



Cultura de Innovación en Instituciones del Gobierno - AWS

Amazon Web Services



Carlos Gonzalez Villegas
Territory Manager Sector Publico

AWS

carlosgv@amazon.com

+1 954 682 2986

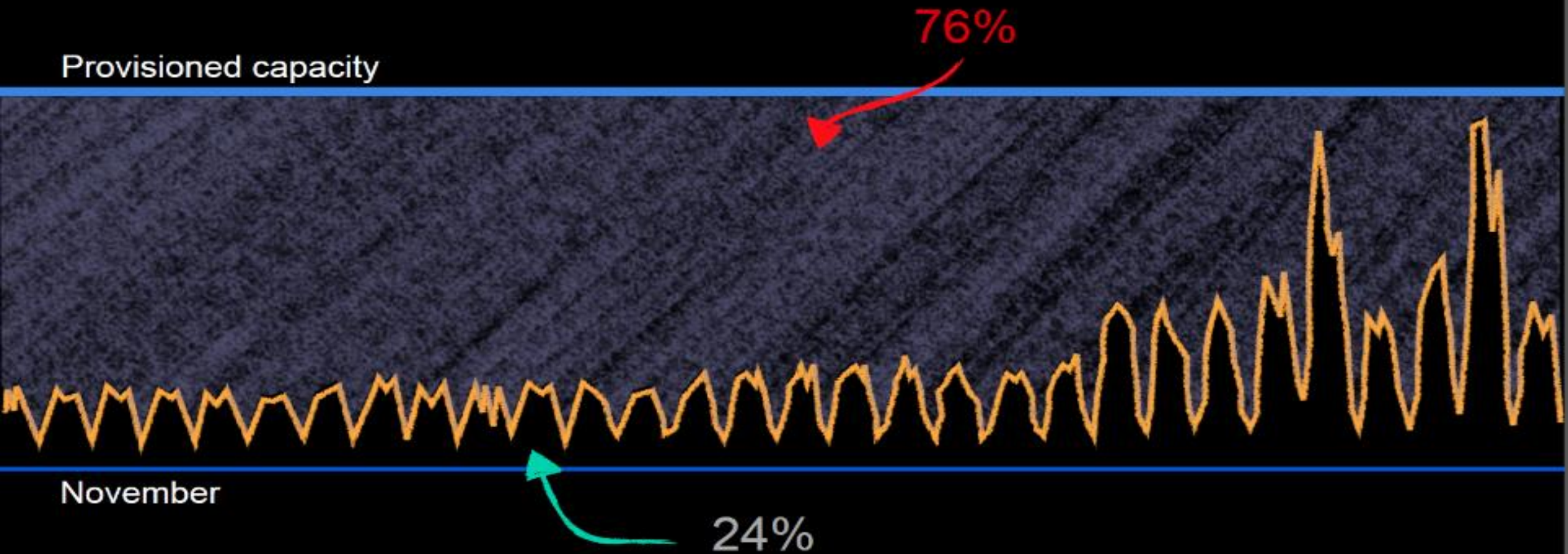




Cultura de Innovación Amazon

Cuanta Capacidad es suficiente...?

November traffic to Amazon.com



Una Misión mas grande...?



Amazon.com...

?



... AWS

AWS...el nuevo normal...



Servicios de Computo por demanda a través del Internet o Redes Privadas

- Con Cero Costo de Inicio
- Sin Largos Contratos
- Bajo un Modelo de Consumo
- Pay-As-You-Go (utilitario)

Gartner Cuadrante Mágico Infraestructura de Nube a nivel Mundial*



Posición favorable en
Ejecución y Visión

Figure 1 Magic Quadrant for Cloud Infrastructure as a Service, Worldwide



Source: Gartner (May 2018)

*Gartner, Magic Quadrant for Cloud Infrastructure as a Service, Worldwide, Smith, Dennis, Leong, Lydia, Bala, Raj, June 2018 G00336148. This graphic was published by Gartner, Inc. as part of a larger research document and should be evaluated in the context of the entire document. The Gartner document is available upon request from AWS : <http://www.gartner.com/doc/reprints?id=1-2G2O5FC&ct=150519&st=sb> . Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.



