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# The electronic signature to improve your processes.

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# 1. Introduction

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Spanish companies are moving faster and faster towards a new digital transformation, where most SMEs, before the exceptional situation caused by the COVID-19 crisis, had electronic signature solutions. As a result of this situation caused by it, their demand has increased significantly, making them see the need to extend the solution they had to more use cases and departments or multiply the solutions according to the new needs.

The increase in teleworking due to the different measures of confinement, social distance and public health and safety, together with the adaptation of SMEs to the operation according to the recommendations of COVID-19, has accelerated the need to have electronic signatures. Currently, the electronic signature is a vital tool for any type of company to work more efficiently.

According to the study carried out by IDG Research Services, the operations of different medium-sized companies in European markets are analyzed, in order to know the different expectations presented by SMEs in these countries and the employment results of the electronic signature.

According to the study, Spain has the highest use of electronic signatures within the European market, where its adoption in that market is around 83%, and as a result of the current situation, trends expect it to reach 90% soon. [REF.01].

As a result of a very high use of the electronic signature and the good implementation in Spanish companies, the next steps to be followed by these companies is greater integration throughout their processes. In addition, it can be verified as a result of this study, the importance of the electronic signature, which must evolve towards a universal solution, to achieve a generalized use of all companies and thus, respond to present and future needs.

In short, the trends of the future increasingly guide us to hybrid work models, which lead us to incorporate in organizations different elements of digital trust and an increase in control over the documents generated. For all these reasons, organizations, increasingly, see the need to implement the electronic signature.



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## 2. What is an electronic signature?

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As established in EU Regulation No. 910/2014, which deals with aspects related to electronic identification and trust services, it defines the electronic signature (Article 3.10) as the "data in electronic format annexed to other electronic data or logically associated with them that the signatory uses to sign" [REF. 02].

Normatively speaking, Law 6/2020, of November 11, regulating certain aspects of electronic trust services [REF.03] complements certain aspects of the Regulation of the European Parliament, repealing the until then current Law 59/2003, of December 19, on electronic signature [REF.04].

It is interesting to consider what the electronic signature can bring to your SME. This allows, in a simple way, to sign documents through different types of electronic signature creation devices remotely and have the use of tools that strengthen the security of operations. In short, it is a question of having electronic means of proof with the same legal value as handwritten signatures..

In fact, both signatures (electronic and handwritten) have the main purpose of ensuring the identity of the signatory; however, the advantage of the electronic signature is that it generates proof of consent and approval of the information contained in the documents electronically, so that the traceability and authenticity of the signature can be guaranteed..

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Electronic signatures are backed by electronic signature creation devices that provide technological support to trust services provided by trust service providers. Both the devices and the services and providers can be "qualified", which provides greater guarantees for the procedures that require it.

For an SME, having an electronic signature allows you, among other things, to sign documents remotely, whether they are purchase orders, employment contracts or budget documents..

## What is the electronic signature for??

The electronic signature is necessary to carry out a large number of procedures or current operations that are carried out through the internet with third parties, whether public or private entities. Its use can also be useful for all the procedures carried out as an SME with the Public Administration.

The digital transformation of companies occurs constantly. Hence, at present, one of the most important aspects is the implementation of the electronic signature for all types of companies, especially SMEs. This entails, regardless of the characteristics that make up the SME or sector in which it is located, that documents can be signed in a totally secure way, thus reducing waiting times and procedures with the administrations.

The digital signature can be used to carry out different procedures. Below are the most common procedures, such as:

- Make bureaucratic requests in electronic administrative records
- Receive electronic notifications from public administrations
- File and settle taxes
- File appeals and complaints
- Sign official documents without travel

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## Types of electronic signature.

According to the European Regulation, there are three types of electronic signature, and each of them has different levels of security [REF-5]:

# 1.

- **Electronic signature:** it is composed as a set of data in electronic form, which are recorded together with other data, and these can be used as identification of the signatory. This type of signature is the most basic electronic signature, allowing a signatory to be identified through simple security systems, such as the username and password. For example, a simple electronic signature is a username and password to access a web page or sign a PDF document.

# 2.

- **Advanced electronic signature:** this type of signature, in addition to proceeding to the identification of the signatory, allows to detect any subsequent change that occurs in the signed data. Therefore, it is an electronic signature linked in a unique way to the signatory and the data that compose it. This signature is created by means that the signatory can keep under his exclusive control. As an example of an advanced electronic signature, we have the handwritten biometric signature.

