Customer Voices

Welcome

At Google Cloud, we take every opportunity to listen to and learn from our customers. Google Cloud customers are innovators, who use our products and services to advance science, healthcare, education, retail, consumer technology, and more. They do so to stay competitive and to blaze new trails in their fields.

In the following pages, these industry leaders share their insights and successes from transforming their business, modernizing their infrastructure, and gleaning intelligence from data. For example:

- **Johnson & Johnson** achieved a 41% increase in search results from high-quality job applicants, significantly improving the company's ability to quickly hire top talent
- **Sony Network Communications** now processes 10 billion monthly queries faster, which advances data analysis
- **University College Dublin** saw significant 6-figure savings by eliminating legacy hardware, software, and maintenance

Whether powering everyday operations and accelerating application innovation, providing tools for specific business needs and executing on big ideas, or advancing the security of technology solutions—Google Cloud customers have a thing or two to say about working in the cloud.

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Financial Services

Google Cloud

We looked at everything from customization capabilities to the ability to draw layers, access to street view and point-of-view manipulation, and Google Maps met our every need. The alternatives didn't come up to par, so it was a no-brainer.

Elizabeth Schreier, Director of Digital and Social Engagement, Allstate Insurance

Allstate

Industry: Financial Services **Region:** North America **Partner:** T3

Diagnosing risks and generating actionable insights

AllState envisioned a tool (GoodHome) that any homeowner could use, one that would be interactive and would visualize useful property statistics and tips in a way that informed and compelled users.

Enter

T3 to kick off the project and **Google Maps** for familiarity, ease of use, and comprehensive features.

Outcome

- Increases likelihood of insurance quote requests by 350% with 6 to 7 minute GoodHome site visit average
- 40% of people who use the tool type more than one address into the map

About

- Serving more than 16 million households, The Allstate Corporation is the largest publicly held personal lines property and casualty insurer in the United States
- Founded in 1931

ATB listens

Industry: Financial Services **Region:** North America **Partner:** Onix

About

- With over 5,000 team members, 25,000 customers, and assets of $48.5 billion, ATB is the largest financial institution based in Alberta, Canada
- Named one of Canada's 50 Best Employers by Maclean's Magazine

A customer-centric attitude and a mandate to transform banking

ATB had a bold vision: reimagine the way banking products and services are delivered. To succeed, the bank needed to equip its distributed workforce with cloud-based productivity tools. They wanted to simplify employee communication and collaboration.

Enter

G Suite to drive innovation, optimize workflows and business processes, and enable more positive customer interactions in the highly competitive financial services space.

Outcome

- Migrates 35TB of data–including 340 million email messages, calendar items, and contacts—to G Suite seamlessly and without disruption to employees or customers
- Reduces strategic planning, consolidation, and reporting time by 50%

Google is revolutionizing collaboration and individual productivity through AI, making it easier for our team members to streamline their workflows using features such as the Explore button in Google Docs. Employees can focus more on creating value for our customers and less on mundane tasks.

Barry Hensch, Vice President, Technology Enablement, ATB Financial

We needed more flexibility in channels, technology, and marketing in general. Now we're working in the cloud, so we only have to enter our marketing campaign planning data once. By using Google BigQuery, it's automatically linked to our reporting tools.

Jo Vandenhaute, Head of CRM, BNP Paribas Fortis

BNP PARIBAS

Industry: Financial Services **Region:** EMEA **Partner:** Fourcast

Aligning teams and enhancing security

The bank's complex marketing campaigns demanded careful synchronization among a 300-person marketing team, but its mix of internal web apps, free cloud tools, and Excel spreadsheets kept teams in silos.

Enter

Fourcast to kick off the project, **Google App Engine** for fast hosting and upscaling from one to multiple departments, **Cloud Storage** to store marketing campaign data, **BigQuery** to report into internal business intelligence tools, and **G Suite** to foster cross-team collaboration.

Outcome

- Reduces critical application delivery time from several months to 6 weeks
- Improves strategic decision-making with more complete and timely data

About

- Belgian subsidiary of BNP Paribas, a leading European bank with more than 189,000 employees in 74 countries
- Largest bank in Belgium

charles SCHWAB

Industry: Financial Services **Region:** North America **Partner:** Insight

About

- Charles Schwab is one of the largest U.S. investment services firm, managing more funds than any publicly traded investment services firm in the United States
- The leading custodian for independent advisors and a leader in asset management and retirement planning

Delivering a more secure investment advisory service

Charles Schwab launched Schwab Intelligent Portfolios, an online investment advisory service that uses sophisticated computer algorithms to help clients invest smarter. The company needed an intuitive interface that not only educated potential clients about its product but also made it easy to sign up and maintain the highest level of security.

Enter

Insight and **Google Chromebooks**, plus **Chrome device management**, to put each device in public session mode and allow multiple, more secure use of Chrome devices.

Outcome

- Rolls out 1,000 Chromebooks to 250 branches in less than 2 months
- Manages 1,700 devices in branches across the country in under 10 hours a week with rigorous security settings to help ensure client data is safe

Our work with Google has helped us deliver on our promise to provide best-in-class client experiences with ongoing innovation.

Ed Obuchowski, Senior VP, Advisor Technology Solutions, Charles Schwab

Google Cloud Platform gives us the scale, robust features, and functionality we need to grow our business while satisfying stringent federal and state security requirements.