Beneficios AWS



De CapEx a OpEx



*Velocidad y Agilidad
(innovación)*



*Beneficios de la
Economía de
Escala*



Eliminan gastos de DCs



Eliminan exceso/falta
de Capacidad



Capacidad Global en minutos

Variedad y Profundidad AWS

TECHNICAL & BUSINESS SUPPORT

- Support
- Professional Services
- Optimization Guidance
- Partner Ecosystem
- Training & Certification
- Solutions Management
- Account Management
- Security & Billing Reports
- Personalized Dashboard

MARKETPLACE

- Business Apps
- Business Intelligence
- DevOps Tools
- Security
- Networking
- Databases
- Storage

ANALYTICS DEV OPS MOBILE SERVICES IoT MACHINE LEARNING ENTERPRISE APPS HYBRID ARCHITECTURE MIGRATION

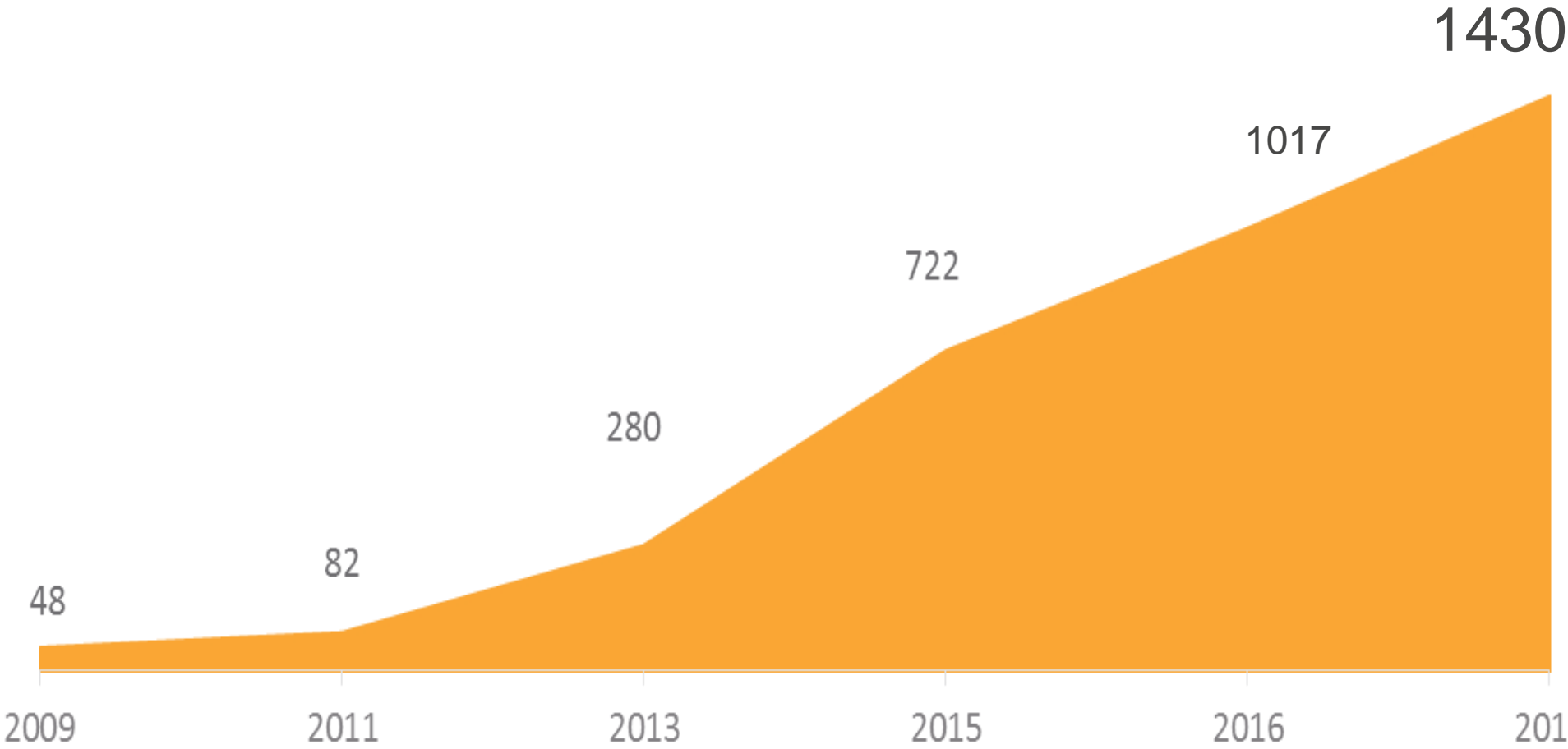
- | | | | | | | | |
|---------------------------|-------------------------|----------------------------------|----------------|----------------------------------------------------|-------------------------|---------------------------------------------|------------------------------|
| ANALYTICS | DEV OPS | MOBILE SERVICES | IoT | MACHINE LEARNING | ENTERPRISE APPS | HYBRID ARCHITECTURE | MIGRATION |
| Data Warehousing | Elasticsearch | One-click App Deployment | Rules Engine | Custom Model Training & Hosting | Virtual Desktops | Data Integration | Schema Conversion |
| Business Intelligence | Data Pipelines | Resource Templates | Device Shadows | Image & Scene Recognition | Sharing & Collaboration | Integrated Networking | Exabyte-Scale Data Migration |
| Hadoop/Spark | Interactive SQL Queries | Build & Test | Device SDKs | Facial Recognition & Analysis | Corporate Email | Integrated Identity & Access | Application Migration |
| Streaming Data Analysis | ETL | Application Lifecycle Management | Device Gateway | Facial Search | App Streaming | Integrated Resource & Deployment Management | Database Migration |
| Streaming Data Collection | | DevOps Resource Management | Registry | Text to Speech | Communications | Integrated Devices & Edge Systems | Server Migration |
| | | Triggers | Local Compute | Conversational Chatbots | Contact Center | | |
| APP SERVICES | | Containers | | Deep Learning (Apache MXNet, TensorFlow, & others) | | | |
| Queuing & Notifications | Email | Analyze & Debug | | | | | |
| Workflow | Transcoding | Patching | | | | | |
| Search | | | | | | | |

