Cloud Industry in Mexico

The cornerstone of digital transformation

KIO Networks®

RESEARCH
by KIO Networks®

Introduction

Cloud technologies are one of the obligatory implementations for any organization, but especially for an organization that is growing. These technologies increase efficiency of the infrastructure by reducing total cost of equipment and they provide for business agility and mobility, as well as faster innovation.

At the same time, with the help of managed services, it is possible to administer devices and mobile applications, organize network security and focus on providing better services. However, the true value of the Cloud comes from approaching it not as a single tactical decision, but rather as part of a comprehensive strategy for digital transformation.

This document, produced by KIO Networks, offers important information regarding the local and global sectors and also conveys possible alternatives so that companies can embrace this trend, increase their flexibility, and come up with products and business models that do not exist yet but that are necessary to achieve lasting success in the face of new paradigms.

“Leveraging the Cloud's full value and the innovation it inherently offers, can only be fully achieved when an organization’s Cloud strategy ties in directly to business transformation”[1].

Archana Vemulapalli
IBM Network Services

1 Information Week. (2020). Build your cloud strategy: the right way Junio 2020

Background

- In 1996, the term Cloud computing is used for the first time.
- At the end of the 90s, Salesforce.com is the first company to take the concept of business applications to the world of the Internet.
- In 2002, Amazon decides to use part of its hardware to offer Cloud storage.

Recent years

- What started as an e-mail and Customer Relationship Management (CRM) application offering has grown to provide very complex combinations and services.
- Cloud computing provides access to storage, servers, databases and application services over the Internet.
- End-user companies supply and use what they need through web applications, while a Cloud service provider owns the essential network-connected hardware for application services.
- In Cloud computing, the network of remote servers that are hosted on the Internet is shared, instead of on a personal computer or on a local server to process, share, manage and store data.
- All the devices on the network can access the data simultaneously through a specifically referenced shared storage space.
- From any location and at any moment, all network devices can access the data.
- The possibilities of the Cloud, thanks to the consolidation of players such as Amazon, Microsoft and Google, include aspects such as application development or Cloud infrastructure management, which allows a personalized service offering with an increasing level of specialization.

- The alternatives that technological advancement brought to the Cloud resulted in its segmentation into various services:
  - **Software as a Service - SaaS**
  - **Platform as a Service - PaaS**
  - **Infrastructure as a Service - IaaS**
  - **Communications as a Service – CaaS**
  - **Database as a Service - DaaS**
  - **Everything as a Service - XaaS**

- About one third of companies' IT budgets goes to Cloud services.[2.]

[2] **IDG. (2018). Cloud Computing Survey Junio 2020.**

The main Cloud services in terms of income [3]

Back-ups/online recovery: 15% of spending related to the Cloud

E-mail hosting: 11%.

Web hosting: 9%.

Online productivity: 9%.

[3] Spiceworks. (2019). The state of IT Junio 2020.

The situation today

- The market will grow from 272 billion dollars in 2018 to 623 billion dollars in 2023, with an annual growth rate of 18%.[4.]
- There are many factors that boost growth of the global market for Cloud computing services. Profitability is considered the most important, and according to experts, annual operating costs can be reduced by more than 35% after implementation.[5.]
- Other factors that stand out are that Cloud computing services provide flexibility for business processes, access from any location at any time and functionality.
- The global market of Cloud services can be categorized according to type, either public Cloud or private Cloud.
- Over the last decades there has been increased demand for multi-Cloud platforms, which leads to an increase in the global Cloud services brokerage market.[6.]
- Spending on infrastructure in the Cloud surpassed 107 billion dollars in 2019.[7.]
- Cloud Data Centers will process 94% of workloads in 2021.[8.]

