









Contents

1 > Introduction	03.
2 > Cloud services in the digitization process 3 > Digital solutions in the cloud	06.12.
5 > References	22.

Fondo Europeo de Desarrollo Regional







1. Introduction

Currently, most companies in Spain are characterized as SMEs, accounting for 98.99% of the total number of companies and 45.98% of employment [REF-1].

However, according to the Digital Economy and Society Index (DESI) report prepared by the European Commission, which measures the level of digitalization of EU member states, Spain shows a low level of digitalization in the business fabric in general and, specifically, for cloud services, only 16% of companies use them, compared to 18% in Europe [REF-2]. Accordingly, these aspects will have to be improved, as the EU has set, among others, the target of cloud utilization and uptake by 2030, in the EU Digital Compass of the Digital Decade.

This is particularly important in a scenario marked by the health crisis resulting from Covid-19, which has led to the urgent need to boost the digitization of SMEs, as they are the most vulnerable to the consequences of the pandemic. Digital transformation is presented as one of the most effective tools to strengthen the resilience of SMEs during this crisis and future situations, as well as to improve their competitiveness. Cloud services, in this sense, will allow companies to better adopt the digitization of their internal and external processes, boosting and enhancing their digitization.

The way customers interact with companies is changing rapidly. .

Customers, increasingly demanding, request access to the company through multiple channels, while the company seeks to be close to the customer, anticipating their needs by providing a useful, simple and differential experience.

Fondo Europeo de Desarrollo Regional









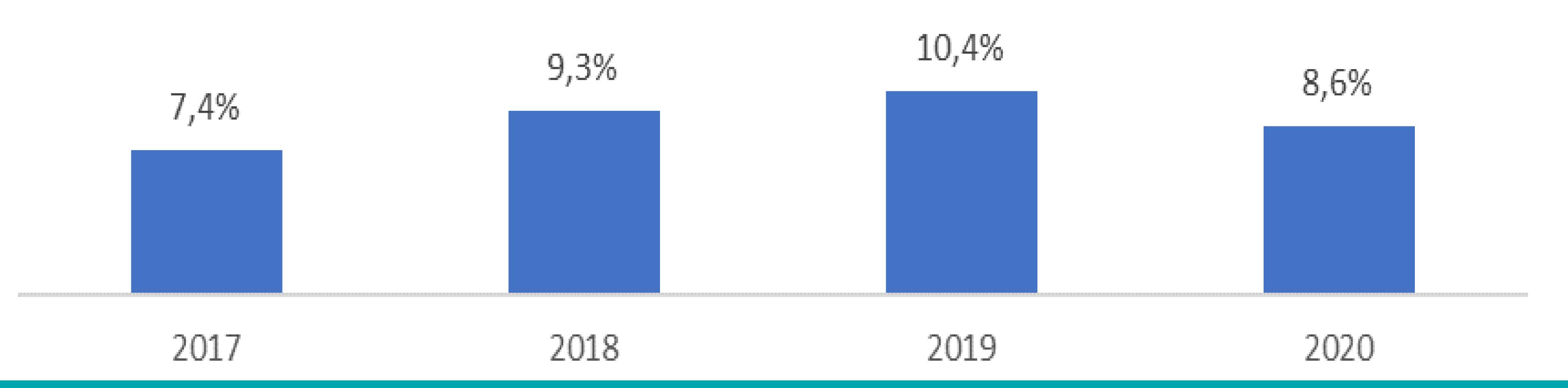
Being able to respond by the current corporate systems to adapt to new business requirements is a major challenge for SMEs. The rigidity of current systems to evolve and the difficulty of integration with new elements in a controlled and efficient way results in an increase of time to market and the need for high investment.

With this in mind, and in relation to cloud services, in 2020, more than 28% of Spanish companies with more than 10 employees had some cloud computing service used over the Internet.

In this regard, the following illustration shows the evolution of cloud services since 2017 in companies with less than 10 employees. From 2017 to 2019 the percentage of companies using some cloud service has increased, with a slight decrease in its use in 2020 compared to the previous two years.

% of companies that buys a cloud computer services through internet

(companies with less than 10 employees)



[REF-3] Graph 1. Source: INE. Cloud Computing. Companies with less than 10 employees : ICT in companies. 2017-2020.

