



Cloud-Enabled Location Intelligence

Disrupting Geospatial Business Models

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A person is looking at a whiteboard covered in red and white diagrams. The person is wearing a dark jacket and has their hair pulled back. The whiteboard contains various lines and shapes, suggesting a complex data visualization or flowchart.

Data is Everything.

Apps (and companies) win or lose based on how they use it.





Indefinite, accelerating change.

Interminable scale.

Location, analytics, and learning.

New Location-Based Entrepreneurship

Built on data

Build from the cloud

Embed location to create value



Case Study



parknav

<http://parknav.com>



Real-Time On-Street Parking Data



Real-Time
Parking Data
Platform

Complete City
Coverage

Focus on
Street Parking



Built on Cloud Data



Data Source: Users

Bootstrapped via Data Partners

Cloud-Executed Data Science and Analytics



Case Study

www.indoormap.com

cartogram





Cartogram provides indoor location services for businesses with large venues.

Cartogram is fueled by a cloud-based **indoor mapping platform** built on top of Google Maps.



Indoor Location Services for Business

Enable New End-User Experiences and Business Models



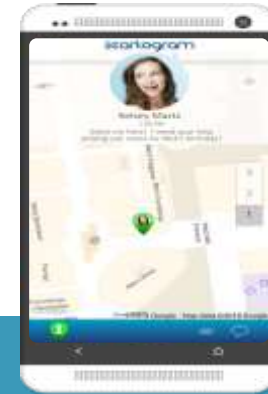
Product search and directions at **over 300 retailers**



Multi-venue wayfinding made possible by integration with Google Maps

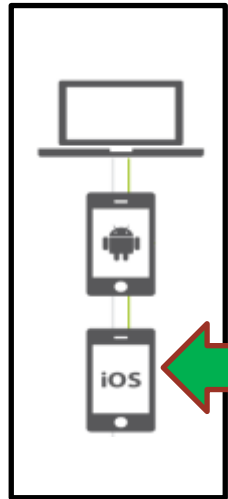


NearView ad management built into Cartogram's cloud-based venue technology management



Indoor delivery enables new revenue channels for businesses

nearview by cartogram



Read/Write

Google Load Balancer

Google App Engine

Google Cloud Messaging

cartogram

Google Compute Engine

Google Cloud SQL

Google Cloud Storage

Google Maps SDK

Google Cloud Platform



Push Ad to NearView



Read-Only

Google Maps SDK

Case Study



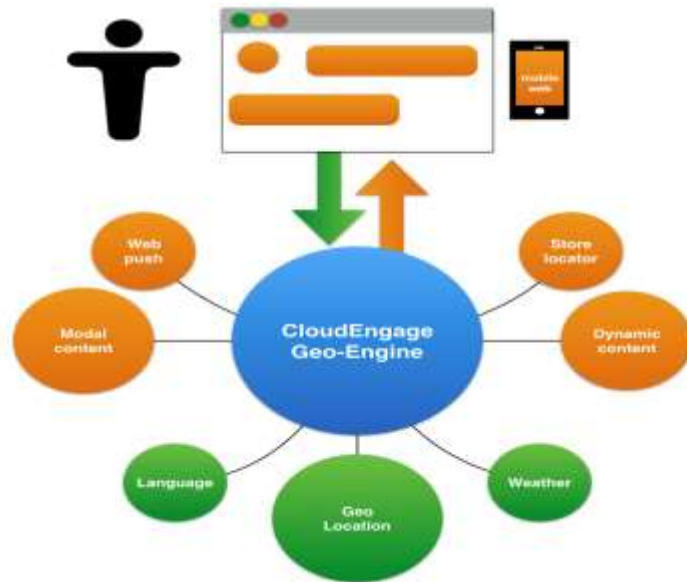
www.cloudengage.com

Regional Geo-Targeting

Geo-shift web and mobile site content without replacing CMS

- Use WiFi triangulation and GeoIP to locate the user
- Additional triggers: local weather, demographics, time then factored in for heightened relevance

Localization dramatically increases website conversion before other forms of personalization kick in



Seattle: Rain, 9°C.

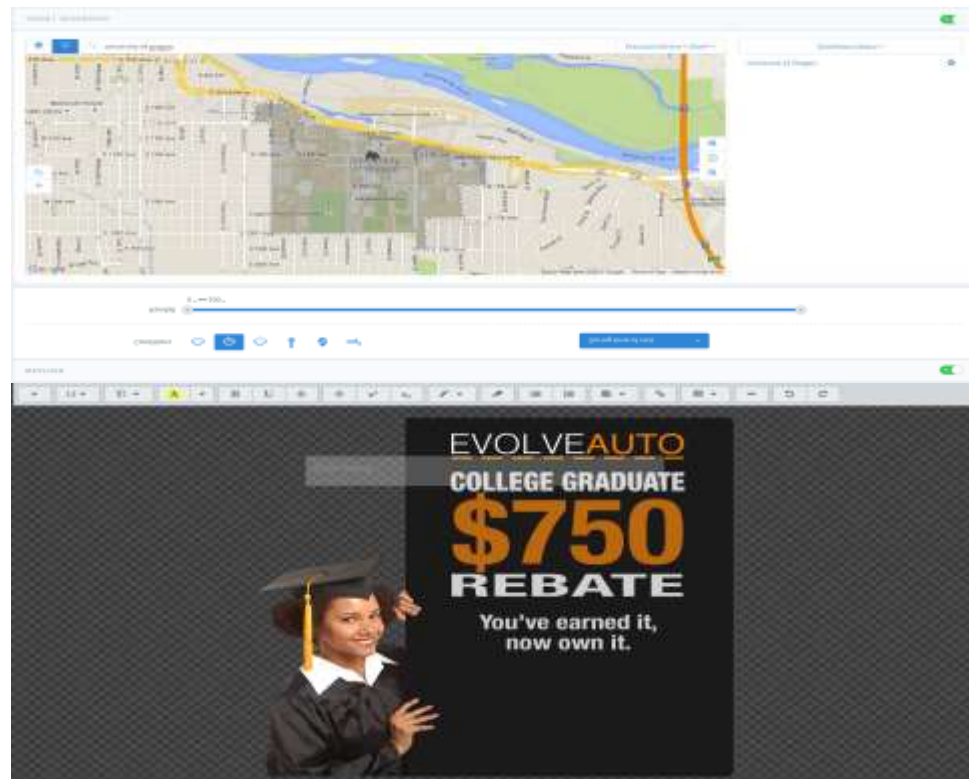


Miami: Sun, 30°C.