[4] **MarketsandMarkets. (2018). Cloud Computing Market Junio 2020**

[5] **Orbis Research (2020). Global Cloud Services Market y Cloud Services Brokerage Market Reporte 2019 Junio 2020.**

[6] **Óp. cit. Cloud Computing Market.**

[7] **Canalys. (2019). Worldwide cloud infrastructure Q4 2019 and full year 2019 Junio 2020.**

[8] **Cisco. (2018). Global Cloud Index Projects Cloud Traffic to Represent 95 Percent of Total Data Center Traffic by 2021 Junio 2020.**

- Corporations execute a more significant part of their workloads on a private Cloud (46%) and a smaller portion (33%) on the public Cloud. [9.]
- Small and medium-sized enterprises prefer using a public Cloud (43%), instead of private solutions that are possibly more expensive (35%). [10.]
- The market is highly concentrated in regions such as: [11.]
  - **Middle East and Africa (Nigeria, South Africa, Egypt, Turkey, United Arab Emirates, Saudi Arabia)**
  - **Central America and South America (Colombia, Mexico, Brazil)**
  - **SE Asia (Malaysia, Vietnam, Thailand, Indonesia, Philippines, Singapore)**
  - **India**
  - **Japan**
  - **China**
  - **Europe**

[9] **Óp. cit.** Cloud Computing Market.

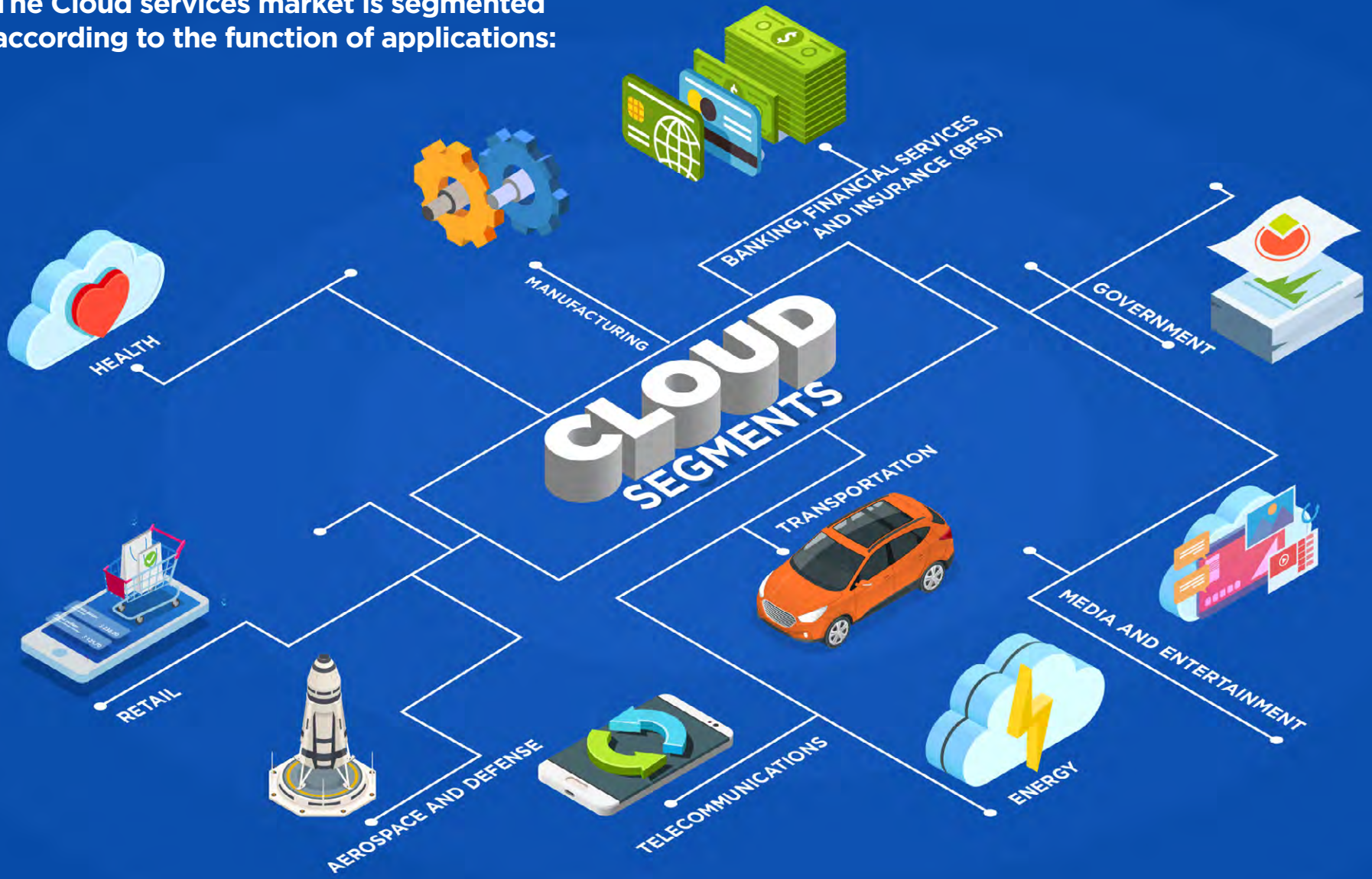
[10] **Flexera. (2019).** Cloud computing trends 2019 state of the cloud survey **Junio 2020.**