INFRASTRUCTURE CORE SERVICES SECURITY & COMPLIANCE MANAGEMENT TOOLS

- | | | | | | | | | | |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------|-------------------|---------------------------|-------------------------|-------------------|------------------------|--|
| INFRASTRUCTURE | CORE SERVICES | SECURITY & COMPLIANCE | | | | MANAGEMENT TOOLS | | | |
| Regions | Compute
VMs, Auto-scaling, Load Balancing, Containers, Virtual Private Servers, Batch Computing, Cloud Functions, Elastic GPUs, Edge Computing | Identity Management | Access Control | Monitoring & Logs | Assessment & Reporting | Manage Resources | Service Catalogue | Configuration Tracking | |
| Availability Zones | Storage
Object, Blocks, File, Archivals, Import/Export, Exabyte-scale data transfer | Configuration Compliance | Key Management & Storage | Account Grouping | Resource & Usage Auditing | Monitoring | Server Management | Resource Templates | |
| Points of Presence | Databases
Relational, NoSQL, Caching, Migration, PostgreSQL compatible | | | | Web Application Firewall | | | | |
| | Networking
VPC, DX, DNS | | | | DDOS Protection | | | | |
| | CDN | | | | | | | | |



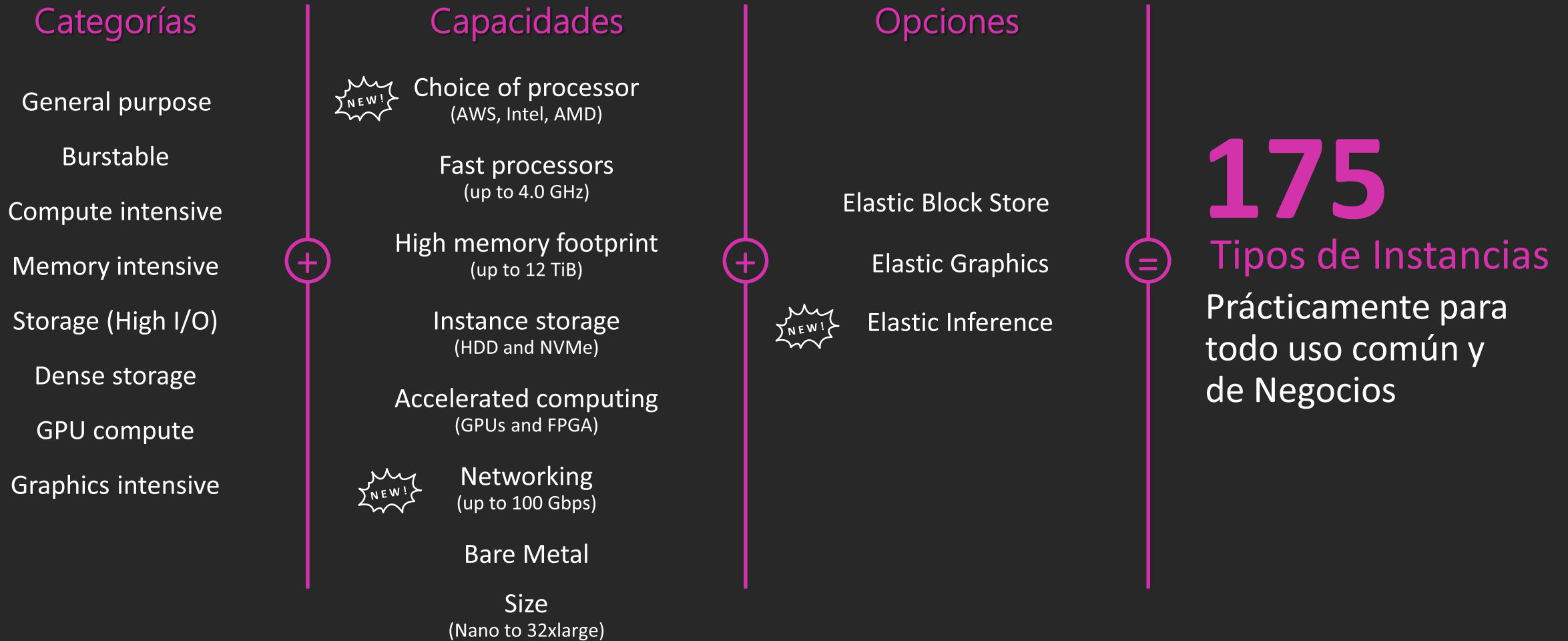
La Innovación se acelera con el tiempo...