Fondo Europeo de Desarrollo Regional





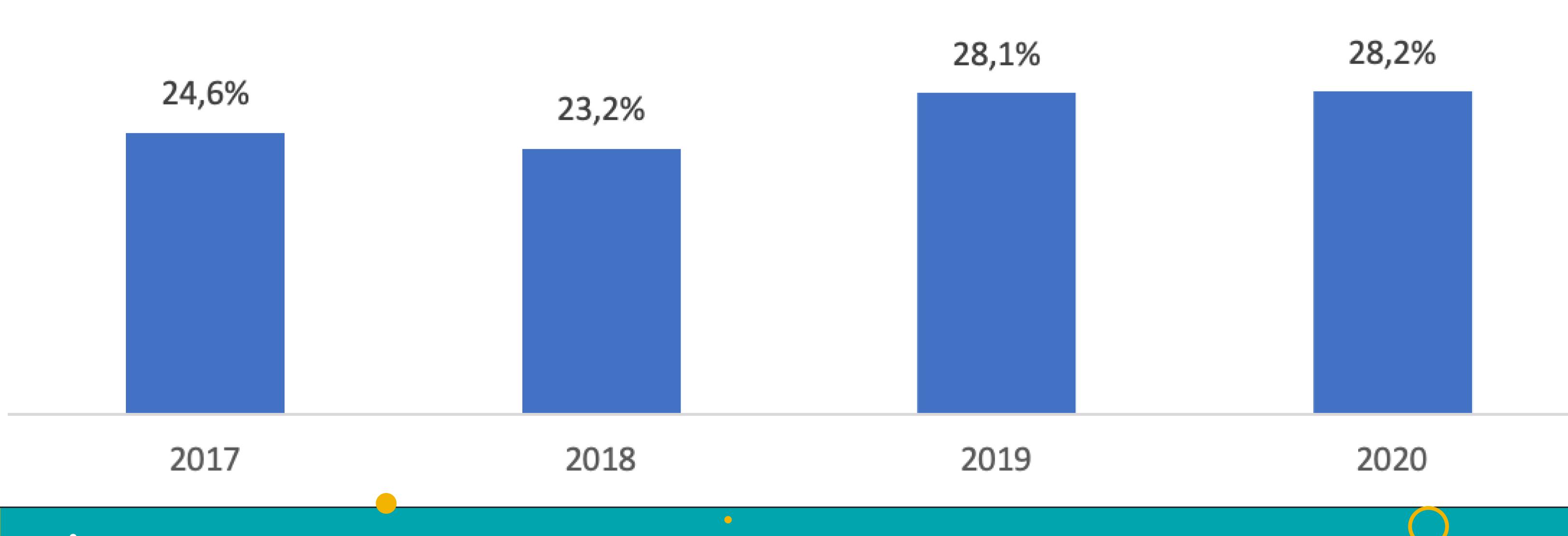




However, companies with more than 10 employees have seen an increase in the use of cloud services since 2018, reaching in 2020 the percentage of 28.2% of companies that have purchased some cloud service used through the Internet. In any case, the most used cloud services are those linked to ERP and POS.

% of companies that buys a cloud computer services through internet

(companies with more than 10 employees)



[REF-4] Graph 1. Source: INE. Gloud Computing). Companies with more than 10 employees: ICT in companies. 2017-2020.

Fondo Europeo de Desarrollo Regional









2. Cloud services in the digitization process.

There is a "new way" for SMEs to meet these business challenges with a positive impact on their business, with a centralized cloud platform that allows them to accelerate their digitization process both in form and content thanks to the use of innovative cloud solutions, linked and adapted to the needs of each business.

The cloud or cloud technology is considered one of the main enabling technologies in the process of digital transformation of companies as it offers a wide range of IT services that are consumed as a service and offer a payment model based on the use made of them. The present demands flexible, agile and highly available infrastructures...

And this is where the cloud provides an adequate solution to the business demand.

Service providers typically offer product licensing, infrastructure and maintenance support.

To reach the success of this model, it is essential to consider the following aspects:

- 2.1 All as a service.
- 2.2 All packaged and industrialized.
- 2.3 Verticalized.
- 2.4 All orchestrated and centrally governed (Centralized operational model).