Kenneth Lin, CEO and Founder, Credit Karma

credit karma™

Industry: Financial Services **Region:** North America

A robust cloud platform to meet stringent regulatory requirements

Credit Karma needed to create an agile, next-generation financial services aggregation platform for consumers. The company set out to take a leap forward from existing data center and hosting facilities that weren't scalable enough to meet its demanding requirements.

Enter

Google Cloud Platform to help protect data and provide thought leadership and advances in a pioneering cloud computing environment.

Outcome

- Achieves full compliance with IRS and U.S. State Revenue Board regulatory requirements for cloud computing
- Serves more than 1 million Tax Services users in the first year of launch

About

- Over 70 million customers use Credit Karma's free credit reports and scores
- Launched a new, truly free, federal and state tax product in 2017

Industry: Financial Services **Region:** North America

About

- One of the world's largest quantitative trading communities, QuantConnect provides a free algorithm backtesting tool for design and optimization of algorithmic trading strategies

Democratizing algorithmic trading through cloud computing

Algorithmic trading is being democratized by companies like QuantConnect and its open source platform. Quantitative analysts use it to research and analyze investment strategies and backtest algorithms against free historical high-resolution data. They deploy these strategies to their brokerage for live trading, where an investment strategy can run for months. With live capital running through the system, the reliability of QuantConnect's application is paramount.

Enter

Google Kubernetes Engine to scale and provide high uptime with little manual intervention, **Cloud SQL** to host QuantConnect's database and protect it from automatic failover for high availability, **Cloud Storage Nearline** to upload and easily access data with sub-second response times, and **G Suite** for employee collaboration.

Outcome

- Realizes 6x business growth with no increase in staff or IT costs
- Provides easy access to 400TB of data and used by more than 50,000 quants

Trust in your infrastructure is essential with algorithmic trading. In the financial sector, where algorithms are running long-term and intensive processes, there's no substitute for Google Cloud Platform. If a VM goes down, another takes over in milliseconds.

Jared Broad, CEO and Founder, QuantConnect

Gaming, Media & Entertainment

Google Cloud

HEARST

Industry: Gaming, Media & Entertainment

Region: North America

About

- One of the nation's most diversified media, information, and services companies with more than 360 businesses
- Hearst Newspapers reaches more than 42 million unique visitors with related digital products

Classifying content with precision and speed

At Hearst, classifying content was a difficult process. Sorting, labeling, and categorizing an average of 3,000 new articles daily was time consuming. Teams often prioritized certain content and left other articles unclassified just to keep up.

Enter

Google Cloud Natural Language and **DoubleClick for Publishers** to target more specific content segments and save time by eliminating manual classification.

Outcome

- Categorizes 3,000 articles a day in real time
- Shifts company strategy to a data-driven approach, using sophisticated analysis of users and content
- Doubles the number of subscribers to the *Albany Times Union* over 6 months with new flexible paywall

Google Cloud Natural Language is unmatched in its accuracy for content classification.

Naveed Ahmad, Senior Director of Data, Hearst Newspapers

With Google Compute Engine, we can set up a whole cluster system with several hundred machines or a couple of thousand machines in 10 to 15 minutes, which is incredible.

Dave Goodbourn, Head of Systems, Milk VFX

milk

Industry: Gaming, Media & Entertainment

Region: EMEA

Competing on a bigger scale with flexible render farms

Visual standards, from high definition to 4K resolution, have soared in recent years. Milk needed a scalable, cost-effective solution to compete with bigger, more established firms for large projects.

Enter

Google Compute Engine for flexible and more secure computing capacity and unrivaled cost savings.

Outcome

- Renders 77 million frames at 4K resolution in under 3 months instead of 2 to 3 years
- Configures ad hoc cluster systems of hundreds or thousands of machines in under 15 minutes
- Cuts cost with flexible pricing and preemptible VMs

About

- Oscar-winning independent visual effects studio based in London and Cardiff
- Milk VFX creates complex sequences for high-end television and feature films, including *Fantastic Beasts And Where To Find Them*, *The Martian*, and *Sherlock*

telegraphmediagroup

Industry: Gaming, Media & Entertainment

Region: EMEA

About

- *The Daily Telegraph* is the UK's best-selling quality daily newspaper
- The 160-year old company reaches a global audience of over 89.1 million per month

Powering a next-gen enterprise data warehouse

Telegraph Media Group used legacy technologies to run its enterprise data warehouse. High costs and difficult, delayed access to actionable insights prompted a change.

Enter

Google BigQuery to provide a deep and joined-up view of all behavioral data for analytics, **Cloud SQL** to provide sub-second response times and together with **BigQuery** deliver exploratory analysis and reporting at any scale, and **Cloud Pub/Sub** to provide seamless integration that scales to millions of users and real-time capabilities, such as content recommendations.

Outcome

- Processes up to 4TB of data in less than a minute
- Minimizes costs with pay-per-query pricing

Google Cloud Platform continues to deliver cost-effective speed, flexibility, and scale. The ability to iterate rapidly over multiple terabytes of data across user interactions comprehensively has dramatically improved our audience intelligence.

Toby Wright, CTO, Telegraph Media Group

Healthcare & Life Sciences

Google Cloud

Using Google Kubernetes Engine, we don't have memory or data limits for our jobs, and this allows us to think bigger and start to combine our data with other datasets out there to create better analysis algorithms.

Dr. Gregory Vladimer, Scientific Co-founder and CSO, Allcyte

allcyte:

Industry: Healthcare & Life Sciences **Region:** EMEA **Partner:** CLOUDPILOTS

Modernizing infrastructure for reliability, speed, and deep analysis

Allcyte uses cutting-edge microscopy techniques and data analytics in a process that helps predict the clinical effectiveness of large libraries of drug treatments. It needed full-scale infrastructure when moving from the academic to independent space.

