and facilitating loans to finance innovative projects led by women (or with majority female participation).
- **Start-up portal:** to showcase the Spanish start-up ecosystem and, at the same time, provide a useful means of interconnection for agents in this sector in Spain.
- **RENACE, a network of entrepreneurship support centres:** to promote the creation and activities of a network of public and private entrepreneurial hubs, featuring business incubators and accelerators seeking to develop collaborative projects. Among other resources, the network will offer SMEs and start-ups a wide range of advanced solutions and financing options.

As part of the design and development of this programme, the necessary synergies and efficiencies will be identified within the framework of Measure 15 of the Integrated Network of Support Capacities for SMEs for Innovation, Digitalisation and Entrepreneurship.

These programmes will be developed by the Secretariat of State for Digitalisation and Artificial Intelligence, in collaboration with the public business entity RED.ES (only in the case of NEO), the General Secretariat for Industry and SMEs and the National Innovation Company (ENISA). During the period 2021-2023, the programmes will invest 100 million euros.

SUPPORT FOR SECTORIAL DIGITALISATION

12) ACTIVA INDUSTRY PROGRAMMES

The aim of the **ACTIVE INDUSTRY** programmes, implemented by the General Secretariat for Industry and SMEs, is to digitalise Spanish industry, especially industrial SMEs. These programmes have been developed within the framework of the National Connected Industry Strategy 4.0. These programmes are specialised and segmented, intended for companies whose activities are categorised within Section C - Divisions 10-32 of the National Classification of Economic Activities (CNAE) 2009, corresponding to Manufacturing Industry.

The following ACTIVE INDUSTRY programmes for SMEs will be applied during the period covered by the present Plan:

- **The HADA online diagnostic tool**, based on a 68-item questionnaire, enables companies to determine their degree of digital maturity and their progress in the adoption of Industry 4.0 solutions. It also provides benchmarks facilitating comparisons with other companies, by sector, region or size.
- **ACTIVE Industry 4.0** is a specialised, personalised advisory programme, conducted by accredited consultants with experience in the implementation of Industry 4.0 projects and performed in accordance with the methodology recommended by the General Secretariat for Industry and SMEs.
- **The ACTIVE Growth** programme is a personalised consulting facility consisting of 50 hours of advice, focusing on six levers of growth: innovation, human resources, operations, digitalisation, marketing and finance. The programme is funded by the General Secretariat for Industry and SMEs and is run by the School of Industrial Organisation in coordination with the Directorate-General for Industry and SMEs.
- **Active Cybersecurity** is a pilot programme for innovation in SME cybersecurity, promoted by the General Secretariat for Industry and SMEs within the framework of the Connected Industry 4.0 Strategy, in collaboration with the National Institute for Cybersecurity (INCIBE). Its main aim is to enable SMEs, in response to the incessant increase in cyberattacks, to determine their current level of cybersecurity and to take the measures necessary to protect their corporate systems and information.

The **ACTIVE Industry** programmes will be developed by the General Secretariat for Industry and SMEs, the School of Industrial Organisation and the National Institute for Cybersecurity (INCIBE). The programmes will invest 38 million euros during the period 2021-2023.

13) SUPPORTING THE DIGITALISATION OF SMEs IN THE TOURISM SECTOR

The Digital Transformation Plan includes programmes for companies operating in the tourism sector, to facilitate their digital transformation, via disruptive innovation in processes and the development of new digital products and services.

The tourism sector is highly fragmented. According to the 2017 INE Central Business Directory (DIRCE), 77% of the companies in the sector have only one or two employees, and 98% have fewer than 20. These companies are highly dependent on the innovations and technological solutions developed by their suppliers. However, their productivity may be significantly increased and their business model enhanced by appropriate digitalisation.

Among other measures, the Digital Transformation Plan for companies in the tourism sector includes specific programmes of assistance for companies, preferably SMEs, with respect to innovative technology-based projects. In this area, two types of projects will be financed: those related to innovation technology and artificial intelligence; and those related to technological innovation through other types of enabling technologies (such as the Internet of Things, 5G, Big Data, cybersecurity measures and mobile applications). The investment will be channelled through calls for applications, and will take the form of direct aid, repayable loans or a combination of the two, as appropriate, to finance projects to be carried out within 24 months.