[11] **Óp. cit.** Cloud Computing Market.C

Some of the key providers in the global Cloud services market are:

Numerous organizations and competitors are contributing to the growth of the market through increased innovation. Among them are the following global providers:

The Cloud services market is segmented according to the function of applications:



The opportunities

- Through 2022, the market size and growth of the Cloud services industry is expected to be three times the growth of general IT services[12].
- The fastest growing market segment is Cloud system infrastructure services, or Infrastructure as a Service (IaaS), which grew 27.5% in 2019 to reach 38.9 billion dollars, up from 30.5 billion dollars in 2018 [13].
- The second highest growth rate, 21.8%, is reached with application infrastructure services in the Cloud, or Platform as a Service (PaaS) [14].
- In 2018, nearly 19% of Cloud budgets were spent on services relating to consultancy, implementation, migration and managed services; and this rate is expected to grow to 28% by 2022 [15].
- Amazon, Microsoft and Google combined represented 56% of the global Cloud computing market in the last quarter of 2019 [16].
- AWS and Azure are the providers selected by 93% of Cloud novices [17].

[12] **Gartner. (2019). Gartner Forecasts Worldwide Public Cloud Revenue to Grow 17.5 percent in 2019 Junio 2020**

[13] **Ídem.** [14] **Ídem.** [15] **Ídem.**

[16] **Óp. Cit. Canalys. (2019). Worldwide cloud infrastructure Q4 2019 and full year 2019.**

[17] **Óp. Cit. Flexera. (2019). Cloud computing trends 2019 state of the cloud survey.**

Table 1. Projection of income from global public Cloud services

(Billions of US Dollars)

	2018	2019	2020	2021	2022
Business process services in the Cloud (BPaaS)	45,8	49,3	53,1	57,0	61,1
Application infrastructure services in the Cloud (PaaS)	15,6	19,0	23,0	27,5	31,8
Application services in the Cloud (SaaS)	80,0	94,8	110,5	126,7	143,7
Management and security services in the Cloud	10,5	12,2	14,1	16,0	17,9
System Infrastructure services in the Cloud (IaaS)	30,5	38,9	49,1	61,9	76,6
Total market	182,4	214,3	249,8	289,1	331,2

BPaaS= business processes as a service: IaaS = infrastructure as a service: PaaS= platform as a service: SaaS= software as a service

Note: Totals may not add up due to rounding.

Fuente: Gartner (abril de 2019)

Aztec X-Ray

- The adoption of Cloud computing in Mexico is increasing and has the potential to reduce barriers to entry and investment risks, including those associated with rapid technological obsolescence.

- Various government agencies are providing electronic government services using Cloud computing, and this has become a driver for the use of Internet among the population.

- In 2019, IDC forecast that Cloud storage would grow 37% in Mexico, while Software as a Service (SaaS) would increase by 32% [18].

- This consulting firm believes that the traditional way of acquiring infrastructure has changed, with a trend towards flexible and agile schemes such as Cloud computing.

- For its part, on-premises hardware presents opportunities such as hyper-converged systems, where growth of 43% is expected, especially for organizations seeking the benefits of hybrid Clouds [19].

[18] **Mundo Contact. (2019). Cloud crecerá 37% en México durante 2019 Junio 2020.**

[19] **Ídem.**

- By 2021, the Infrastructure as a Service (IaaS) market will outstrip that of on-premises infrastructure, without the latter disappearing [20].
- During 2018, 48% of companies in Mexico invested in Cloud products and services. Of the companies that opted for this technology, 30% dedicated part of their IT budget to public Clouds and the remaining 18% did so to private Clouds [21].
- In early 2020, Microsoft announced that it would build its first Cloud Data Center region in Mexico, as part of a 1.1 billion dollar investment in the country over the following five years [22].

