A business users' perspective on Cloud Computing

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Technology companies and software developers love using the latest jargon to show how smart they are. While possibly technically correct and "buzz word" compliant, these statements or descriptions don't tell a business audience a whole lot. So, in this series, we will endeavor to take the 'Tech' out of Technology and provide a business users' perspective of our platform and its environment.

In the 2014 romance comedy 'Sex Tape,' a married couple wakes up to discover that a sex tape they made the evening before on the husband's iPad has inadvertently been uploaded to the Cloud and go on a frantic search for devices linked to the husband's cloud account. When the wife asks her husband, "can't you get it down from the cloud" he replies, "you can't get it down from the cloud; nobody understands the cloud; it's a mystery."

Cloud computing, what exactly is it?

Well, let's go back a step. Initially, most user's introduction to computers was via a personal desktop computer or, for large business, possibly a mainframe. Software programs either ran a separate instance on a person's desktop or multi-user applications on a mainframe. As our appetite grew for more data and complex processing, client-server technology was introduced. The bulk of the processing moved off the desktop to shared servers managed by IT departments. Our appetite for more data and complex processing continues to grow, and for most users and organizations, the cost associated with supporting the infrastructure required has become prohibitive.

Cloud computing has overcome the prohibitive costs of managing this infrastructure in-house. Cloud Computing is a model for providing convenient on-demand access from anywhere to a shared pool of computing resources. As user's demand increases, they can offer more storage, networking applications, or services. Likewise, as demand decreases, this hardware and services can be released, thus optimizing IT costs associated with a business's operations.

There are includes five characteristics of a typical cloud model:

1. On-demand self-service allows users to access the IT resources quickly and automatically they want without additional human interaction.
2. Broad network access: this is the ability to access a service from any standard device connected to the network, including PCs, laptops, mobile phones, or tablets.
3. Resource pooling: hardware, networking, and storage are pooled and shared across multiple customers.
4. Flexibility: you to quickly scale or shrink the capabilities of your cloud usage to match the level of user demand.
5. Metering: tracks and controls the level of resource usage or the cost of that usage.

There are three options for their cloud deployments – private, public, or hybrid Cloud.

A *private cloud* is provisioned for the exclusive use of a single organization; the infrastructure is usually owned, managed, and operated by the organization within its firewall.

Public clouds provide infrastructure for the general public. This type of Cloud is owned, managed, and operated by a cloud service provider such as Microsoft's Azure or AWS and runs on the provider's premises.

The third option is a *hybrid cloud* that allows users to access private and public cloud resources from a single management environment.

You should also be familiar with the three distinct types of services available through these cloud environments.
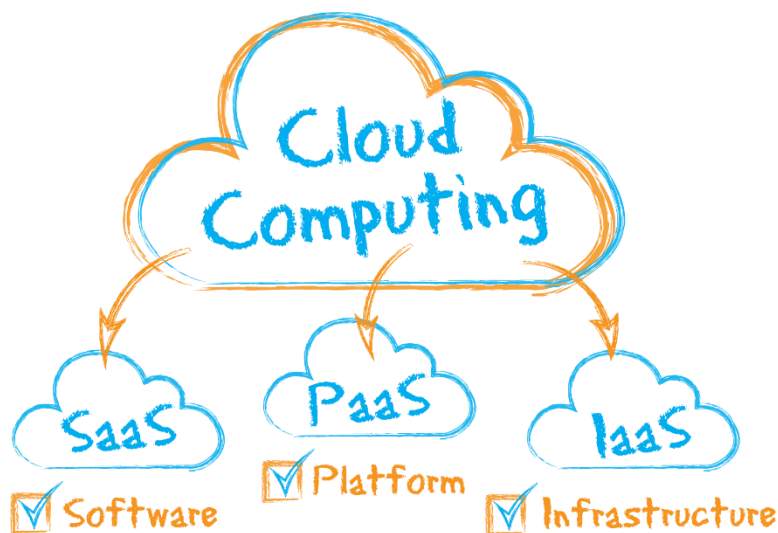
Software as a Service (**SaaS**): SaaS allows users to access an application without having to manage or control the underlying cloud infrastructure. Simple examples of SaaS solutions include Gmail or salesforce.com

Platform as a Service (**PaaS**): PaaS gives users access to a software development environment to create their own cloud applications using programming languages, library services, and tools. The user has control over these applications without having to manage or control the underlying cloud infrastructure.