The programmes included in the Digital Transformation Plan for companies in the tourism sector have been developed by the Secretariat of State for Tourism, in collaboration with the State Mercantile Company for the Management of Innovation and Tourism Technologies (SEGITTUR) and will invest 80 million euros during the period 2021-2023.

14) PROGRAMMES FOR THE DIGITALISATION OF COMMERCE

Programmes are being implemented to digitalise companies in the retail and commercial distribution sector, and to foster their internationalisation. These programmes are more specialised and segmented, and are aimed at companies whose activities are categorised in Section 47 of CNAE-2009.

For SMEs, the following digitalisation programmes are particularly important:

- The **Sustainable Markets Programme** provides finance to local entities and autonomous communities to modernise municipal markets, commercial areas, non-sedentary sales markets and short-reach marketing channels. Eligible projects must be designed in accordance with technological and innovative criteria to increase competitiveness and accelerate digitalisation towards a more sustainable model, especially as concerns renewable energies, the efficient use of resources, waste treatment/recycling and sustainable mobility.

The programme has been developed by the Secretariat of State for Commerce and will invest 215 million euros during the period 2021-2023, facilitating 1,200 projects. Moreover, 15 million euros will be reserved for municipalities in under-populated areas with fewer than 10,000 inhabitants.

- The **Trade Modernisation Programme** will support investment in projects to incorporate new technologies enabling local businesses to respond to changing consumption habits. The programme will impact on the digital transformation and sustainability of the establishment and/or its business model. Each project accepted will have 80% public financing and 20% private financing, thus exemplifying public-private collaboration. In addition, a Connected Commerce platform will be created to assist retailers in their digital transformation. Implementation of this platform will be based on a strategy agreed with RED.es and financed by RED.es and the Secretariat of State for Commerce, within the framework of the “Acelera PYME” programme, which is specifically intended to support the creation of e-commerce portals for local businesses. The Trade Modernisation Programme will invest 102.1 million euros during the period 2021-2023.

- The **Trade Innovation Diagnosis Programme** will support retail trade, as foreseen in the corresponding agreement between the Ministry of Industry, Trade and Tourism and the Spanish Chamber of Commerce “for the development of programmes to support the competitiveness of retail trade”. The programme offers SMEs, micro-enterprises and the self-employed specialised and personalised advisory services, free of charge, based on individualised diagnoses and systematised analyses, and will make recommendations of a strategic, innovative and digital nature, for retailers to renovate and optimise their management processes. Once the diagnosis is completed, a report will be given of the advisor’s recommendations. The programme is expected to enable 750 such diagnoses per year, at a cost of 0.83 million euros per year (2.49 million euros for the period 2021-2023).

- The **ICEX eMarket Services Programme** will facilitate the internationalisation of Spanish companies via its online presence, enabling access to electronic markets. This programme will be of value to companies in all phases of their online internationalisation, providing information, training, advice and consultancy, commercial promotion actions and operational support. The programme will invest five million euros during the period 2021-2023, benefiting some 500 SMEs.

This trade digitalisation programme will be developed by the Secretariat of State for Commerce, the Chambers of Commerce of Spain and ICEX Spain Export and Investments. It will invest 324.59 million euros during the period 2021-2023.

COORDINATION, EFFICIENCY AND REFORM

15) INTEGRATED NETWORK TO SUPPORT INNOVATION, DIGITALISATION AND ENTREPRENEURSHIP

One of the main resources available for promoting entrepreneurship and the innovation and digitalisation of companies, particularly SMEs, is the existence of a robust network of support centres, providing advisory, training and knowledge transfer services, tailored to the company's specific needs.

In Spain, there exists an ecosystem of agents working to provide this support, via diverse networks, which are structured according to their main objectives: support for entrepreneurship, innovation or digitalisation. Although in general they function independently, their operations sometimes overlap when a single agent forms part of different networks (for example, a technology centre, whose main task is to facilitate innovation, can also act as a digitalisation office).