# 3.

- **Qualified electronic signature:** this type of signature has the characteristics of the advanced and, in addition, is based on a recognized digital certificate. This signature is considered as the legal equivalent of the handwritten signature and, in order for the verification of the identity of the certificate to be guaranteed and generated on a secure signature device, it can only be issued by an official Certification Authority.

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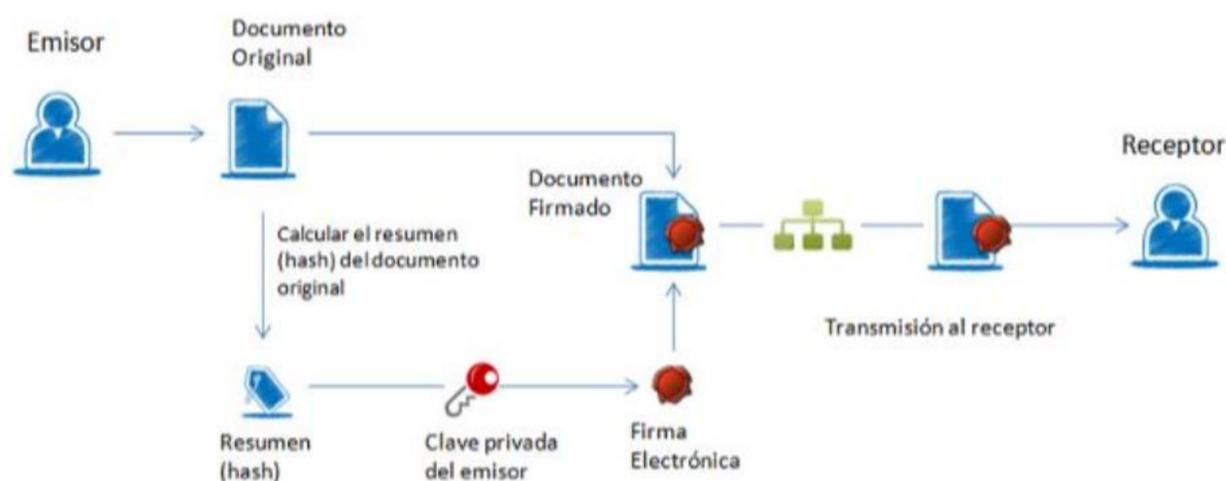
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All electronic signatures are legally valid, but depending on the level of identification and the security used, it will grant greater or lesser legal validity.

The following graph shows the general process of electronic signature, regardless of the device (qualified or unqualified) used to carry it out:



Source: Portal Administración Electrónica

In order to carry out the process followed by the electronic signature, SMEs must take into account the following steps to follow:

- The person who wants to sign must have a file in electronic format (PDF document, spreadsheet, or even a form on a web page).
- The electronic signature creation device will operate on the file signed according to the characteristics of the signature used ("basic", advanced or qualified)

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In the case of the use of electronic certificates, the application uses the private key to encode the summary and creates an electronic document containing said encoded summary. This new document is the electronic signature associated with the original file that was put to signature.

As a final result of all this process, an electronic document is obtained generated from an original document and the key creation system of the signing user.

When carrying out any management that requires an electronic signature, three key questions can be asked that allow choosing the most appropriate and least burdensome type of signature for SMEs:

1. Do you want to be absolutely sure that the signatory can be identified?
2. Is it necessary to be certain that the signature is linked only to the signatory?
3. Is it necessary to be certain that the signature has been created under the exclusive control of the signatory?

In case the answer to the three questions is negative, the simple signature is sufficient; on the other hand, if you have a positive answer to any of the questions, it should be assessed whether the advanced or qualified electronic signature is appropriate. In this way, depending on the nature of the content of the file you want to sign, you can choose the one that is most practical and appropriate.

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## The advanced electronic signature

At this point we will analyze in more detail the advanced electronic signature, which is the type of signature most used by Spanish SMEs.

This type of signature is established as a set of data, which are attached to an electronic documentation in order to uniquely identify the author. In order to carry out this type of electronic signature, a series of requirements must be met:

- Link to the signatory holder in a unique way.
- Possible identification.
- Creation using signer data and exclusive control of it.
- Connection with the data signed in the document, without allowing subsequent modification of them.

All these features that correspond to the advanced electronic signature provide complete security to the signatory during electronic transactions. One of the most important aspects of it is the integrity of the content that is signed, ensuring that the signed documentation has not been modified or the identity of the signatory has been modified, that is, with its use the signatory can be identified and verify the verification that the documentation to be signed has not been modified.

The advanced electronic signature marks certain relevant differences with the rest of the signatures (the "simple or basic" electronic signature and the qualified electronic signature).