Enter

CLOUDPILOTS to use **Google Kubernetes Engine** for easy scaling and automation, **Container Builder** for speedy and stable replication of deployment pipeline, and **Hangouts Meet** for stronger collaboration.

Outcome

- Processes upwards of 100GB of images daily
- Achieves rapid and heavy scaling without large upfront costs

About

- Allcyte began as a project at the Research Center for Molecular Medicine (CeMM) at the Austrian Academy of Sciences
- Pharmacoscopy, its high-content imaging platform, aims to deliver personalized cancer medicine to patients and physicians

BROAD INSTITUTE

Industry: Healthcare & Life Sciences **Region:** North America

About

- The Broad Institute seeks to describe all molecular components of life, develop effective new approaches to diagnostics and therapeutics, and disseminate discoveries
- Founded by MIT, Harvard University, Harvard-affiliated hospitals, and philanthropists Eli and Edythe L. Broad

Helping to protect genome data in the cloud

Broad Institute generates roughly 25 terabytes of sequence data daily. It needed a more secure cloud infrastructure that would allow it to scale at the rate of genomic data production without delays or interruptions to its pioneering research.

Enter

Google Cloud Storage to scale capacity on-the-fly and accommodate spikes in resource demands, **Pipelines API in Google Genomics** to queue incoming data, and **Compute Engine** for processing and analysis.

Outcome

- Analyzes genomes 400% faster with Google Cloud
- Protects genomic data by governing privacy, data access, and use

The pace and volume of data produced for our research was increasing. We needed a more secure cloud infrastructure that would allow us to scale quickly and support the rapid increase in genomic data production.

Niall Lennon, Senior Director, Broad Institute

The collaboration between Jibe and Google Cloud Job Discovery for our career site allows us to do a much better job matching opportunity to talent on a very large scale.

Sjoerd Gehring, Global VP of Talent Acquisition, Johnson & Johnson

Johnson & Johnson

Industry: Healthcare & Life Sciences **Region:** North America **Partner:** Jibe

Developing a smarter recruitment platform

Like many large enterprises, Johnson & Johnson faced a talent shortage across a range of critical roles. Search results on the company's front door to talent—its career website—didn't surface the right opportunities for job candidates.

Enter

Jibe Platform to integrate **Google Cloud Job Discovery** machine learning capabilities.

Outcome

- Boosts highly qualified applicants for business critical roles by 41%
- Increases job site click-through by 45%

About

- A 130-year old company with over 130,000 employees in 60 countries united in a common mission to profoundly change the trajectory of health for humanity
- Named a 2018 Fortune World's Most Admired Company

NEXTPLANE

Industry: Healthcare & Life Sciences **Region:** North America

About

- Adopted by more than 850 hospitals in 47 states and one of the largest healthcare safety clouds in the world, NextPlane Solutions is playing a critical role in building a better national understanding of patient safety
- Seeks to advance detection, analysis, and learning and help eliminate preventable harm in healthcare

A modern and more secure infrastructure + ML for good

NextPlane Solutions changed the patient safety landscape with its XChange platform. As demand grew, NextPlane needed a platform to more securely store, analyze, and gain insights from health information without worrying about the underlying infrastructure. It also wanted to introduce machine learning to analyze reports from doctors, nurses, and clinicians.

Enter

Google Cloud Platform to more securely store and analyze insights from health information and quickly and easily satisfy security audit requirements, **Compute Engine** to spin up new services in just a few hours, and **Cloud Natural Language** to analyze content in healthcare providers' reports and extract sentiment and syntax to classify safety concerns.

Outcome

- Helps prevent thousands of deaths per year through shared safety information
- Connects more healthcare organizations with improved scalability

Google demonstrated its understanding of the healthcare industry by engineering essential security capabilities, such as control over encryption, into the cloud environment. Google Cloud Platform offers the security features we need. We can control where services are located, use a cloud platform that supports HIPAA compliance, and have peace of mind that security features are less exposed to human error.

Mike Personett, President, NextPlane Solutions

What you can do with Google Genomics—and can't do in-house—is run 1,000 genomes in parallel. From our point of view, it has almost infinite resources. A single user can boot up 5,000 machines.

Somalee Datta, PhD, Director of Research IT, Stanford School of Medicine

Stanford Center for Genomics and Personalized Medicine

Industry: Healthcare & Life Sciences **Region:** North America

Creating life-saving intelligence from complex DNA sequences

At Stanford Center for Genomics and Personalized Medicine (SCGPM), scientists crunch massive genomic datasets around DNA sequences to learn how individual genomes impact health. Researchers needed a more secure and reliable cloud solution to avoid delays in data processing, which dramatically limit exploration and advancements in treatment of disease.

Enter

Google Genomics and **BigQuery** to build a genetic variant analysis pipeline and return results at unprecedented speed.

Outcome

- Returns query results in less than 10 seconds
- Establishes high-level security for DNA data to confidently store and share data in the cloud

About

- SCGPM devises new approaches to the study of genomic changes in cancers to understand disease origins and progression
- Focuses on developing technologies for functional genomics and proteomics

Industry: Healthcare & Life Sciences **Region:** North America **Partner:** Perficient

About

- University of Colorado Denver - Health Data Compass helps doctors evaluate patients at the molecular level to predict patients' individual risks for disease
- Helps doctors develop personalized therapies based on patient DNA

More securely integrating genetic data and patient records

Large-scale analysis of the genetic compositions and health histories of thousands of patients generated huge amounts of data for University of Colorado Denver - Health Data Compass. Securely and quickly integrating this data to make it usable is a major challenge, and the legacy on-premises technology they used was costly and unable to scale.