In the SME Digitalisation Plan, these networks will be promoted via the following measures:

- Measure 4. "Acelera PYME" programme
- Measure 9. Programme to support innovative business clusters
- Measure 10. Programme to support digital innovation hubs
- Measure 11. Programmes to support digital entrepreneurship

As a complementary, reforming measure, in response to the large number of agents and networks in the above-mentioned ecosystem, and considering the close connection between the three activities concerned, the Plan seeks to **reform the networks**, providing them with **greater cohesion** according to the following criteria:

- Reflect the complementarity among these agents, by combining the capillarity offered by some with the specialisation of others (for example, by using physical centres to provide videoconference access to experts from other centres, and even from different networks).
- Strengthen the orientation towards entrepreneurs, the self-employed and SMEs, making the network demand-based (aimed to meet users' needs at a single point) rather than supply-based (in terms of the scope offered by each programme).
- Personalise the support given according to the stage of the company's life cycle, while ensuring the provision of comprehensive support, thus facilitating the company's evolution between different phases.
- Make better use of virtual platforms, integrating their content and services to present a comprehensive range of physical and digital resources.

To achieve the above goals, **the strategy and planning of the network must be conducted in a more orderly and coordinated fashion**, enabling it to specialise in accordance with the technological and sectorial priorities identified, and ensuring the generation of economies of scale, thus maximising efficiency in deployment and operation, enhancing synergies and achieving the desired impact among the SMEs addressed.

16) DIGITAL CERTIFICATION FOR SMEs

The aim of this measure is to determine the viability and, where appropriate, to develop and promote an accreditation and certification scheme for the digital maturity of SMEs, providing official acknowledgement of business excellence and the investments made in digital transformation.

This facility would cover all stages of SME digitalisation, including levels corresponding to the implementation of certain basic transformations resulting in a standardised digitalisation profile, which can be used, among others, in the Digital Programme Toolkit. Lightweight labelling and certification systems would be used where appropriate.

The Secretary of State for Digitalisation and Artificial Intelligence, in collaboration with the Spanish Standardisation Body (UNE), will carry out the feasibility study and, where appropriate, implement the scheme, which will be designed taking into account any pre-existing initiatives to certify the digitalisation of SMEs.



GOVERNANCE AND BUDGET

PRODUCTS
POSITIONING

SALES per COUNTRIES

Level 1

TMX	▲	98.0	▲	+98.0%
STO	▼	-0.05	▼	-0.05%
TR	▼	-20.0	▼	-20.0%
HK	▲	+50.0	▲	+50.0%
VIO	▼	-10.0	▼	-10.0%
EX	▼	-30.0	▼	-30.0%
KEY	▲	+65.0	▲	+65.0%
HLD	▲	+55.0	▲	+55.0%
LP	▼	-15.0	▼	-15.0%
IB	▼	-25.0%	▼	-25.0%

172.67 09:29H

STOCK MARKET REPORT

6. GOVERNANCE AND BUDGET

6.1 GOVERNANCE

6.1.1 Advisory Council for Digital Transformation

This Plan is one of the development measures included in Spain's Digital 2025 Agenda. Accordingly, its governance and monitoring system will be integrated into those established for the Agenda, namely the **Advisory Council for Digital Transformation and its Standing Committee for the Digitalisation of the Economy, the Public Administration and the Citizenry**.

The Plan's governance and monitoring will also be incorporated into the **SME State Council**, and will take advantage of existing structures, working groups and committees in matters relating to innovation and digitalisation.

The governance system, therefore, will have a twin-track responsibility.

For this purpose, an **Executive Committee** will be established, to be coordinated by the Secretariat of State for Digitalisation and Artificial Intelligence, and composed of the public and private agents required to achieve the successful implementation of this Plan. This Committee will meet at least quarterly to monitor and, if necessary, adapt the Plan, and more frequently if circumstances so require.

The Executive Committee will be assisted by a **Technical Office** to manage and monitor the Plan.