Fondo Europeo de Desarrollo Regional









2.1 All as a service (PaaS y SaaS)

Platforms as a service or PaaS translate into business management application platforms that provide users with a complete functional solution with the advantage of not having the server locally, covering the entire business process from start to finish. All this, in a cloud environment where they can deploy, operate, monitor and manage different applications and services in a very simple, efficient and secure way, covering different topics for different retail models (own stores, franchises, etc.), different countries or business models. A clear example is the URL sales transactions, in which there are no installations, and the merchant can operate with the customer from that URL.

In addition to storage and other IT resources, merchants can use a set of prebuilt tools to develop, customize and test your own applications, or third-party applications through maximum cloud coverage.











- The growing trend towards solutions as a service (SaaS), operated and managed in cloud mode, allows users to access them directly without the need to install applications on their local devices, in addition to having many other advantages in terms of architecture:
- Scalability: with expansion capability. For example, opening of another business.
- Security (physical, logical and legal): Security of having the service hosted in the cloud.
- Agility in the implementation and instant updates incorporating the latest technology on the market.
- System continuity, without interruptions in operations.

Under this concept, SMEs would have the ability to easily contract, access and manage solutions through a "one-stop shop":

- Hiring and activating at any moment what they need.
- Managing access to those authorized users, assigning licenses to each employee.
- Manage the costs incurred using the solutions or service contracted (monthly report, possibility of receiving invoices...), among others.

Fondo Europeo de Desarrollo Regional









2.2 Packaged and industrialized

Agility has become essential when implementing a solution in a business. The fact of being able to contract packaged solutions guarantees agility and automation in the deployment in multiple sites, as well as offering unlimited scalability to meet the needs of those SMEs that require it.

On the other hand, it seems reasonable to think of an industrialized managed service, adapting the infrastructure model and service equipment to the needs of the SME.