CloudEngage Geo-enhanced Hypertargeting

- Custom shapes editor allows CloudEngage clients to draw geo-fences over areas as small as a city block
- This allows geo-shifted web and mobile content
- Hypertargeting can then be further refined by applying demographic data
- 4x website conversion rate increase average with hypertargeting

Example: Hypertargeted college campus



Google Cloud Platform Vision

Single-node computing
"Some assembly required"

1st Wave Colocation

Your kit, someone else's building.
Yours to manage.



Storage



Processing



Memory



Network

2nd Wave Today's Cloud: Virtualized Data Centers

Standard virtual kit, for rent.
Still yours to manage.

Automation

True, on-demand cloud

3rd Wave An actual, global elastic cloud

Invest your energy
in great apps



Clusters



Distributed storage & processing



Containers



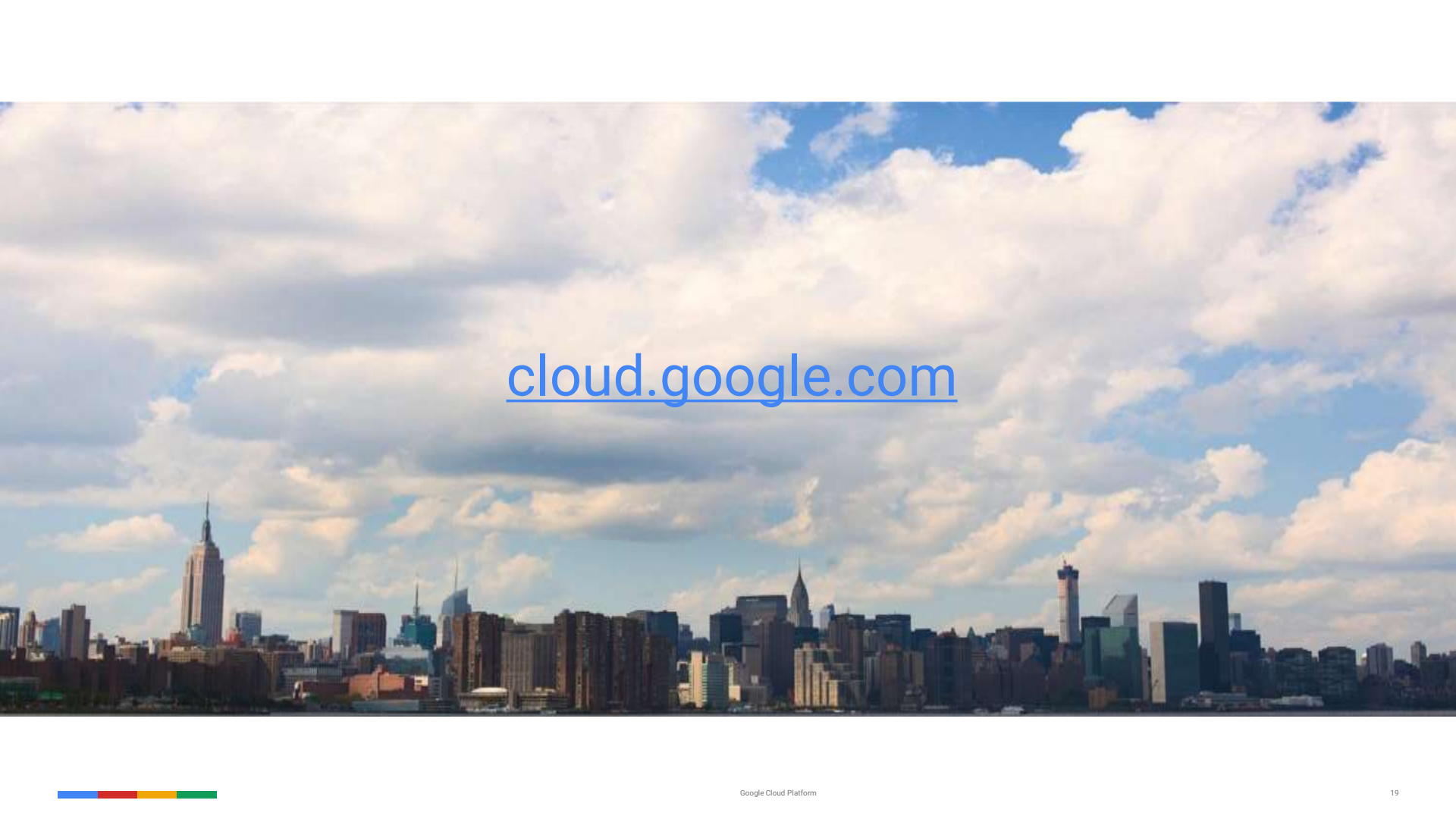
Conclusion

Next-generation geospatial businesses are **built on data from the cloud**

- Infinite scale
- Location understanding
- Scalable analytics
- Deep learning

Cloud-based data empowers disruption





cloud.google.com

