



FROM INSIGHTS TO ACTIONS

Jan Hendrik Fleury

Commercial Director Crystalloids | Chairman DDMA Data Decisions Engagement

crystalloids **looker**  Google Cloud **TraviX**

AGENDA

 **09.30 - 09.50** Now is the time to deliver smart and democratized insights **Jan Hendrik Fleury**

 **09.50 - 10.10** The modern Data Warehouse - What's New on GCP **Peter Bavinck**

 **10.10 - 10.30** The journey from BI to the Data Platform **Paul Goddard**

10.30 - 10.45 Coffee break

 **10.45 - 11.10** Democratising data: From on-premise to cloud-based data stack **Koen Mevissen**

11.10 - 11.45 Panel discussion and Q&A **Looker - Travix - Google - Crystalloids**

11.45 - 13.00 Lunch & networking

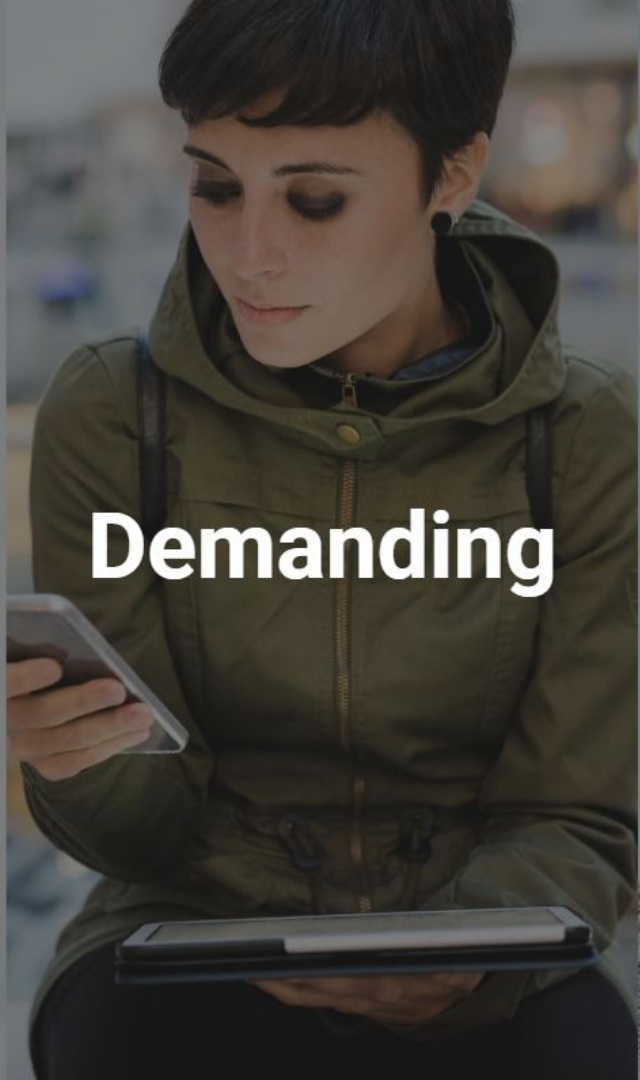


crystalloids

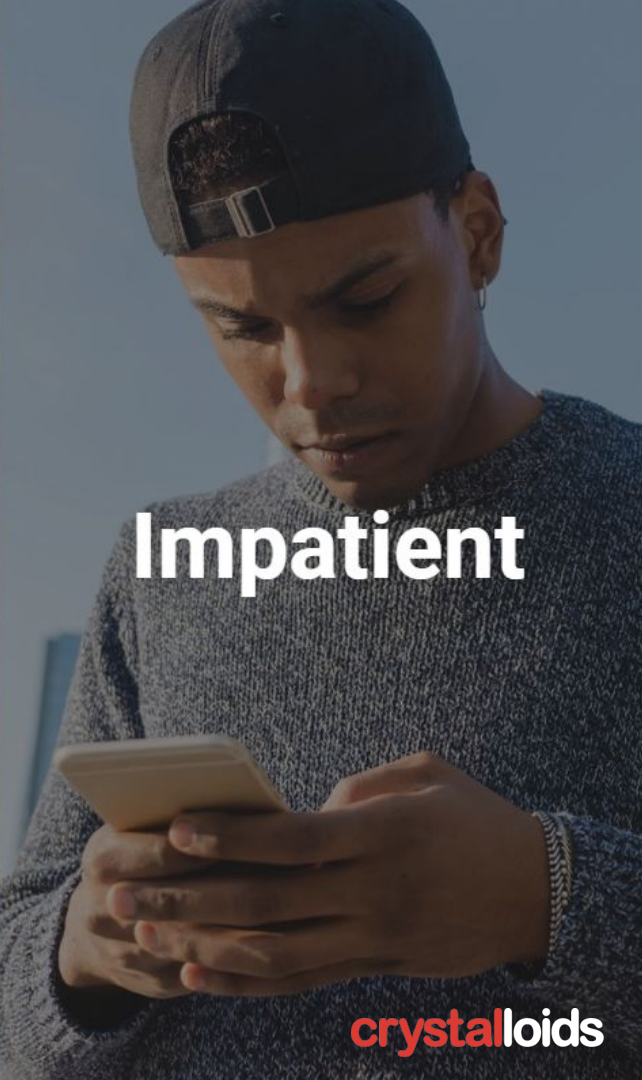
NOW IS THE TIME TO DELIVER SMART AND
DEMOCRATIZED INSIGHTS



Curious



Demanding



Impatient

MARKETING ENGINEERS