Fondo Europeo de Desarrollo Regional







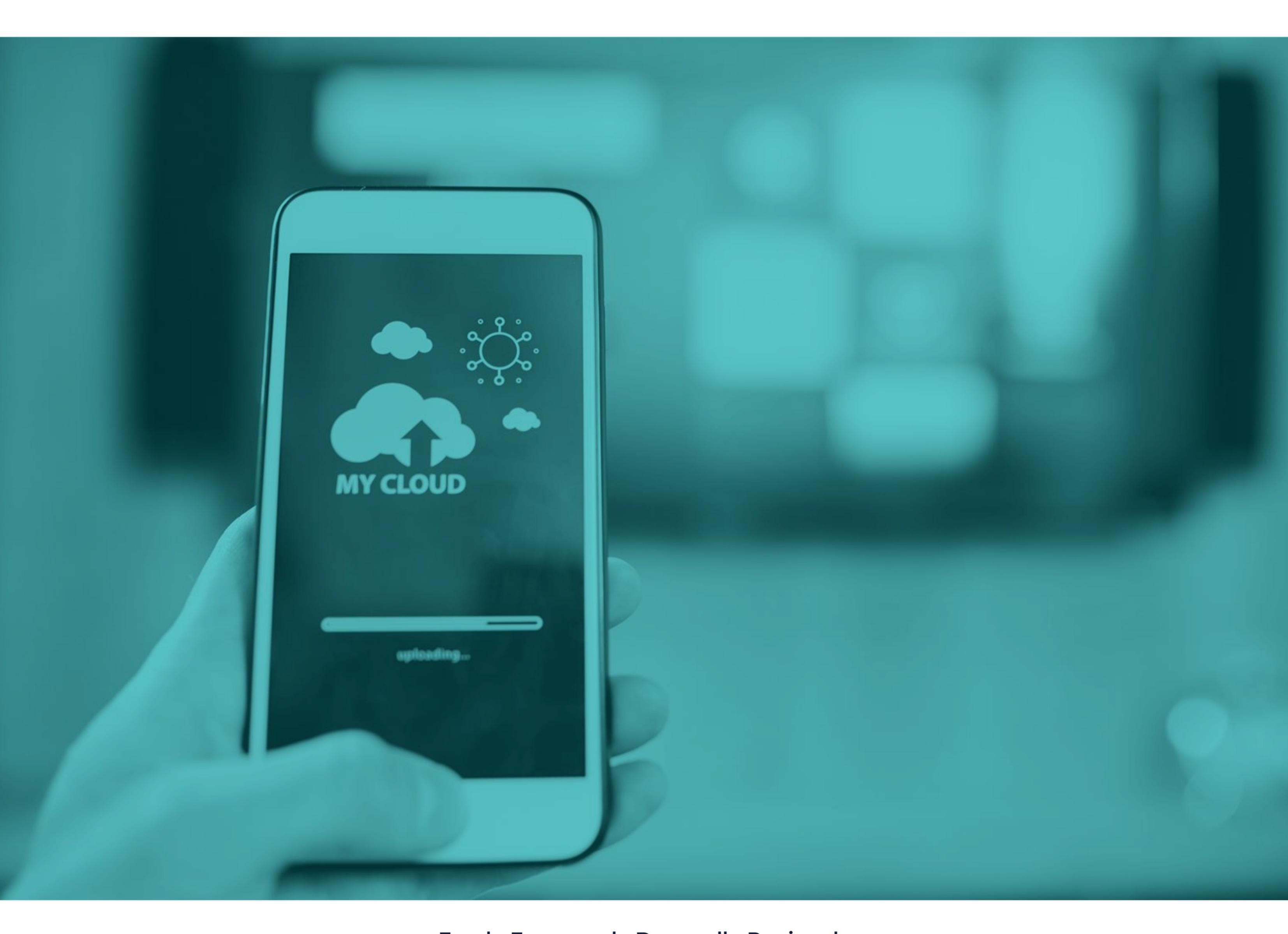


2.3 Verticalized

> Perhaps one of the most valued features in a solution is its flexibility.

Verticalized solutions can respond to each SME according to the characteristics of its business or activity, easily adapting to each sector and with a minimum impact on the solution.

Within an open and collaborative platform to meet the needs of different businesses, it is possible to incorporate external solutions or new devices that add value, increase the overall functionality and can have a greater market reach.