The first of these is the identification of the person signing the documentation. The simple electronic signature does not have an obligation in the creation of an identification pattern of the signatory, when for the advanced electronic signature it is one of the mandatory requirements established as a security criterion for operations.

On the other hand, advanced and qualified electronic signatures share most of the characteristics and uses. Among the differences to highlight between both firms is the creation of the firm itself. The qualified electronic signature is an advanced electronic signature that, in addition, is created by means of a qualified electronic signature creation device and that is based on a qualified electronic signature certificate.

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The electronic certificate is the usual means used for electronic signatures. As in the case of the signature, services or devices, there is the possibility of it being qualified. The differences between the two are given by the very definition of the Regulation, in its Article 3:

- Art. 3.14) 'electronic signature certificate' means an electronic declaration linking the validation data of a signature with a natural person and confirming at least that person's name or pseudonym;
- Art. 3.15) 'qualified electronic signature certificate' means an electronic signature certificate which has been issued by a qualified trust service provider and which satisfies the requirements set out in Annex I to the Regulation.

Thus, the mission of the certificate is to validate that the electronic signature corresponds to a specific person or entity. In addition, it contains the necessary information to electronically sign and identify its owner with their data.

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# 3. Benefits of electronic signatures

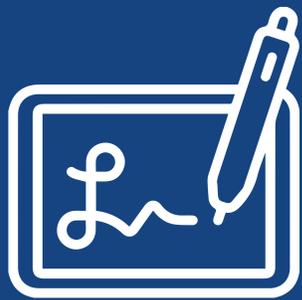
Spanish SMEs have, for the most part, electronic signatures, which has made it possible for companies to continue advancing in their use, trying to integrate into the processes of organizations.

It is not a simple task, due to the complexity in the integration of the signature in the processes and the doubts regarding the most appropriate type of signature to use, which means that many entrepreneurs do not finish getting used to the migration from the traditional format to the digital format, although they know the facilities that these types of electronic signature can provide in their day to day, which makes them a very important ally for Spanish SMEs.

As detailed throughout the monograph, these signatures allow companies to make approvals, document signatures and deal closings instantly. Among the main purposes of the electronic signature in SMEs, the following should be highlighted, although this list is much broader;

- Streamline daily work processes.
- Eliminate repetitive tasks.
- Dispense with manual shipments of documents.
- Secure agreements and close businesses in an agile way.
- Sign instantly and anywhere.

Among the most outstanding benefits of electronic signatures, the legal validity of performing a task with an electronic signature is of interest and, in addition to this, we can mention other benefits, such as:



## 1. Practical

Through the use of electronic signatures by Spanish SMEs, as a result of the advancement of technologies, a great evolution is allowed in the field of innovation and practicality in SMEs, reducing the time periods in the collection of signatures when the interested parties are not in the same place.



## 2. Economic

With the implementation of the electronic signature, SMEs reduce the costs produced by carrying out manual procedures (printing, shipping, storage of documentation, etc.). These annual costs are usually very high and, in addition, do not guarantee the security of the interested party, since losses of confidential documentation or excess of the deadlines set in the procedures, etc. may occur.



## 3. Sustainable

The electronic signature contributes in some way to the maintenance of environmental sustainability, as a consequence of the reduction of CO2 emissions, caused by the paper economy. In this way, electronic signatures participate directly with the reduction of the carbon footprint.



#### 4. Security

In the face of SMEs, this is one of the most relevant points, since it becomes one of the most serious problems they have to face in their day to day, because the lack of security can mean high economic losses.

With the implementation of digital signatures, measures are applied to avoid fraud, since it avoids the imitation of the signature, being unique for the user of the same and the encryption of data.

Therefore, implementing the electronic signature in business means, in addition to streamlining processes, optimizing the security of the information of the SME.



#### 5. Agile

Among the great advantages obtained by the electronic signature, one of them is to facilitate the efforts of citizens and / or workers in their day to day. Being able to make signatures electronically, without the need to go in person, allows to make the tasks more flexible and shorten the completion times.

# 4. Use cases of electronic signatures in SMEs

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As a result of technological changes, SMEs have been able to adapt to this situation, based on tools to facilitate their daily tasks. This is the example of the electronic signature.

This digital transformation has caused changes in the way of working in companies, having to adapt to changes by implementing new technological resources, which have been vital for the development of companies, in the face of their productivity, efficiency and profitability. Below are different use cases where the electronic signature has been put into practice.

## 1. Close commercial agreements

Most SMEs that have any type of electronic signature, created it for this purpose. Mainly, because it has the same guarantees and validity as the handwritten signature, but the electronic signature streamlines the procedures and it is not necessary to meet personally to close commercial agreements, whether customers, suppliers or others, generating in both parties a saving of time at the same time as resources.