Enter

Perficient and **Google Cloud Platform** to support federal HIPAA compliance. **Cloud Storage** to receive data uploads from multiple sources and **Google Genomics** and **BigQuery** to support a wide range of analytics.

Outcome

- Accelerates data query times by 97%
- Reduces costs dramatically, freeing funds for vital program development

We take our responsibility to protect patient data very seriously. Google Cloud Platform provides significant advantages in data security over on-premises systems and helps us achieve HIPAA compliance.

Michael Ames, Associate Director for Health Data Compass and Director of Enterprise Architecture, University of Colorado Denver - Health Data Compass

Public Sector & Education

Google Cloud

BROWN

Industry: Education **Region:** North America

About

- Founded in 1764 in Providence, Rhode Island, Brown University is the seventh-oldest higher learning institution in the U.S.
- Known for its open curriculum that encourages students to build custom degrees based on individual interests

Community-wide collaboration & more modern data storage

Brown University wanted to free students and faculty from having to constantly clean out inboxes and delete large attachments—all while avoiding a costly upgrade to the on-premises email server.

Enter

G Suite for seamless collaboration tools, large storage capacity, security protection, easy internal troubleshooting, and steady feature upgrades.

Outcome

- Realizes $800,000 annual savings over 5 years
- Creates stronger alumni ties when graduating students take their email, calendars and files with them

I can't remember what collaborating with teams was like before Google.

Hong Chau, Instructional Designer, Brown University

I'm in Google Docs writing a paragraph. Something someone else is writing might trigger my thinking and now we're collaborating in real time. They can be 400 miles away, and I'm benefitting from their intellect. That is such a huge change in how we communicate and how we work. It has been monumental.

Flint Waters, Former CIO, State of Wyoming

Industry: Public Sector **Region:** North America

A monumental shift in the way state agencies work and collaborate

Governor Mead of Wyoming wanted to create a culture of urgency and collaboration that would empower employees and better serve citizens. To do this, the large, geographically diverse organization needed to streamline operations and improve cross-agency communications.

Enter

G Suite, which requires only an internet browser, to cut IT costs, streamline communications, and add tools that help employees work together. **Google Cloud App Maker** to develop applications on the fly for paperless forms, login monitoring, and more. **Chromebox for Meetings** to improve transparency and bring public servants, citizens, and elected officials closer together.

Outcome

- Saves Wyoming taxpayers more than $1M annually by using G Suite to reduce software license, server purchase, and maintenance costs
- Reduces employee travel time by using Chromebox for Meetings

About

- Department of Enterprise Technology Services (ETS) establishes and refines information technology structure
- Increases the ability of State agencies to deliver quality, cost effective services to the citizens of Wyoming

University College Dublin
Ireland's Global University

Industry: Education **Region:** EMEA

About

- 32,000 students from over 120 countries make University College Dublin one of Europe's largest research universities
- Up to 40,000 devices connected to the network simultaneously

Transforming how students and staff work and connect

University College Dublin students, faculty, and staff had an expectation of a modern, open, and more secure network that was not tied to a particular device and that could reliably work off wireless. Users demanded always-on capabilities and an intuitive interface. They also didn't want to be bothered with registering devices or connecting to email.

Enter

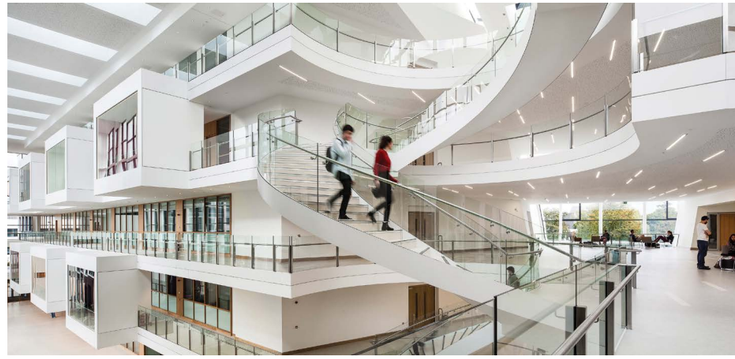
G Suite for advanced email capabilities and easy migration to **Google Calendar**.

Outcome

- Realizes significant 6-figure savings by eliminating legacy hardware, software, and maintenance
- Encourages a new data-driven culture as staff and students discover creative ways to collaborate using G Suite

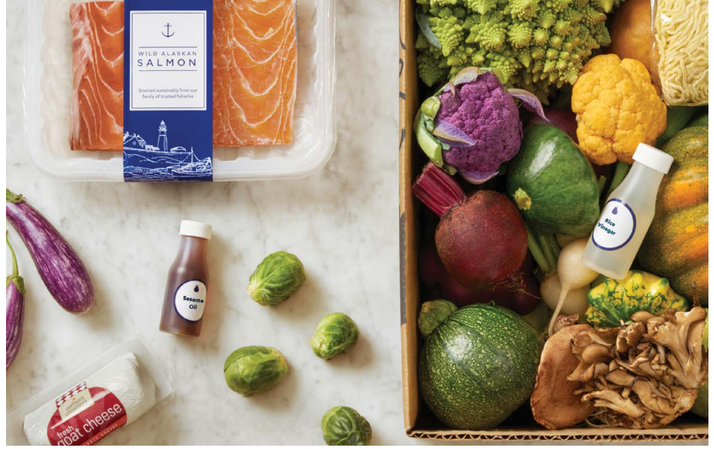
The big driver for choosing Google was that Gmail was reliable, always on, and intuitive for people to use.