Fondo Europeo de Desarrollo Regional



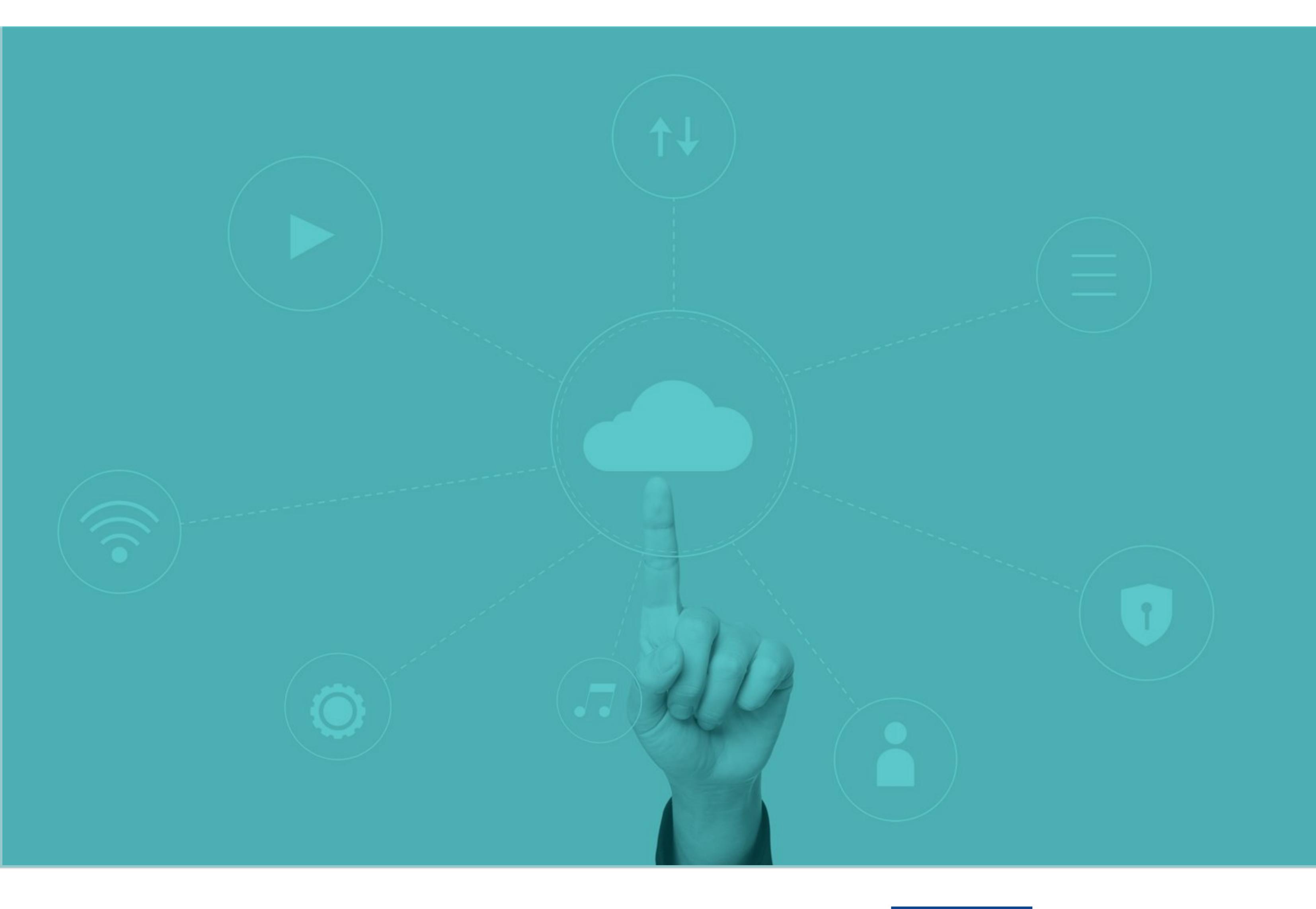






2.4 Centralized Operating Model

- > The centralized operating model in the cloud allows central configuration of all business logic, introducing clear benefits for the SME as follows:
- Minimal hardware requirements: no local server in the stores, requiring only an Internet browser.
- Minimum bandwidth requirements...
- No local software implementations.
- Real-time control of each store (stock, invoicing, etc.).
- A single integration with external or corporate vendor systems.
- Hierarchical control over different ownership models.









3. Digital solutions in the cloud

Below is a list of some of the main digital solutions or tools that SMEs can implement in a cloud environment and be able to coexist with existing solutions in the company, which will allow them to advance in their degree of digitization, commercial presence and sales rate:

3.1 Sales

Specifically, for the sales area, SMEs can implement the following solutions:

- Enterprise resource planning system.
- Point-of-sale terminal.
- eCommerce Solutions.
- mCommerce Solutions.
- cCommerce Solutions

3.1.1 Enterprise resource planning system (ERP)

It is a basic element of business management, consisting of different functional modules that allow businesses to have a global vision from beginning to end of the sales processes, as well as a comprehensive management of the goods or services offered, their associated rates, stock and suppliers, or configuration of promotions, among others. One module associated with ERP that can be of great importance is CRM, as it allows users to categorise product lines to help evaluate sales projections.

Fondo Europeo de Desarrollo Regional









In addition, cloud ERP systems offer great control and flexibility to adapt the platform to each business, as they allow managing both the general functionalities of the product being sold and the different sales channels.

The different sales channels, both online and offline, are built from the combination and interrelation of different ERP modules, so that a centralized management of the system and an omnichannel vision of the platform is achieved.

3.1.2 Point-of-sale terminal

Thanks to the cloud architecture and the interconnection of solutions through the enterprise resource planning system, the point-of-sale terminals in the cloud allow to manage the sales process through an interface accessible to retailers and from any device, promoting a perfectly customizable solution for use from a mobile terminal or a tablet.

It is a POS solution with which to complete transactions allowing payment with different means of payment, generate and print the sales receipt, manage the store's inventory and rates, carry out different cash operations, or generate reports related to commercial management, among others.

Fondo Europeo de Desarrollo Regional









3.1.3 eCommerce Solutions

These are various technological platforms made available to SMEs to sell products and services over the Internet, being able to reach a larger number of consumers thanks to their ability to adapt to any B2B or B2C scenario.

Fundamentally, an online store is a website that provides users with special eCommerce functions, with several basic features that allow for:

- Global customization, adapted to the image of each store.
- Possibility of making the purchase process for registered and unregistered users in a quick and easy way.
- A unified product catalog.
- Tracking the purchase process through to delivery to facilitate customer insight and increase customer confidence.
- Improve the management of users and clients by obtaining information that allows for feedback on processes in order to optimize service.
- Incorporate new, more agile, efficient and secure payment methods that also facilitate their use by the customer.