This type of electronic signature allows to perform efficiently among others:

- Sales order processes.
- Preparation of contracts.
- Purchase orders.
- Closing of contracts with suppliers, customers, etc.

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## 2. Promotion of financial processes

Small and medium-sized companies are characterized by their great financial control; therefore, it is necessary to incorporate tools to improve their processes. Through the use of the electronic signature, companies are allowed to guarantee security in all their processes, while making them much more agile. Some of its use cases consist of:

- Asset transfers.
- Inventory management.
- Opening of accounts.
- Expense Processing.

## 3. Linking payments at the time of signatures

For Spanish SMEs, being able to count on this type of signature, makes it possible to optimize the customer experience, offering that any consumer, regardless of where they are, can sign and pay.

That is, by having this digital tool, payments can be linked to the signatures of the contract, carrying out the procedures more quickly and thus eliminating the probability of non-compliance. Therefore, by having a digital signature, you can count on many advantages in these cases, such as:

- Have several payment methods.
- Integration between tools.
- Enjoy high security at the time of payment.
- Tracking amounts automatically.

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#### 4. Improving departmental productivity

Since the beginning of the pandemic, organizations had to adapt to new forms of work, where teleworking has been established as a common practice, pointing for the coming years in one of the great trends.

Through the electronic signature, users are allowed to sign documents and continue with the performance of their tasks, regardless of the place of location of the same or the medium from where it is carried out. In this way, more time is gained to devote to other tasks improving efficiency, communication and ultimately productivity between the different departments.

#### 5. Optimization of recruitment and personnel management processes

As mentioned throughout the monograph, being able to count on a digital authentication favors the sending of documentation instantly. For procedures related to the hiring and management of personnel, it offers numerous aids to companies since through the signature they can send, analyze and evaluate information. With this solution, SMEs will be able to sign different types of documents such as;

- Payroll.
- Signatures of documentation for new hires.
- Linking/unlinking lists.
- Agreements.

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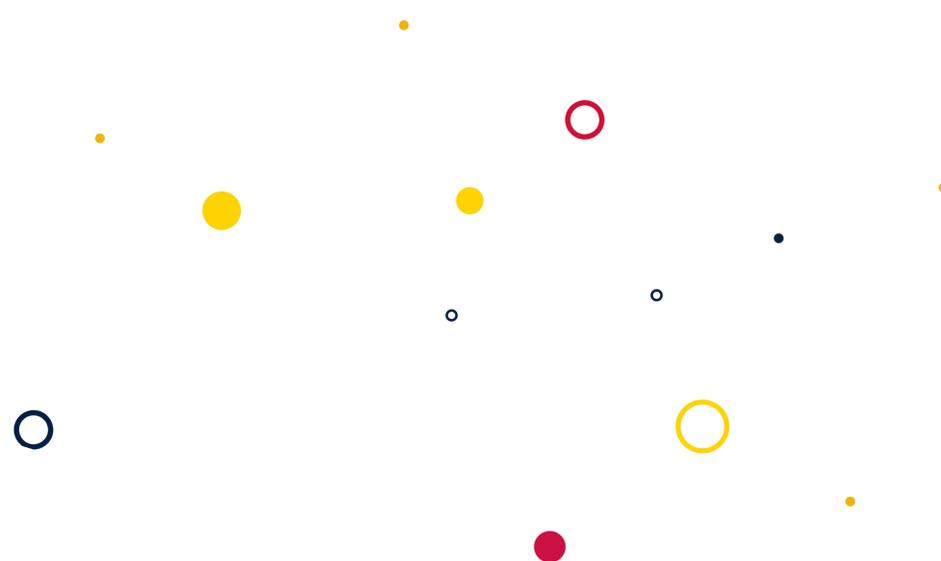
# 5. Conclusions

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The electronic signature offers a simplified signature experience, which allows to improve the customer experience. For this type of signatures, the user can do it quickly and easily, regardless of where he is and through any means, whether from a computer, a mobile, etc.

Through the use of this tool, numerous procedures that are involved in the signing of a document (commercial agreements, financial documents, contracting processes, etc.) are saved. This is a very relevant aspect, especially when we know the importance of customer satisfaction in the growth of a business.

The electronic signature allows any process to be carried out by a company or a citizen to be carried out in a more agile way, allowing it to grow faster. All this has been directly reflected in the situation derived from COVID-19, where companies have seen the need to reinvent themselves and adapt to new forms of remote work. This is where SMEs that had the electronic signature before the pandemic come in, which had the option of seeing their activity less affected. Since then, the number of companies that have this tool amounts to more than 83% and, in the coming years, it will be possible to reach 90%.