6.1.2 Observatory to support Business Digitalisation

The Observatory to support Business Digitalisation is a consultative collaboration scheme, to be established among the agencies involved in business digitalisation, in conjunction with the National Observatory of Telecommunications and the Digital Society (ONTSI). Its purpose is to consider the major structural reforms needed to support the digitalisation of SMEs and to make recommendations in the following areas:

- Organising, reorienting and, where appropriate, reinforcing programmes to support business digitalisation; improving current provisions, enhancing the digitalisation map and identifying inefficiencies or gaps in coverage;
- Increasing the efficiency of existing financial and tax advantages to better meet the needs of productive sectors, and reducing gaps in benefit coverage;

- Monitoring the development and contribution of programmes to promote enablers of digitalisation, to increase their effectiveness and to focus attention on the digitalisation of SMEs.
- Identifying potential reforms to the regulatory framework that would accelerate the digitalisation of productive sectors and eliminate legal barriers and disincentives, thus creating a coherent regulatory environment facilitating the digital transformation of the productive fabric; where appropriate, analysing opportunities for the development of regulatory sandboxes;
- Reporting on the digitalisation plans of public agencies and private associations, detecting possible barriers to digitalisation and proposing measures to overcome them;
- Promoting the creation of stringent universal standards to boost and underpin the development of digital technologies in Spain and to ensure the economic and environmental sustainability of the digital transformation undertaken by productive sectors and throughout society. Complementing regulation, standards play an essential role in digital transformation, and the present complexity of norms and regulations concerning digitalisation makes it necessary to coordinate actions in this area.

6.1.3 Business Digitalisation Intelligence System

The Business Digitalisation Intelligence System will provide advanced, highly segmented, reliable, real-time knowledge of the state of digitalisation of the business fabric, complementing official statistical models.

With currently-available capacities, systems and metrics it is not possible to obtain an accurate view of the digitalisation of specific business sectors and professional activities, or map the levels of maturity achieved. Nevertheless, this information is essential to the development of effective, resource-efficient programmes, rather than the present situation in which general-focus actions tend to be less efficient and produce less impact.

The System will help policymakers make evidence-based decisions in the design and evaluation of digitalisation policies and programmes, and will facilitate the identification of barriers.

The System is conceived as a public, open big-data instrument that will assist in diagnostics, decision-making, impact assessment and forecasting. It will provide a multidimensional digitalisation map, drawn from public and private data sources. It will facilitate the use of techniques to extract valuable information, using the Internet as a data source, and may provide a basis for implementing networks of sensors to monitor business digitalisation.

6.2 BUDGET

The SME Digitalisation Plan represents a public investment of 4.656 billion euros and will produce a direct impact of 4.459 billion euros in the form of aid for digitalisation.

The corresponding public investments will be financed with European funds from the Recovery & Resilience Facility and will be subject to budget availability.

ACTION MEASURES AND AREAS	Implementing Ministry	Budget (M€)
Basic digitalisation for SMEs		3.118
1. Digital Toolkit	MAETD	3.000
2. Connectivity voucher (1)	MAETD	50
3. Protect your company	MAETD	42
4. Acelera PYME	MAETD	26
Managing change		656
5. Management training programme (2)	MAETD	256
6. Experts in the digital transformation of SMEs (2)	MAETD	100
7. Agents of change	MAETD	300
Disruptive innovation and entrepreneurship		439
8. Disruptive innovation for the digital transformation of SMEs	MAETD	100
9. Support for Innovative Business Clusters	MINCOTUR	115
10. Support for Digital Innovation Hubs	MINCOTUR	42
11. Support for Digital Entrepreneurship	MAETD	182
Sectorial support for digitalisation		443
12. Active Industry	MINCOTUR	38
13. Digital Tourism	MINCOTUR	80
14. e-Commerce	MINCOTUR	325
TOTAL		4.656

(1) Programme financed by the Plan for the Connectivity and Digital Infrastructure of Society, the Economy and the Territory

(2) Programmes financed by the National Plan for Digital Skills

ACRONYMS:

-MAETD: Ministry for Economic Affairs and Digital Transformation
 -MINCOTUR: Ministry for Industry, Energy and Tourism



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