Fondo Europeo de Desarrollo Regional









3.1.4 mCommerce Solutions

These are mobile shopping solutions in which retail customers benefit from a self-paced shopping experience.

After scanning a QR code that can be found in the store itself, on an advertisement, on a magnet on the fridge, or through a link they have received in their email, customers can directly access the store's product catalog.

The entire purchase process is done from the cell phone without the need to download anything or complete any registration process. In addition, customers can select the delivery option that suits them best, either pick up at the store itself or receive the order directly at home. In this way, customers can place orders in just a few clicks and meet their needs.

On the other hand, the retailer has access to sales data from his portal, he can see for example what his customers buy and how often, analyze this information and make decisions about your business.

3.1.5 cCommerce Solutions

A step further within mCommerce solutions are conversational commerce solutions. In this case, customers can make purchases or access discounts and promotions via WhatsApp, without the need to download or install anything else.

For this type of solution, technology goes hand in hand with artificial intelligence to interact with customers and provide them with an intuitive experience.

Thus, customers get a personalized and efficient service, being able to have a conversation, resolve a doubt or purchase at any time, and the company will improve its sales potential and simplify its processes in the interaction with the customer.

Fondo Europeo de Desarrollo Regional









3.2 Payments

For the payment area, the following solutions that merchants can implement are explained below:

- Electronic receipt.
- Bizum for business
- Android device payments (TapToPhone).
- Payment by notification.

3.2.1 Electronic receipt

Thanks to solutions of this type, retailers have the possibility to send receipts electronically to their customers, so that they are always available for exchanges, guarantees or simply to control expenses.

The store does not need to change its POS software, simply by installing an agent on the computer where the software runs, it is able to obtain all the tickets generated by the store. With each purchase, the clerk is asked for a customer identifier to link the ticket univocally. Once the customer has been identified, a link is sent to the customer so that he can access his receipt.

In this way, retailers can identify all customers interested in having the ticket and create a database that can be used later with digital marketing tools to send communications or even promotions.

3.2.2 Bizum for business

Dizum for business is another of the payment methods that can be the most ideal for your business.

Adding Bizum as a payment method in your e-commerce will facilitate the relationship with your customers, as only their telephone number and the password provided by Bizum will be needed to make the online purchase. The option of incorporating Bizum as a payment method is available in the main e-commerce platforms (Prestashop, WooCommerce, etc.) and e-commerce creation platforms (Shopify, Sipay, etc.).

Fondo Europeo de Desarrollo Regional









3.2.2 Android device payments (TapToPhone)

These are TapToPhone-type solutions that enable an Android device (tablet or smartphone) with NFC technology to be converted into a terminal that accepts contactless credit and debit card payments without the need for any additional hardware. After a simple registration and download of the payment application, the merchant can use his Android device to accept payments with cards, smart watches, digital wallets and other contactless devices.

TapToPhone bases its technology on the standard and security of an EMV transaction minimizing fraud and the risks of card-not-present payments:

- Leverages the small merchant's existing mobile device for payment acceptance.
- Simplifies the implementation of a face-to-face payment solution.
- Allows to combine in a single device both the POS application and the payment.
- Offers a payment solution from any location without the need for a fixed point of sale.

In this way, merchants can identify all the customers interested in having the ticket and create a database which can then be used with digital marketing tools to send communications or even promotions.



Fondo Europeo de Desarrollo Regional









3.2.3 Payment by notification

Payment by notification allows customers to process their payment through a secure link received from their favorite channel (email, SMS, or WhatsApp).

This type of solution allows the merchant to generate a link or QR code that leads the customer to a Virtual POS solution with preloaded payment information (identification of trade, amount, concept and other additional information) so that the customer can complete the payment details and accept the payment.

3.3 Loyalty

The following solutions that can be used by retailers in the field of customer loyalty are explained below:

- Digital Marketing Tools.
- Real Time Marketing Engine.
- Coupons.
- Marketing and communication campaigns.

3.3.1 Digital Marketing Tools

Digital Marketing tools are examples of solutions that companies have sought to reduce Customer Acquisition Cost (CAC). Whether in the implementation of advanced or basic strategies, they are used by many types of businesses.

