

Federal Reserve Bank of Philadelphia

# Third Annual FinTech Conference

## How Cloud and AI are Transforming Financial Services



Google Cloud


**Stuart Breslow**


Financial Services Industry Lead

November 14, 2019

# Google Cloud Platform

## Announced regions


 Current regions and number of zones


 Future regions and number of zones




# Google Cloud Platform

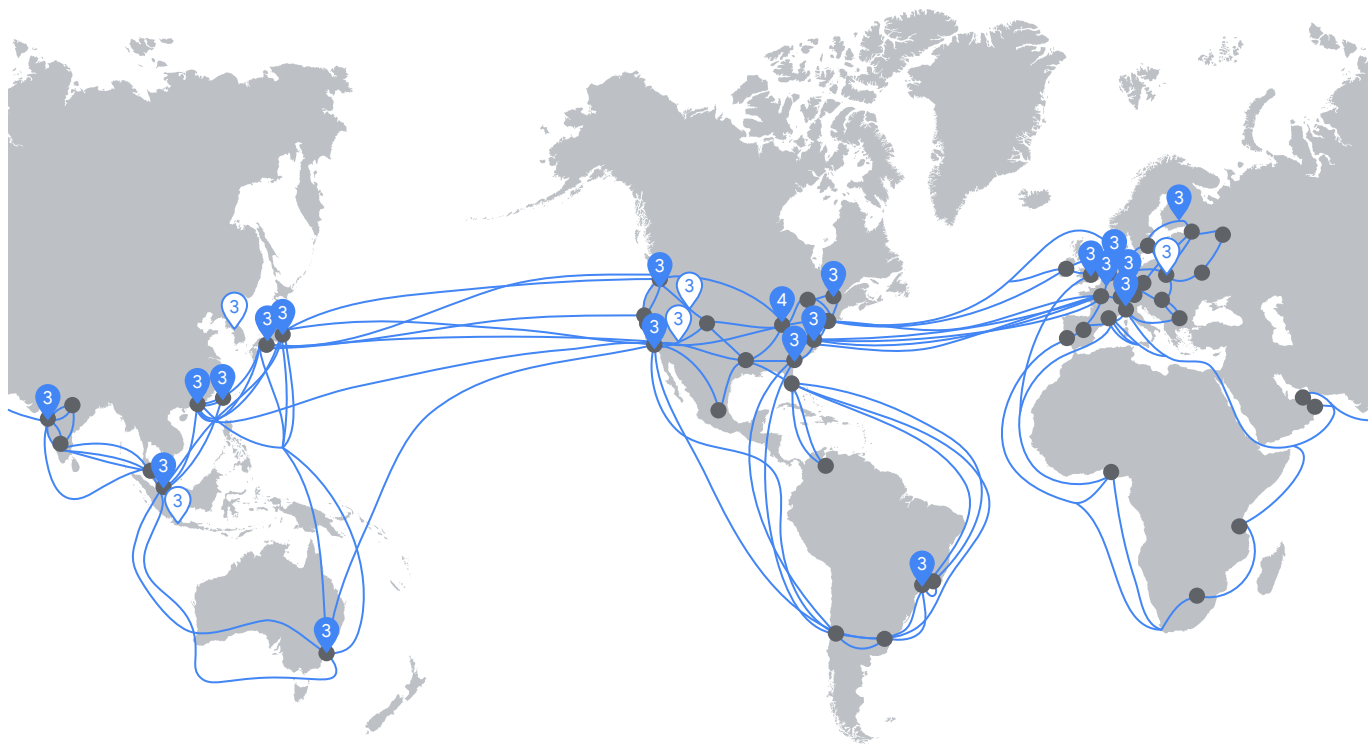
134 points of presence and  
14 subsea cable investments  
around the globe

 Current regions  
and number of zones

 Future regions  
and number of zones

 Edge points  
of presence

 Network





**We need banking  
but we don't need banks  
anymore.**

Bill Gates, 1994

# FSIs face increasing challenges

## Customers are demanding more

Customers expect seamless, custom experiences.

Loyalty is increasingly difficult to maintain.

## Market forces are in constant flux

Cloud-native fintechs are changing how FSIs go to market.

Regulators are leveling the playing field.

## Risk & regulatory burdens mount

Exposure to market & operational risks are increasing.

Meeting compliance demands continue to be a heavy burden.

## Legacy IT & High Costs

Inflexible, expensive legacy infrastructure prevents rapid change.

Data remains in silos and difficult to use effectively.

# Customer expectations are changing

# 24/7

Customers expect always-on, seamless service and personal offerings

# 1/3

Millennials are willing to switch FSIs in the next 90 days if it means a better experience.



[Financial services institutions] have often grown through acquisition, operating with relatively static products and geographies. Typically, these IT operating models just **are not nimble enough to support where things are headed.**”

**PWC**

*FS Technology 2020 and Beyond, 2016*

# Democratization of Innovation



Google Cloud







**The world is changing. Big will not beat small anymore. It will be the fast beating the slow.**

Rupert Murdoch

Financial institutions...still **struggle to extract meaningful information and use it for good business decisions**. By some estimates, businesses use only 0.5% of available data. To turn data into insights, firms must overcome data stuck in silos, incompatible formats, and more.

PWC  
*Data and Analytics in  
Financial Services, 2018*



Machine learning is a  
core, transformative  
way by which we're  
rethinking how we're  
doing everything

Sundar Pichai  
CEO, Google



# Machine Learning in Financial Services



## Sales

Content personalization,  
product x-sells/up-sells



## Trading

Algo-trading, backtesting,  
strategy mining,



## Operations

Automate end-to-end flows,  
customer support



## Compliance

KYC, trade  
surveillance



## Risk Management

Credit risk modeling, RegTech



## Financial Control

Model forecasts, optimize  
period end close



## Lending

Credit scoring, underwriting



## Payments

Fraud detection, AML



## Research

Sentiment/news analysis,  
insight extraction



## Investment Management

Personalize financial  
Products, robo-advising



## Legal

Contract intelligence, legal  
documents analysis



## Vendor Management

Supply chain optimization,  
3rd-party risk management

# Financial Services Cloud Overview

**\$1.5T**

2018, financial markets represented 7.4% (\$1.5T ) of U.S. gross domestic product

**\$23.9B**

The finance cloud market will grow from \$12.9B USD in 2019 to \$23.9B by 2021

**61%**

Sixty-one percent of FSI survey respondents said cloud strategy was only formative in their org

1867

2019

