



MOTOROLA SOLUTIONS

THE CLOUD

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Why is there so much distrust of using the cloud in Latin America?

In general, all of us—people, companies and governments—are somewhat skeptical of the benefits of something new when it requires us to change our habits. Why? Because we know that all systems and processes (from pen and paper to complex computer systems) have vulnerabilities, and changing habits introduces uncertainty and unknowns that contribute to the sense of risk. Better the devil you know than the devil you don't.

Do the current cloud systems offer security mechanisms that protect them from vulnerabilities?

Yes, definitely. The systems in the cloud didn't start from zero. The security mechanisms that have been developed for IT systems in general have been applied to the cloud computing world as well. In order to talk about security mechanisms, we have to talk about the most common vulnerabilities: Phishing attacks, site attacks and design attacks.

The first type of attack involves tricking the user into voluntarily providing access to data or the system. The second involves using USBs or other devices to introduce viruses or algorithms into the system that are intended to extract data or cause it to fail. The third involves taking advantage of application code and design failures to get applications to carry out different or unexpected functions.

For solutions in the cloud, site attacks are uncommon because the resources are distributed and it is, therefore, almost impossible for the attacker to determine the server or processor that is processing the data being targeted. Design attacks can be better mitigated in cloud applications than on-site solutions because, in general, it is easier to update them as vulnerabilities are discovered. Usually, on-site solutions are not periodically updated, since this requires temporarily interrupting the service. Cloud applications have advantages in terms of security, but that doesn't mean that all cloud and application providers are alike. Thus, the user has to put their energy towards determining which is the best for them.

For those who haven't already, what would be the natural way of getting into the cloud?

Migrations can be done in stages. First, entities should give the cloud a try. They can do a test run with information they don't view as critical and, as they see the results and get better acquainted with the cloud, they can make adjustments for the more critical systems and data. Little by little, they will get to know the benefits of the solutions and gradually gain trust in it.

How can they get over the fear of taking the first step?

By learning more about the cloud. By understanding the sources of vulnerability and mapping vulnerabilities, even if they seem very obvious, so that they can then mitigate those that may pose a greater risk.

And by understanding the advantages of the cloud: one of the most important advantages is that data, in all its forms, is growing exponentially and the cloud can drastically improve the way it is used and managed. The cloud makes it possible to combine and link historical data and information stored in many locations in real time.

How can you tell if a provider is truly reliable?

1. Find out which data center (or cloud) provider the application provider uses. Some have sophisticated solutions and tiers of security depending on the sensitivity and users of the solution. Understand the solution provider's incentives.
2. Ask the following questions:
 - a. Was this solution designed for agencies or clients like me?
 - b. Do they have clients like me or is it mostly a solution for users that are very different?

- c. Can I trust that the provider won't use my data to resell the analytics or send me advertisements?
 - d. What is the base of this provider's business?
 - e. What are the economic consequences for this provider if it fails me or someone like me?
 - f. How many years of experience does the company have with clients like me?
3. Look up academic and secondary sources: there are lots of very serious articles and studies on the topic.

In order to be an "evangelist" within my organization, what are the main reasons I could give for adopting the cloud?

Efficiency: in operations, in costs, in the possibility of doing more with less, in having solutions that are always up-to-date and ready for the future.

What about costs nowadays?

Having information in the cloud translates into more profits because it reduces the cost of maintaining physical infrastructure.

In sum, why the cloud?

The cloud provides modern solutions that don't require you to pay more. The cloud offers solutions and constant updates. The world is changing, and cloud-based solutions can and should play an essential role in that evolution. Having information in the cloud means replacing obsolete systems with a new orderly data storage option that makes it possible to obtain and exchange information efficiently, when and where it is needed most.