Brian Morrissey, Head of Web Services, University College Dublin



Retail

Google Cloud



The combination of Looker and Google BigQuery is powerful, allowing us to get data-hungry analysts essential information much faster.

Sam Chase, Tech Lead, Data Operations, Blue Apron

Blue Apron

Industry: Retail **Region:** North America **Partner:** Looker

A better recipe for modern analytics

As a pioneer in meal kit delivery, Blue Apron creates incredible home cooking experiences by sending recipes, high-quality ingredients, and instructions to customers. Since ingredients must be sourced at the right time, quality, and price, Blue Apron needed a better analytics platform to make faster business decisions about food inventory.

Enter

Looker and **Google BigQuery** to build a data exploration platform with lightning-fast queries, **BigQuery Data Transfer Service** to provide actionable analytics from marketing data, **Cloud Dataproc** for data cleansing and transformation, and **BigQuery** integration with **G Suite** to bring data into **Sheets** for further distribution and analysis.

Outcome

- Enables near real-time business decisions to better manage food inventory and delivery
- Helps improve customer service and optimize business processes with faster insights
- Reduces costs while reclaiming up to a week of engineering time a month

About

- Blue Apron's mission is to make incredible home cooking accessible to everyone
- Building a better food system that benefits consumers, food producers, and the planet by reimagining the way food is produced, distributed, and consumed

Industry: Retail **Region:** EMEA **Partner:** Datadog

About

- Conrad Electronic is an online retailer of electronic products in Germany
- Offers more than 1 million products for B2B customers and 750,000 products for B2C customers

Embracing change with cloud technology and IoT

Conrad saw the future decades ago, launching one of the first online shops in Europe in 1997. Continuing this tradition of disruption, the company wanted to expand from a B2C retailer to an advanced B2B e-procurement platform. To achieve its vision, Conrad needed automated, personalized marketing with reliable analytics.

Enter

Google Ads and **Google Cloud Platform** to develop Conrad Connect, an IoT platform connecting over 50 brands with thousands of smart products.

Outcome

- Accelerates time to market by 5x while reducing IT development and testing time by 25%
- Introduces powerful, scalable performance for IoT and e-commerce platforms
- Manages more than 250 million data sets per week in Conrad Connect, and over 5 million searches per month on the web

We saw a need for IoT products from different companies to communicate well together. Building Conrad Connect on Google Cloud Platform helped us capitalize on that opportunity and get to market faster. In one year, with a small team, we developed IoT connections to almost 50 different brands. What a great efficiency achievement!

Aleš Drábek, Chief Digital and Disruption Officer, Conrad Electronic

We had a tight deadline, a sense of mission, and ambitious goals. No Plan B, just full steam ahead. This kind of migration is definitely achievable, when the right platform, the right partners, and the right people come together.

Ryan Kerry, Global Head of Engineering and Technology, Lush

LUSH FRESH HANDMADE COSMETICS

Industry: Retail **Region:** EMEA **Partners:** Ancoris, Claranet

Keeping up with customer demand

Lush's increasing popularity has led to spikes in demand throughout the year, including Boxing Day, the biggest shopping day in the U.K. To keep providing shoppers with uninterrupted access, Lush set out to migrate its e-commerce platform to a high-performance infrastructure that could scale easily to handle increased traffic.

Enter

Ancoris and Claranet to kick off the project, **Google Compute Engine** for rapid VM deployment, **Cloud SQL** to control infrastructure and optimize for scaling and **Google's private fiber network** to streamline networks without impacting latency. **G Suite** to collaborate and share information quickly and easily.

Outcome

- Improves availability during peak loads with autoscaling
- Reduces infrastructure hosting costs by 40%
- Streamlines data center usage from 5 to 3 locations

About

- Lush is a global cosmetics company headquartered in the U.K. with over £700 million in revenue and 930 stores in 49 countries
- Ethically sourced ingredients backed by ethical business policies and public stances on environmental and political issues

ocado
The online supermarket

Industry: Retail **Region:** EMEA

About

- Ocado is the world's largest online-only grocery retailer
- £1.27 billion in annual revenue

Improving operations and service with machine learning

Ocado had been working on machine learning for over 5 years, having developed applications that required PhD data scientists and on-premises infrastructure. With access to Google Cloud Machine Learning Engine, Ocado saw how it could transform its approach to AI and accelerate development.

Enter

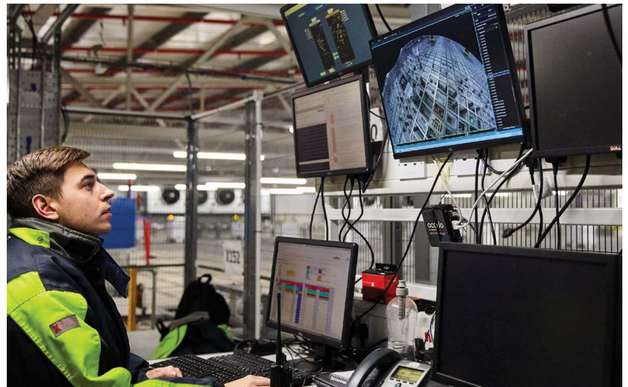
Google Cloud Machine Learning Engine and **TensorFlow** to uncover which type of neural network could best prioritize emails and to predict customer behavior and improve user experience. **Cloud Storage** and **BigQuery** to provide the backbone for data for the Ocado Smart Platform.

