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## **cybersecurity consulting**

Nowadays we need to generate some changes and make some upgrades when we are talking about having an actual business, even more, when it's about an electronic store, mainly because being updated with the technology is the best way to get a successful business.

A great change is getting out of the "tradition" (having a center with own data) to the modern stuff (having the data on the cloud), where the benefits such as stability, flexibility, location, and prices. Those benefits seem to be attractive, anyway right before that it needs to be taken into account certain factors and study close the data safety and its manage, because it's the biggest benefit, but the bad informático management can bring problems. So now we are going to present the factors to take into account.

At first, it is essential to know the model that is going to be carried out, in this case, a client-server model serves, where:

- a.) Tasks are shared among resource or service providers.
- b.) The end users can be dispersed in a more or less extensive geographic area.
- c.) Facilitates integrity and maintenance.

After having the concepts of the model, the role of the server and the client must be taken into account:

### Server:

- 1.) It just listens while waiting for customer requests to arrive (in this case the server is the electronics store).
- 2.) It offers a series of encapsulated services so that customers do not know its security detail.
- 3.) Upon receipt of a request, it processes it and then sends it to the client.
- 4.) It accepts connections from a large number of clients (generally).

### Client:

- 1.) The client is an apparition or a computer that sends instructions remotely to the server and interacts with the user.
- 2.) It is who initiates requests or requests.
- 3.) the client Waits and receives responses from the server.

After having this clear, you can touch on the topic of the cloud and how it works, it has two essential components Front -end which is the part of a website that interacts with users and

runs on the client-side and Back-end It is the part that is not visible to the user and is responsible for the operation of the page.

Up to this point, only concepts have been given on how a model and the components of the cloud can be assembled, but the problems that may arise when migrating have not been discussed. The cloud is a very large information data bank, where information traffic is unimaginable and for that very reason the security and data that are uploaded are very vulnerable to being attacked and stolen, but for this, we are going to talk about security must-have when you are working with the cloud.

1. It must be clear that the server where the data will be mounted in the cloud has to have an HTTPS extension (Hypertext Transfer Protocol Secure) and not HTTP (Hypertext Transfer Protocol), the differences are several, but there is one in particular that stands out and is the security offered by HTTPS since in this the data traffic is encrypted and in the other, it is not.
2. Then if any user or worker wishes to enter the page, they must comply with a strict security protocol, for this, 3 things can be taken into account to identify that the person who wants to access is allowed:
  - a.) What they are: where the fingerprint is used, the iris of the eyes.
  - b.) What they know that the user or worker entered and where it is recommended to use capital letters, special symbols and numbers, to make it more difficult in case someone wants to steal a password.
  - c.) What they have: where you can request an email to which you get a verification code when you want to enter, this would be like a digital certificate to validate identity.

With these three forms of authentication, you can have broader security of those who want to enter.

3. The cloud is not without risks and for that reason, it has to comply with the CID triad:
  - a.) confidentiality: Only authorized people can enter.
  - b.) integrity: Be certain that the data has not been tampered with.
  - c.) availability: Available when needed.

All these issues mentioned above are part of the great challenge involved in changing from the traditional to the modern, it is a great chance that has to be handled with great responsibility and with the greatest care so as not to be victims of an attack on the data that there were deposited, the data traffic is very large in the cloud as already mentioned and therefore these basic but fundamental security data must be taken into account.