Infrastructure as a Service (**IaaS**): IaaS as a service cloud allows users to provision complete computing resources quickly and easily, including processing storage and networks, without managing or controlling the underlying cloud infrastructure.

There are many benefits to switching to the Cloud, including:
- ✓ reduce costs,
- ✓ increase speeds,
- ✓ increase productivity,
- ✓ increase global scale.
- ✓ and security

On the last point, cloud computing is often far more secure than traditional computing because companies like Google and Amazon can attract and retain cybersecurity personnel and implement tighter that their uses would find cost prohibitive.
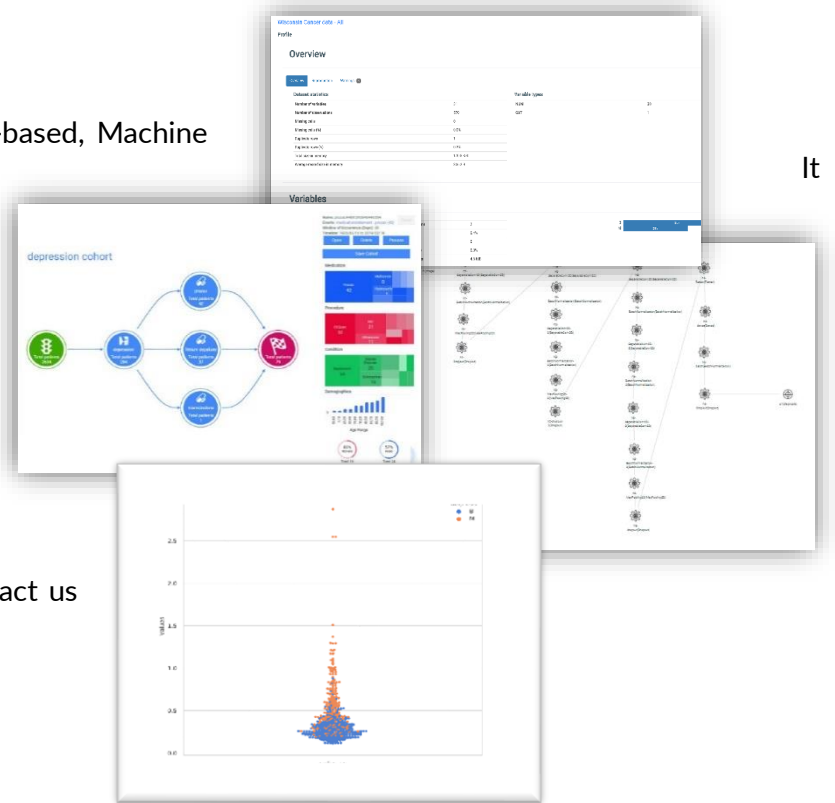
About Genetica.AI

In 2020 no business was immune to the unprecedented challenges brought about by political unrest, extreme weather conditions, and of course, the devastating coronavirus pandemic. These uncertainties continue to persist in 2021 and demonstrate that businesses can no longer rely on traditional Descriptive or Diagnostic analytics; instead, organizations need to become proactive to survive. However, being proactive requires more than building predictive models. To be effective, they need to run autonomously, alerting different users at different times with relevant information and recommendations for their specific roles to enable pre-emptive actions.

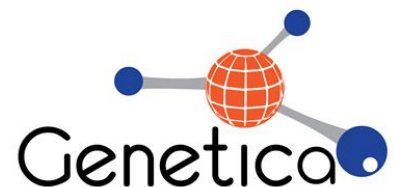This is what Genetica.AI delivers!

Our Cortex Cognitive platform© is a Cloud-based, Machine Learning lifecycle management platform. It allows users to build predictive models intuitively, with absolutely no coding required, then accurately perceives, utilizes, and manages its environment.

Cortex not only understands "**what**" needs to be done but also handles the "**how**" and "**by whom**" all within the platform.

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