Outcome

- Delivers analytics results 80x faster, at 33% lower cost
- Increases contact center efficiency by 7%
- Responds to urgent messages 4x faster

Without Google Cloud Machine Learning Engine, it would have been a lot harder to succeed on a project like email classification. Even if we invested significantly in infrastructure, it would be difficult to manage because of the computational intensity.

Roland Plaszowski, Head of Retail Systems, OSP, Ocado



Changing to a cloud-based suite of tools is a key part of Woolworths strategy to use technology to promote greater collaboration, productivity, and effectiveness.

Industry: Retail **Region:** APAC

Transforming workplace collaboration

One of Australia and New Zealand's most forward-looking retailers, Woolworths is always looking for ways to use technology to add convenience for customers. The company also wanted intuitive tools to help teams work more efficiently.

Enter

G Suite and **Google Chrome** for a company-wide transformation of workplace technology and to help Woolworths reinvent how employees work and serve customers.

Outcome

- Adds to the successful roll out of in-store *Tap to Support* iPad app, developed on Google App Engine, to roll out G Suite and Google Chrome
- Empowers staff to work from any device at any time, boosting collaboration and productivity

About

- Woolworths Group employs 205,000 team members and serves over 29 million customers every week
- Mission is to deliver the best in convenience, value, and quality to customers

Technology

Google Cloud

AgroTools

Industry: Technology **Region:** LATAM

About

- World leader in agricultural intelligence
- AgroTools produces technology that helps the entire agribusiness supply chain improve efficiency, gather competitive intelligence, and minimize business risk

Increasing agricultural intelligence to help feed the planet

AgroTools needed a cloud services provider that could scale to nearly unlimited capacity. It also wanted a managed big data solution to provide fast performance for agricultural analytics, knowing that its on-premises database could not keep up with future demand.

Enter

Google BigQuery to quickly analyze large datasets, instantaneously generate strategic reports for all in the agribusiness chain, and complete queries in seconds rather than weeks.

Outcome

- Boosts sales by 40% and reduces IT costs by 32%
- Analyzes over 200,000 huge data sets annually

By moving to Google Cloud Platform, we're giving our customers confidence that their data is increasingly more secure and that they will have better access to powerful services. We can continue to provide the highest levels of accuracy and speed, even as agricultural data increases exponentially.

Fernando Martins, CEO, AgroTools

With its expertise in a rapidly evolving technology landscape, Google is the perfect match for us in a world that demands constant improvement in services.

Pablo Moncada, IT DevOps Team Lead, BQ

Industry: Technology

Region: EMEA

Better customer service at a lower cost

BQ went from providing services to several thousand local customers to having to provide reliable service and updates to millions of mobile devices—a challenge difficult to manage using an IT infrastructure built on individual virtual machines. In addition to streamlining management, BQ wanted to reduce costs while maintaining high availability.

Enter

Google Kubernetes Engine for managed orchestration and easier development, **Compute Engine** instances for affordable high availability, **BigQuery** to quickly analyze information from millions of devices and application logs, and **G Suite** for connected mobility.

Outcome

- Scales to support more than a 2,000% increase in services
- Saves 60% in cloud hosting costs

About

- BQ is one of the leading technology companies in Europe, designing and developing consumer electronics such as smartphones, 3D printers, and robotics
- Develops and sells mobile devices to over 5 million customers in more than 40 countries

Industry: Technology **Region:** APAC

About

- Carousell began in Singapore in 2012 and is now in 19 cities around the world
- One of the world's largest and fastest growing marketplaces

A powerful mobile classifieds marketplace to buy, sell, and chat

Carousell used to run its mobile online marketplace on a range of hosted services, but the company realized it needed to improve stability and availability to meet customer expectations and internal requirements.

Enter

Google Compute Engine to create and run virtual machine instances, **Cloud Load Balancing** to scale compute to meet demand, **Cloud Storage** and **Cloud Dataflow** for data retrieval and processing, **Cloud Pub/Sub** to deliver enterprise messaging communication between the company's applications, and **G Suite** to ensure prompt, reliable communication across teams.

Outcome

- Enables more than 80 million listings and 1 billion chats
- Increases availability from 90% to 99.99%

Google Cloud Platform is enabling us to meet the requirements of millions of monthly average users who have posted more than 80 million listings since we were established. These listings include about 500 million images, while we have supported more than 1 billion chats and more than 20 billion individual chat messages.

Jordan Dea-Mattson, Vice President, Engineering, Carousell

Eliminating our physical data centers and running on Google Cloud Platform means we can focus on delivering new services that make Evernote's customers more productive.

Ben McCormack, Chief of Staff, Evernote

EVERNOTE

Industry: Technology **Region:** North America **Partner:** Datadog

More secure cloud storage for billions of notes and attachments

More than 220 million Evernote users store the equivalent of roughly 10 copies of every modern book ever published. The company's private cloud could no longer scale to support demand for the company's services. Evernote needed a reliable cloud-based solution that could offer the monitoring and analytics critical to increasing performance and reducing downtime.

Enter

Google Cloud Platform for more secure, unstructured data and machine learning and Datadog for custom analytics dashboards that provide greater visibility into applications and infrastructure.

