Innovation for Development

For Government, Healthcare, Education, and Nonprofit Organizations

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AWS Introduction

What is cloud computing and how does it work?Why are organizations choosing AWS?What are organizations using AWS for?



What Is (True) Cloud Computing?



The on-demand delivery of IT resources over public or private networks with zero up-front costs, no long-term contracts, and pay-as-you-go pricing

"Tingi-Tingi IT"

Electricity > Water Utilities > Banking





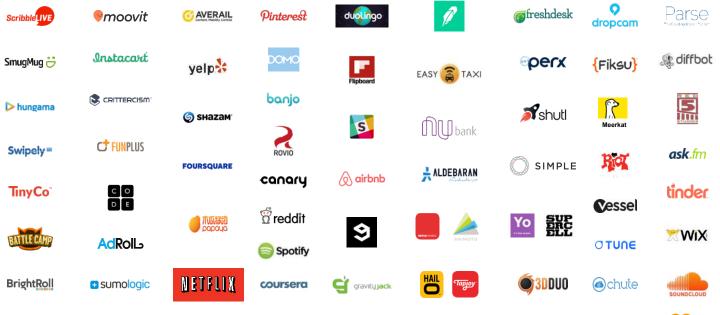
Why Are Customers Adopting Cloud Computing?

Main benefits experienced by customers in virtually every industry

- 1. Its cheaper than building Datacenters
- 2. Managed Services so you don't have to do it all yourself
- 3. Excellent security capabilities and certifications
- 4. Supercharge the speed of Innovation



Startup Customers





Enterprise Customers





Government Agencies and Educational Institutions Use AWS Worldwide, including Philippines!



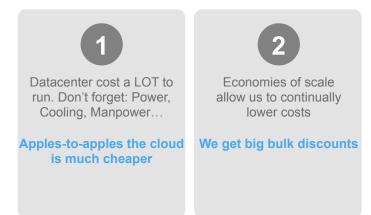
webservices

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Lower Up-Front Costs and Save More as Your Usage Grows





Increased Agility

AWS

Increased agility has become the #1 reason organizations use the AWS cloud.

Our concept = Amazon.com for Technology Solutions!



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Organizations Can't Afford to Be Slow



AWS: Solutions in **MINUTES**

One-click new dev environment One-click new prod environment One-click new environment in Japan One-click Add 1,000 servers One-click Remove 1,000 servers One-click deploy CRM One-click deploy ERP



The Cloud Fosters a Culture of Innovation: Experiment Often and Fail Without Risk



With on-premises technology:

- Experimenting is infrequent
- Failure is expensive
- · Innovation is diminished



- Experiment often
- Fail quickly at a low cost
- Innovation increases
- More time to Innovate



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Project: Emerging and Sustainable Cities Initiative IDB Group: Housing and Urban Development

Problem: Emerging Latin American cities have underdeveloped infrastructures that rely on outdated and labor intensive processes in order to maintain city upkeep and operations. There is inconsistent delivery of services in emerging and/or very low income cities (power grid, transportation, public safety, utilities) due to lack of the technology available to compliment services being delivered to residents.

Impact: Inconsistent civil services impact overall commerce, economic growth, and city infrastructure and progress. This results in loss of confidence in local government meeting the needs of their residents. On the most extreme cases, cities struggle to meet even the most basic civil service needs of the people, resulting in higher crime rates and public safety/first responder issues

AWS Role:

- First, AWS has partnered with IDB in order to identify specific local governments who are not only actively adopting a smart cities approach, but have financially invested with IDB.
- Second, AWS helped to shortlist AWS partners and/or customers that could solve the specific needs of a local government with services/solutions that are readily deployable.
- Third, AWS supports these AWS Partners with AWS credits in order to subsidize some costs of the project from the government
- Combined with IDB and the local governments funding, the identified agency has a technically vetted and subsidized technology platform (tax, urban management, rainfall sensors you name it)



Project: Land Titling Digitization IDB Group: Rural Development Team

Problem: Documenting, tracking, modifying, and tax collection of land is a consistent issue for governments to consistently remain updated on. It is a highly manual process to map and track the taxation/ownership/leasing of land that occurs at a national level. Currently, many Latin American countries utilize a hybrid of on premise and paper documentation (inefficient)

Impact: Because of the on premise and high volume of paper documentation involved, Countries are overspending on unused storage spaces, outdated servers, and inflexible technology that does not allow multiple agencies to interact and/or access the information easily. This results in slower tax collection, information disbursement, and the visibility of governments of the land that is actually in use

AWS Role: AWS is working closely with the rural development team in three ways: 1) Migrating the paper data, maps, and documents onto a public cloud environment, reducing costs of on premise server time, storage space in government facilities, and better tracking of land usage; 2) Providing a hybrid storage environment to meet the concerns and needs of the government to be able to access the data immediately, but still provide back up in non-usage hours; 3) Developing a platform/solution that provides the government a highly flexible solution that is able to create, modify, and visualize land titling and tax services so that multiple agencies can obtain access



Project: Natural Disaster Hackathon in Ecuador IDB Group: Analytics and open data group

Problem: AWS and IDB hosted a "hackathon" in Ecuador in Fall 2016 where IDB and AWS worked along with the Municipality of Quito and the IDB Country Office in Ecuador, with 7 different competing teams. The main challenge for this hackathon was to provide a solution/project around disaster management

http://ciudades-resilientes.org/

IDB offered a prize to the best solution and each solution was published in the IDB Open Source Repository for any agency to utilize license free.

Impact and AWS Role: AWS awarded a grant prize to the winner as well as an AWS Solutions Architect to further develop their project in support of the goals of supporting disaster management. The four winning teams were the following:

- **Go Help!** (First Prize) is a platform to efficiently manage the distribution of goods in case of a catastrophe. It connects the offer and demand of first aid and food supplies. The project will receive a contract of \$10K from IDB, and institutional support from the municipality of Quito's Innovation Lab to incubate the project.
- "I'm a Volunteer!" (Second Prize) is a platform to manage volunteers. Users can sign up and determine their skills and willingness to help in case of a catastrophe. They will receive support from IDB to improve their business model.
- "Mobilicity" (Visualization Prize) used the data provided by Telefonica to understand how people moved during the days of the earthquake of April 16.
- The fourth prize was a special mention for an established company that presented a project in which they had been working for a long time. This project uses sensors to identify temblors that can help anticipate an alert. This team has developed a sensor called "Dropball" that could provide interesting data for the Bank in different fields like smart agriculture, water management, weather monitoring and transport. <u>http://ecx-labs.com/es/dropballs.html</u>



In a Nutshell: Cloud Technology will improve the (1) Cost and (2) Pace of Developmental Innovation