They serve to automate many manual tasks that take time to execute and make it difficult to prioritize more strategic activities.

With digital marketing tools, it is possible to address a large volume of information, accelerating processes and improving results >

Fondo Europeo de Desarrollo Regional









Among the many existing options, we can find email marketing tools, marketing automation, content marketing, content creation and editing, SEO and SEM, benchmarking, online presentation sharing, social media management and prospecting, brand online presence monitoring, social media influence measurement, etc.

3.3.2 Real Time Marketing Engine

It is increasingly common to reward customers for their loyalty based on a series of behavioral rules, giving them rewards or benefits that respond to the fulfillment of multiple defined events.

There are countless rules to be managed based on the following areas, for example:

- Related to customer attributes (age, segment, number of children, etc.): Note that the product is customizable without development, so it is possible to add and customize attributes. Predefined target audiences (e.g., generated with the "Marketing and Communications Campaigns" module). Behavior or usage habits.
- Frequency of occurrence of events, or even for events with an accumulated amount (purchases) in a certain period (e.g.: more than 1.000€ in the last 3 months)
- Event-related; By channel (online, app, partner, etc.), location of the event, when it occurs (days, times, day of the week).

Fondo Europeo de Desarrollo Regional









3.3.3 Coupons

Solutions that enable the design of personalized coupons, based on discounts or any other type of rewards, which can be given directly to customers or through a real time campaign engine.

They also allow individualized tracking of the status of each coupon, from creation, assignment to a loyalty member, until the coupon is used.



3.3.4 Marketing and communication campaigns

- Data segmentation consists of generating filters on the data stored in the platform, allowing the SME to use them for the following purposes:
- Generate informative communications.
- Generate communications that require customer feedback (surveys).
- Export the pre-selected data to a file.
- Assign the group to a Real Time Marketing campaign if this module is available.

Fondo Europeo de Desarrollo Regional









4. Conclusions

After the Covid-19 pandemic companies have become aware of the importance of digitization within their corporate structures. One of the most influential trends that has emerged after the pandemic has been the new ways of relating to customers digitally, anticipating needs and improving the relationship between companies and the corporate digitalization of the company itself through cloud services, an agile and simple way to have business data available in real time and with access from any device and anywhere.

Spanish companies have increased their use of cloud services in the last three years, according to official data provided by the INE, which implies that there is a digital awareness and an initiative to improve on their part.

Currently, cloud computing services are adapted to the different needs that may arise in the company. There are cloud services designed to digitize the entire business management from end to end and others that are customized, depending on the needs of the company.

The digital cloud solutions that SMEs can adopt cover different areas of great relevance in the business strategy of an SME: sales, payments and customer loyalty. Currently, suppliers make available to SMEs numerous tools or services that can be adapted to the needs of their business and make the company grow.

Finally, it is important to note that it is becoming increasingly common to accompany businesses with cloud services, to improve their efficiency, communication and business management. The data analyzed in this monograph reveal the increased use of these services by companies, improving and involving the company in the digital transformation process required.

Fondo Europeo de Desarrollo Regional







5. References

[REF-1] Figures iPyme reports January 2021:

http://www.ipyme.org/es-

ES/ApWeb/EstadisticasPYME/Documents/CifrasPYME-enero2021.pdf

[REF-2 Digital Economy and Society Index report (DESI):

https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=66959

[REF-3] Companies with less than 10 employees: ICTs in enterprises. 2017-

2020. https://www.ine.es/jaxiT3/Datos.htm?tpx=25618

https://www.ine.es/jaxiT3/Datos.htm?tpx=28827

https://www.ine.es/jaxiT3/Datos.htm?tpx=32810

https://www.ine.es/jaxiT3/Datos.htm?tpx=37768

[REF-4 Companies with more than 10 employees: ICT in the enterprise. 2017-

2020. https://www.ine.es/jaxiT3/Datos.htm?tpx=25632

https://www.ine.es/jaxiT3/Datos.htm?tpx=28840

https://www.ine.es/jaxiT3/Datos.htm?tpx=32835

https://www.ine.es/jaxiT3/Datos.htm?tpx=37782

Fondo Europeo de Desarrollo Regional