[20] **ídem.**

[21] **El Economista. (2018). La mitad de las empresas en México están haciendo inversiones en la nube Junio 2020**

[22] **CRN. (2020). Microsoft to build first cloud data center región in Mexico Junio 2020..**

Benchmark

- Around 80% of organizations in Mexico use Cloud-based services, either through private or hybrid Cloud models. This is due to favorable government initiatives, which have resulted in the reduction of entry barriers for Cloud providers in the country and decreased investment risk associated with technological obsolescence and changes [23].

- Government agencies in Mexico are going digital and have focused on offering Cloud-based electronic government services, which in turn is driving market growth. This is widely seen as the next generation computing revolution in major end-user vertical markets, such as the public sector, banking, financial services and insurance, health and retail.

- The key players offering Cloud services in Mexico's Cloud computing industry are Microsoft Corporation, Amazon Web Services, IBM Corporation, Accenture, Oracle Corporation, SAP SE, Google, Rackspace, Salesforce.com, Telefónica, TIVIT Technology, Dell EMC, VMware, KIO Networks Group and Hewlett Packard Company [24].

- Leading Cloud service providers aim to enhance their service portfolio and existing delivery models, such as the public and private Cloud model, to offer a comprehensive solution to customers.

- The introduction of Cloud services at a highly competitive price is another important strategy followed by the main players in the Mexican Cloud-computing market.

[23] **DataCube Research. (2020). Mexico Cloud Computing Market Introduction Junio 2020.**