As of January 2018



...Familia de Computo completa



AI - Machine Learning en AWS

10,000+ Clientes: Corre mas Machine learning en AWS que en cualquiera otra plataforma

Desarrolladores de Aplicaciones



Amazon SageMaker
Fully managed end-to-end machine learning service



Amazon Rekognition
Image and Video Recognition & Analysis



Amazon Machine Learning
Managed Machine Learning



Amazon Polly
Text-to-Speech



Amazon Lex
Natural Language Understanding (NLU)
& Automatic Speech Recognition (ASR)



Amazon Transcribe
Automatic speech recognition (ASR)



Amazon Translate
Neural machine translation service



Amazon Comprehend
Discover insights and relationships in text



AWS DeepRacer



AWS DeepLens

Científicos de Datos e Investigadores



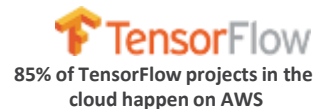
AWS Deep Learning AMI
Use and scale deep learning frameworks quickly and easily

Amazon EC2 P3dn.24xlarge - the most powerful P3 instance yet



Optimized for distributed machine learning training and high performance computing

3x faster network throughput than other providers using P3dn instances



Clientes

81%

De los proyectos de "deep learning" en la nube corren en AWS



Amazon Echo...Alexa



Organizaciones Exponenciales

“ It’s hard to pin down exactly when this new [exponential] organizational form emerged... (**es difícil determinar...**) If we had to pick an official ExO origin date, it would be **March 2006, when Amazon launched AWS and created the low-cost “Cloud”** (**Cuando AWS creo la Nube de bajo Costo para ...**) **for medium and small businesses.** From that date on, the cost of running a data center moved from fixed CAPEX cost to variable cost. Today, it is almost impossible to find a single startup that doesn’t use AWS.