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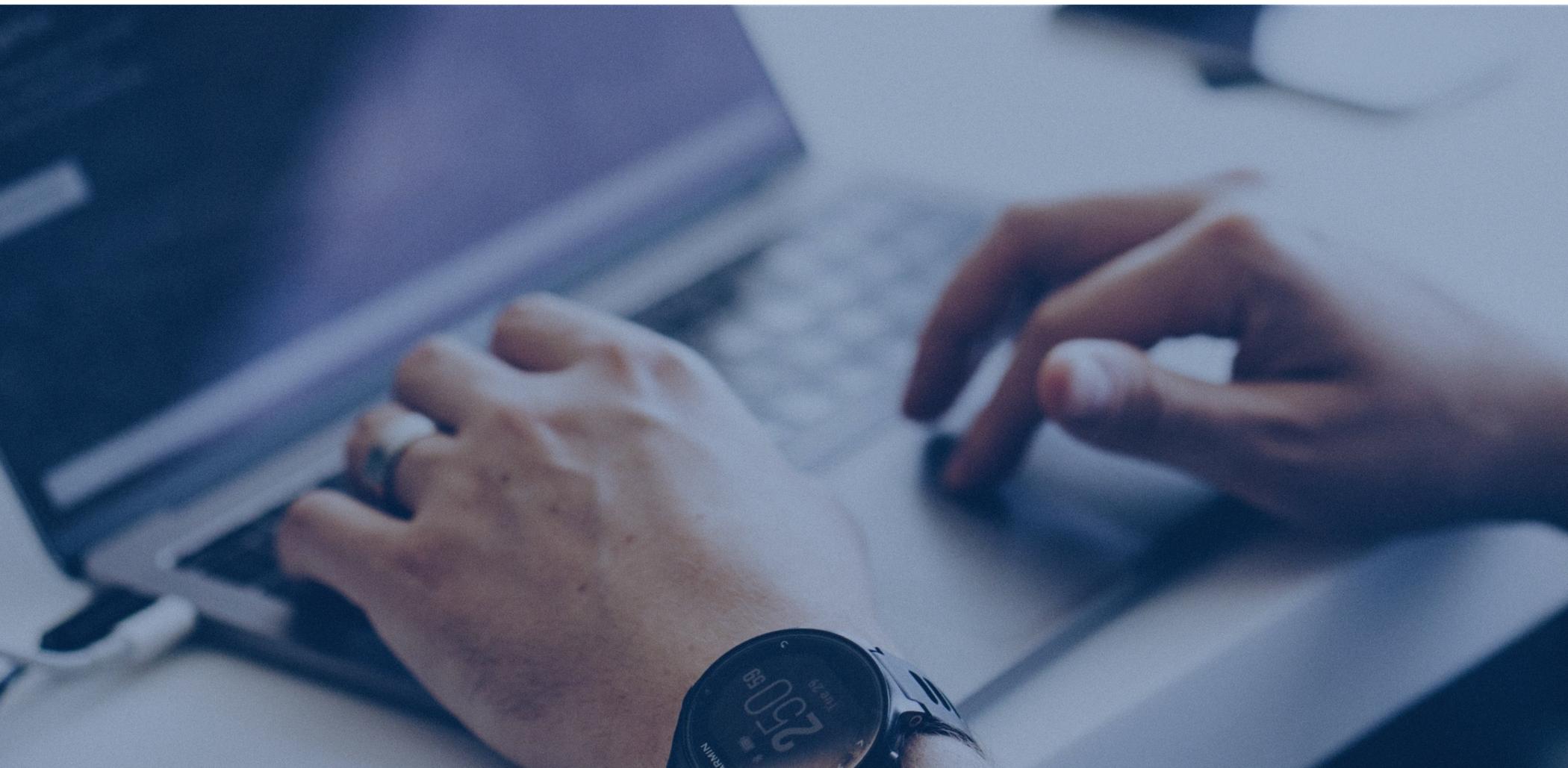


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The implementation of the electronic signature in large companies may seem complicated with the different steps to follow to achieve its obtainment, specifically from a legal service, but it is really a simple procedure that offers security to the signatory and improves the efficiency and productivity of the company.

In short, the use of a digital signature or electronic signature is considered the most efficient and secure way to sign documents of companies. The electronic signature is a tool that brings more digitalization to companies than any online marketing campaign, no matter how good it is. For those cases in which your SME does not have an electronic signature certificate, but you want to start doing so, it is the ideal time to digitize and continue growing hand in hand with your company.



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