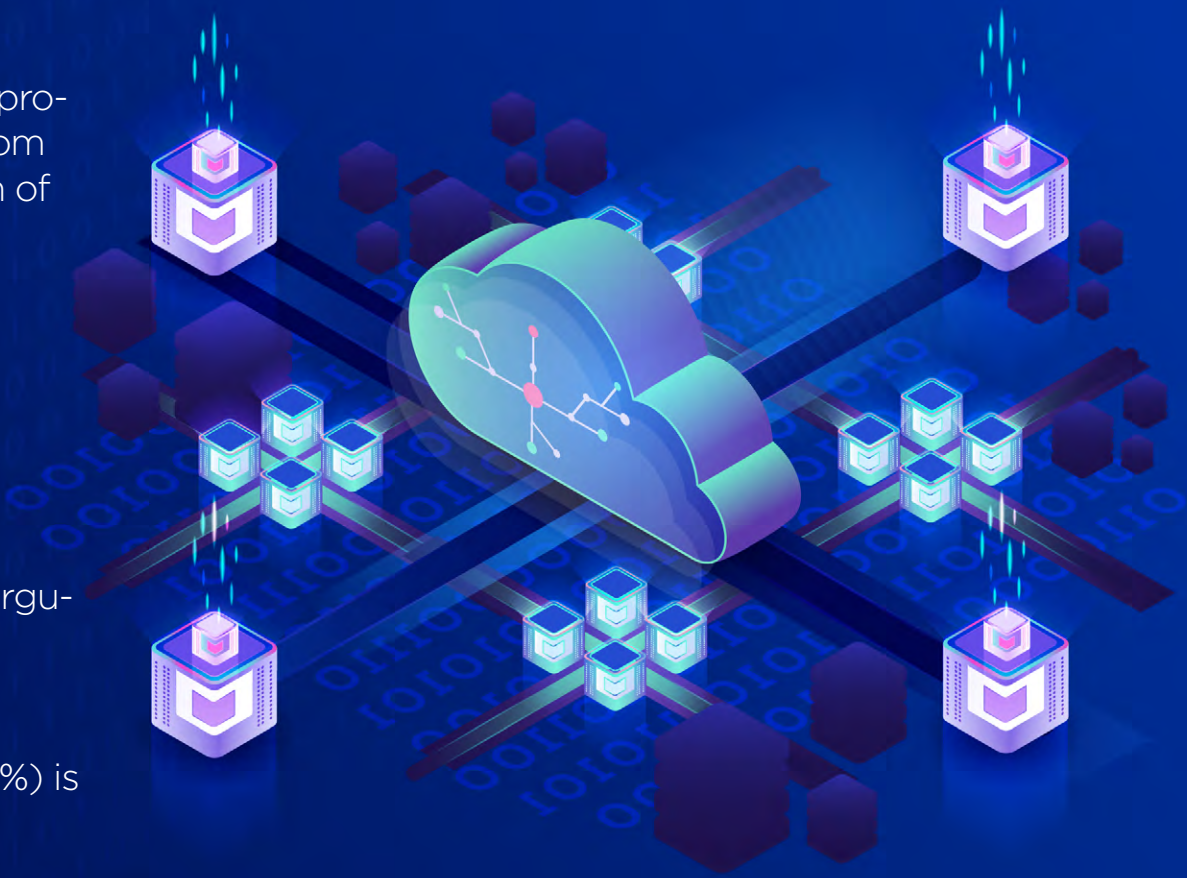
[24] **ídem.**

Market Restraints

- Legacy IT infrastructure.
- Inefficient fiber optic network and connectivity infrastructure.
- Threats associated with data privacy and security.
- Existing commercial applications were created using the paradigm of traditional IT. As a result, these applications are typically monolithic and configured for a fixed capacity in some Data Centers. Moving them to the Cloud will not automatically give them all the dynamic features of the Cloud.
- The work force needs to be retrained or improved for the Cloud environment.

What pushes companies to the Cloud? [25]

- Although saving money is a good incentive, it is not the main reason.
- 42% of companies surveyed affirm that providing access to data at any time and from any place is the main driver for adoption of the Cloud.
- Recovery from disasters (38%) is next.
- Flexibility (37%) is another important argument.
- Alleviating the workload for IT staff (36%) is also among the main responses.



25 SysGroup. (2018). 10 cloud computing statistics Junio 2020.

Areas of opportunity

- The adoption of public Cloud solutions is accelerating due to its flexibility, mainly in Software as a Service, while the lower adoption of private Cloud is due to the type of industry that uses it: primarily banking [26].

- Although data management is the great challenge of the hybrid Cloud, the possibility of scheduling the workload prevails, gaining scalability with the public Cloud and greater security for the most strategic data with the private Cloud, which means that in a single environment it is possible to use two types of Clouds for different purposes.[27].

- Data Center providers have observed a new space in the market, betting on technologies like artificial intelligence, machine learning and business intelligence.

- Although it still requires a more efficient business model, entrepreneurs are beginning to turn their attention to Edge Computing as an alternative in order to increase the speed of the Internet of Things (IoT) connections.

[26] **Comstor. (2019). Previsiones para data center y cloud computing en México durante el 2019 Junio 2020.**

[27] **Ídem.**

How do I get into the Cloud?[28]

- Evaluate the current IT portfolio
- Choose a focus for the transformation.
- Coordination of IT and business objectives.
- Ensure commitment and investment from top management.
- Address change management.
- Measure and reward the technology team for standardization and automation.

[28] **McKinsey & Company. (2018). Cloud adoption to accelerate it modernization Junio 2020.**

“By viewing Cloud computing as a starting point for IT automation, businesses can have it all: scalability, agility, flexibility, efficiency, and cost savings. But that's only possible by building automation and Cloud capabilities.”

McKinsey & Company.[29]

29 Óp. Cit. McKinsey & Company. (2018). Cloud adoption to accelerate IT modernization Junio, 2020.

The Cloud is a means, not an end

- At KIO Networks, our offering is focused on taking advantage of the integration of different Clouds to provide intelligent information, while guaranteeing data security, improving operational efficiency, and providing valuable information for your business and for the implementation of commercial actions, thus allowing companies to concentrate on their core business.

- With KIO's Hybrid Cloud, the public Cloud functions as an extension of the Data Center, through the connection with our product, which allows for secure implementation of workloads from any location.

- KIO brings together more than 300 products and managed services, offering: security and continuous operations, professional services, implementation of a hybrid Cloud with KIO's Hybrid Cloud, and if needed we can integration to AWS.

- With our Disaster Recovery as a Service (DRaaS) solution, we provide:

  - **Complete integration with Microsoft 2016 Data Center Technologies.**

  - **Lower RTOs and RPOs by Integration Nimble Storage.**

  - **Optimization of local resources with Direct Restore to Microsoft Azure.**

  - **Simplification of administration and increased efficiency with VMware Cloud Director.**

- Back up as a Service (BaaS) is a service that backs up and restores information that users have in computer environments and we even improved our costs to reach a savings of 45% compared to last year, depending on the type of project and the retention plans.

- Our Cloud services offer flexibility, which allows businesses to strengthen their competitive positions in the market of Cloud administered services.

https://www.kionetworks.com/en/

Thank you!