—*Exponential Organizations*, p.46



~70% DE LAS STARTUP ESTÁN EN AWS



Infraestructura AWS Global

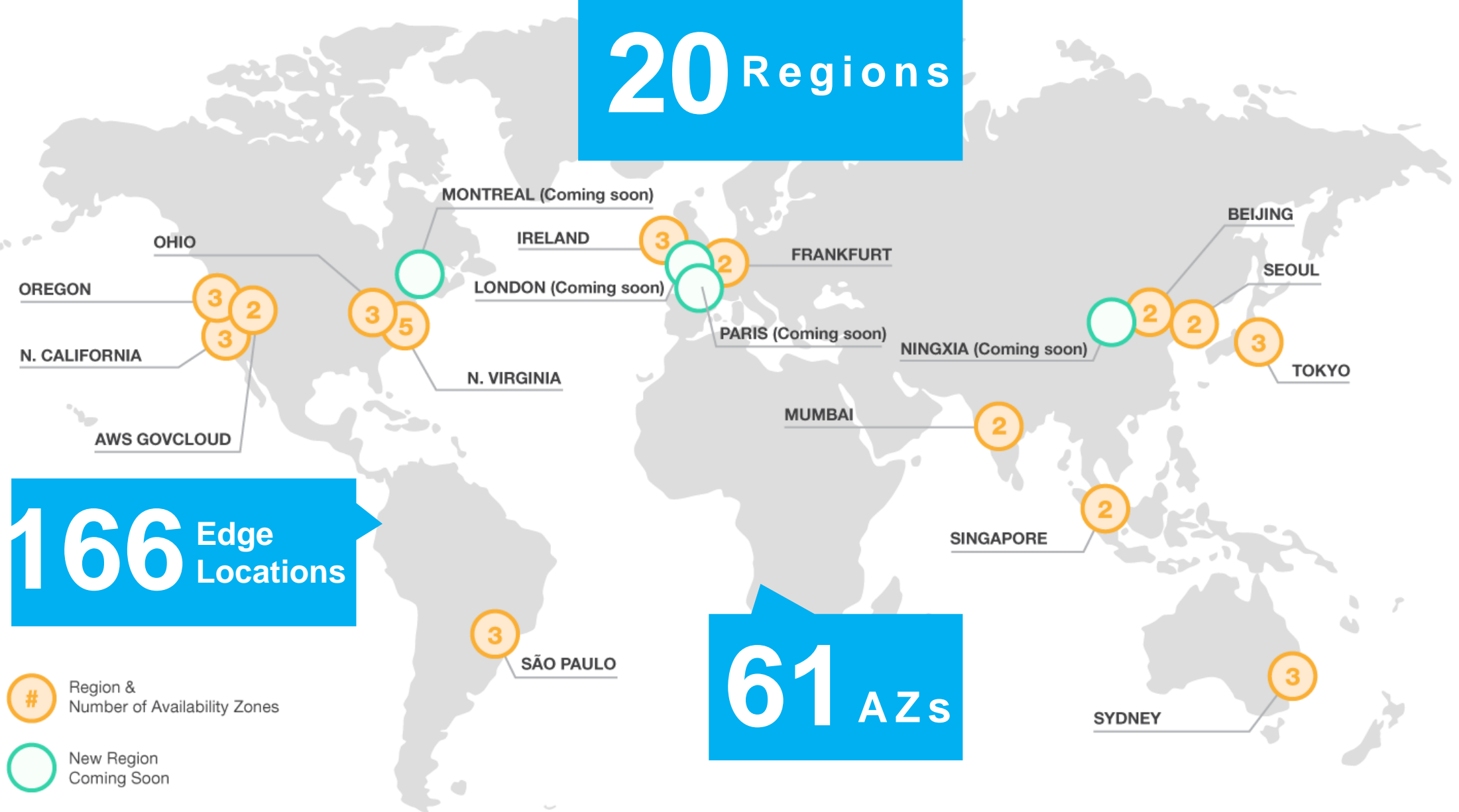
20 Regions

166 Edge Locations

61 AZs

Region & Number of Availability Zones

New Region Coming Soon



Seguridad Compartida

Cliente se encargan de la Seguridad **'En'** la Nube

Customer Data

Platform, Applications,
Identity & Access Management

Operating System, Network &
Firewall Configuration

Client-side Data
Encryption & Data
Integrity Authentication

Server-side Encryption
(File System and/or
Data)

Network Traffic Protection
(Encryption / Integrity /
Identity)

AWS se encarga de la Seguridad **'De'** la Nube

Compute

Storage

Database

Networking

AWS Global
Infrastructure

Regions

Edge
Locations

Avail. Zones

Trayectoria de Adopción Nube

Plan multiannual



Escenarios Cloud...Innovación continua

1. Desarrollo y Pruebas
2. Portales
3. Computo de desborde (elástico)
4. Almacenamiento y Respaldo
5. Continuidad de la operación
6. Analítica y BIGDATA
7. Base de Datos
8. Aplicaciones Empresariales (MSFT, Oracle, SAP)
9. Portales, Móvil y aplicaciones de redes sociales
10. Inteligencia Artificial y Maching Learning
11. IoT



Moderniza e Innova...Mentalidad Startup

1. Mas TI sin incremento de presupuesto o de personal
2. Suma valor a tu centro de dato a un bajo costo
3. Renueva y Moderniza tu ambiente de TI
4. Viste de valor y funcionalidad tu centro de datos en minutos
5. Deja de hacer mas de lo mismo con el TI viejo
6. Convierte datos en información, análisis y decisiones
7. Crea un ambiente para la innovación y la experimentación
8. Evolucionar tu Centro de Datos a uno Seguro

Gracias!