Outcome

- Migrates 5 billion user notes equal to 3.5PB of data in only 70 days
- Improves performance, uptime, and security and gains better visibility across the entire application stack

About

- Evernote is a cross-platform app designed to help individuals and teams capture, organize, find, and share ideas

GO-JEK

Industry: Technology **Region:** APAC

About

- GO-JEK develops apps for transport, logistics, and payment services to residents of more than 25 Indonesian cities
- Provides services in 15 industry verticals and is the market leader in 13 of them

Technology that scales to support a fast-growing company

Growing from 100 to more than 2,000 employees in a short time period, GO-JEK needed to support its rapid growth and automate key processes in order to deliver the availability and stability required to provide the best possible customer service.

Enter

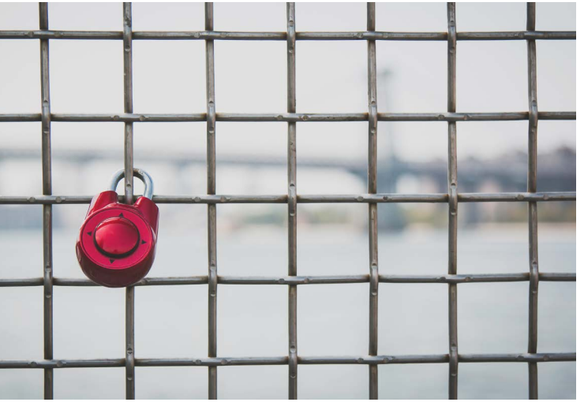
Google Compute Engine to create high-performance, scalable virtual machines to power hundreds of back-end services that provide everything from ride services and food delivery to tickets and shopping, **BigQuery** to analyze massive amounts of data, and **Maps** integration for user route planning and ride selection.

Outcome

- Supports hundreds of thousands of concurrent transactions and more than 100 million internal API calls per second
- Generates up to 4TB of data per day, delivers response times of 50 milliseconds, and achieves nearly 100% payment success rates

We receive a lot of data and billions of events per day across multiple products. Using Google Cloud Platform has enabled us to capture and analyze this data to identify new opportunities and areas for improvement.

Ajey Gore, Group Chief Technology Officer, GO-JEK



We're constantly trying to catch attackers, who continually change their behaviors. Google Kubernetes Engine enables our small team to manage a big infrastructure and respond quickly with new security services.

Pete Hunt, CEO, Smyte

smyte.

Industry: Technology **Region:** North America **Partner:** SADA Systems

Combating online abuse with data science

For online services, fighting spam, scams, harassment, fraud, and compromised user accounts takes a tremendous amount of time and money. Smyte wanted to detect and foil more malicious activity on their customers' online platforms in less time.

Enter

SADA Systems, **Google Kubernetes Engine**, and **BigQuery** for combining automatic classification with powerful search and aggregation. Customers can now analyze data on a massive scale, giving them more power and flexibility to improve abuse management at a fraction of the cost.

Outcome

- Identifies $1 million in credit card fraud for a major customer
- Analyzes data from more than 100 million unique visitors per month

About

- Smyte combats abuse using customizable rules and configurable ML models trained by event data and content signals
- The Smyte platform is adaptable to the technology stack and unique behavior of users and configurable via SQRL Rules Engine

SONY

Industry: Technology **Region:** JAPAC

About

- Founded in 1995, Sony Network Communications is a subsidiary of Sony Corporation
- Aims to provide customers with an exciting and inspiring environment while continuing to offer internet services that customers can use at ease

Going big on big data: greater efficiency and intelligence

Sony Network Communications Inc. operates an Internet Service Provider, So-Net, along with enterprise IT solutions for cloud integration. The company also manages cloud computing and application development for Sony products and services. The company wanted to use big data and deeper data analysis to improve its products, services, and content, as well as improve operations and user experience.

Enter

Google BigQuery, **Cloud Dataflow**, **Cloud Pub/Sub**, and **Kubernetes Engine** to build a commercial data analysis infrastructure for multiple applications and services.

Outcome

- Processes 10 billion monthly queries faster, which advances data analysis
- Manages mobile private DMP on BigQuery and Cloud Dataflow

The 80:20 rule that applied in our data analysis meant that 80% of time is spent on preparation and only 20% of time is spent on actual analysis. Our data analysis team consists of data scientists, data engineers, and business personnel. As a long-time data engineer myself, I was plagued by this problem. But Google's managed service brought us a paradigm shift that allows us to spend much more time moving the company forward.

Masato Kawada, Cloud Development & Operation Section Manager, Sony Network Communications

Additional Industries

Google Cloud

Industry: Food & Beverage **Region:** EMEA **Partner:** Injenia

About

- Barilla is the world's leading producer of pasta and Italy's premier provider of baked goods
- Factories in 10 countries, offices in 17 territories, and billions in annual revenue

Transforming the business of making great pasta

In the old world at Barilla, production line workers track events in their notebooks, shift leaders track details in another notebook, and the leader of the maintenance team tracks in yet another notebook. Teams meet daily in the morning to synchronize all of the paper notes.

Enter

Injenia to kick off the project, cloud-based **Google Docs** to collect ideas, **Forms** to collect feedback, **Hangouts Meet** and **Google+** to communicate (all in real-time with collective files stored in **Drive**), and **App Engine** and **Cloud SQL** to build a socially-focused **G Suite** collaboration app.

Outcome

- Faster, more efficient maintenance processes due to easy, cross-factory knowledge sharing
- Quick and easy adoption of CollaborAction app led to rollout in just 15 days

CollaborAction hasn't just made our maintenance processes faster and more efficient, it has also exponentially increased the knowledge and understanding employees have about their work. It's improving team spirit.

Alessandra Ardrizzoia, Digital Engagement Senior Manager, Barilla

We made a big breakthrough using TensorFlow and Google Cloud Machine Learning Engine. Existing machine vision inspection systems are expensive, require a large space for installation, and take a long time to introduce. With TensorFlow ML, we developed a prototype in only two months that doubled productivity.

Takeshi Ogino, Deputy Director of Production Division, Kewpie Corporation

愛は食卓にある。
kewpie

Industry: Food & Beverage **Region:** JAPAC

Using machine learning to save time and boost productivity

Fulfilling its motto that "good food comes from good ingredients" demanded sizeable manpower for inspection and sorting of raw ingredients. Large fluctuations in quality and size of raw food used for its signature Kewpie Mayonnaise, as well as dressings, seasonings, baby foods and nursing care foods equated to time and money spent on the factory floor. The Tosu Factory alone inspected 4 to 5 tons of raw ingredients a day. Kewpie decided AI and machine learning was the answer to this problem.

Enter

TensorFlow for anomaly detection that employs unsupervised machine learning to identify acceptable ingredients.

Outcome

- Adds both speed and precision to food inspection, enabling factories to process more food and boost production
- Picks defective ingredients with near-perfect accuracy

About

- Founded in 1919, Kewpie is a leading Japanese manufacturer, wholesaler, transporter, and warehouser of food products that employs nearly 15,000 people

Industry: Manufacturing **Region:** EMEA

About

- Philips Lighting is the world leader in lighting products, systems, and services and is an industry leader in using the Internet of Things to transform homes, buildings, and urban spaces
- €7.1 billion in sales and 34,000 employees in over 70 countries

Bringing apps, devices, and users to light with a powerful backend

Philips Hue connects lighting to the internet, surfaces usage data, and interacts with users for home security and customer well-being. But Philips needed a cloud platform that would let apps more securely access, monitor, and interact with the system.

Enter

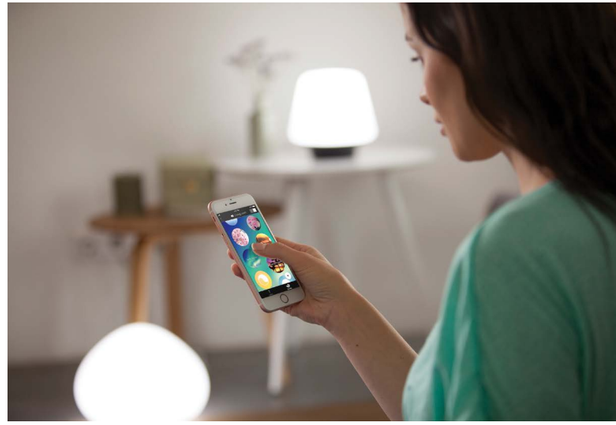
Google Kubernetes Engine and **Compute Engine** to handle 200 million transactions every day and **App Engine**, **Cloud SQL**, **Cloud Storage**, and **Cloud Datastore** to power the back-end and enable out-of-home connections.

Outcome

- Routes 200 million daily transactions for 25 million remote lighting commands per day, with dramatic cost cuts
- Achieves 10x the scale of other similar projects with one-tenth the workforce

Google Cloud Platform has a rich set of services that lets us be creative in designing new capabilities for Philips Hue. When something comes up that we want to do, there's always a Google Cloud service that allows us to build it.

George Yianni, Head of Technology, Home Systems, Philips Lighting



As part of our IoT integration strategy, Google Cloud IoT Core has helped us focus our engineering efforts on building oil and gas applications by leveraging existing IoT services to enable fast, reliable, and economical deployment. We have been able to build quick prototypes by connecting a large number of devices over MQTT and perform real-time monitoring using Google Cloud Dataflow and Google BigQuery.

Chetan Desai, VP Digital Technology, Schlumberger Limited

Schlumberger

Industry: Oil & Gas

Region: North America

Running advanced algorithms in the cloud

Schlumberger wanted to leverage the strengths offered by cloud computation stacks to bring its data processing to the next level. To make this a reality, the company needed powerful processing capabilities and better collaboration between locations worldwide.

Enter

Schlumberger's Software Technology Innovation Center and **Google Cloud IoT Core** to use existing IoT services that enable fast, reliable, and economical deployment of oil and gas applications with **TensorFlow** for complex petrotechnical interpretation of seismic and wellbore data, as well as automation of well-log quality control and 3D seismic interpretation.

Outcome

- Using Cloud NVIDIA GPUs and Custom Machine Types, deploys compute capacity of over 35 petaflops and 10PB of storage
- Launches the DELFI cognitive E&P environment and deploys E&P Data Lake based on BigQuery, Cloud Spanner, and Cloud Datastore with more than 100 million data items comprised of over 30TB of petrotechnical data

About

- Schlumberger is the world's leading provider of technology for reservoir characterization, drilling, production, and processing to the oil and gas industry
- 100,000 employees in more than 85 countries around the world

Thank you

Thank you for taking the time to learn about our customers. They're proud of the successes they've had and the results they've achieved, and so are we.

Visit us at **https://cloud.google.com/customers/** to learn more about the cool things that Google Cloud customers are doing with their cloud technologies.

Google Cloud