DATA



DECISION
MAKING



CUSTOMER
ENGAGEMENT

OUR CUSTOMERS



BODY&FIT



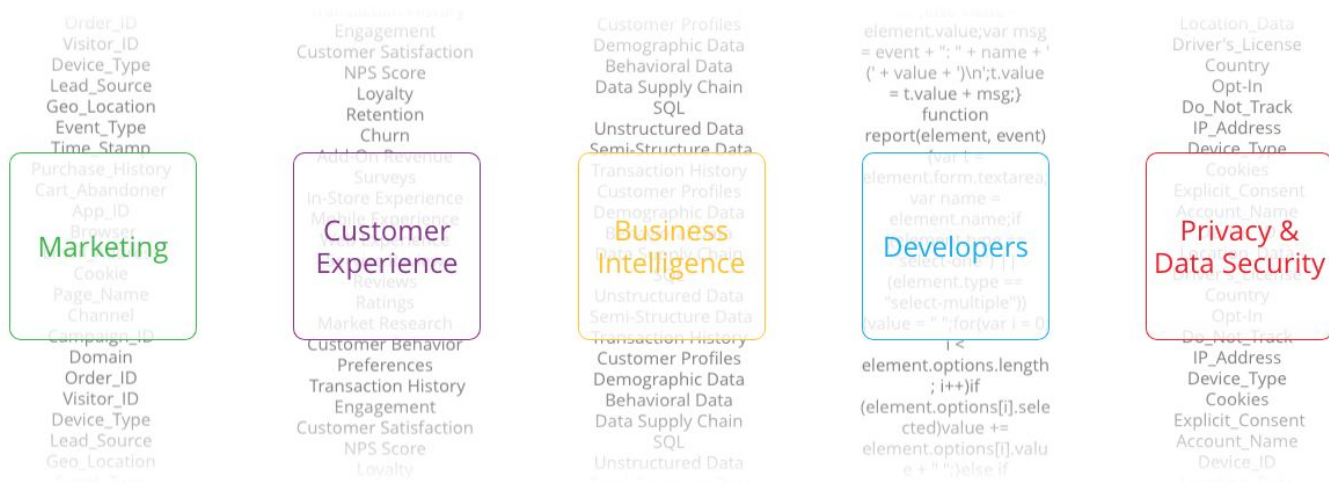
METRO GROUP



de Bijenkorf

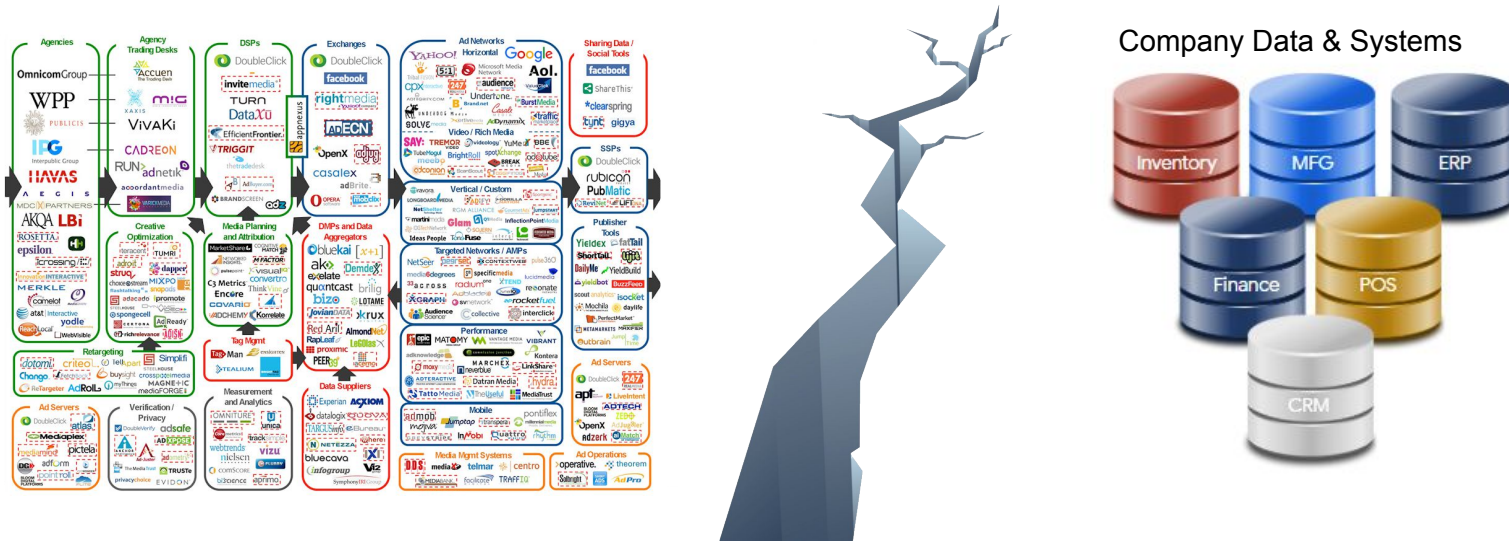


DATA MUST BE CENTRALIZED...



...AND MADE AVAILABLE SO ACTIVITY IN ONE CHANNEL CAN IMMEDIATELY SUPPORT ENGAGEMENT IN ANOTHER CHANNEL

PLATFORM AND DATA INTEGRATION KEEPS A CHALLENGE...



Marketers on average are using
4.9 platforms to execute a single campaign

In addition, large amounts of marketing &
customer signals live in data stores in the
enterprise

...SO BRING YOUR DATA TO GOOGLE CLOUD

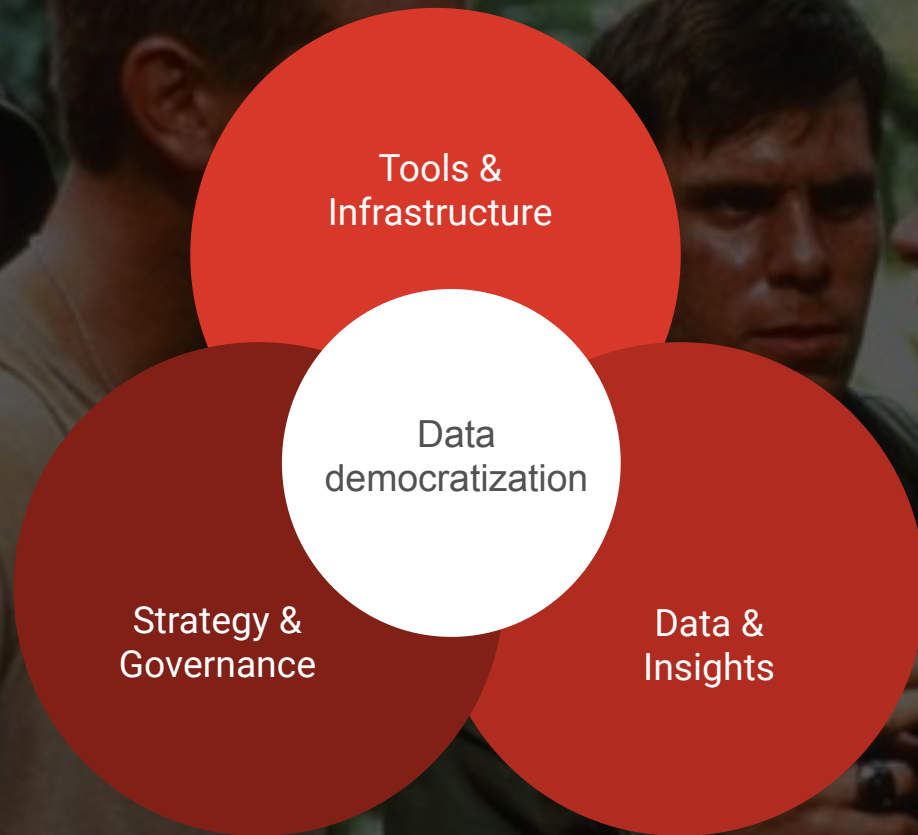
An illustration featuring a large number of hands of various skin tones reaching upwards from the bottom towards a central red banner. The hands are wearing sleeves of different colors like blue, yellow, red, and purple. The background is a solid blue color.

Democracy

- 
- A background image showing three men in military uniforms. The man on the left is in profile, wearing a light-colored t-shirt. The man in the center is looking towards the right, wearing a dark jacket. The man on the right is also in profile, looking towards the center, wearing a dark jacket. They appear to be in an outdoor setting with foliage in the background.
- Avoid data silos
 - Provide simple tools
 - Teach people data & software
 - Data governance

- Reduce engineering and ops support
- Reports designed by end users
- Facilitate actions from analysis
- Scalable solution

FRAMEWORK



NOW IT'S THE TIME!

TECHNOLOGY

- 10x cost reductions
- Maturity SAAS and PAAS
- Google
- Looker
- Ease of use

BUSINESS & CUSTOMER JOURNEY

- Customer centricity is imperative
- Business information at fingertips
- Truthful data and information

COMPLIANCY

- Store customer data only once (GDPR)
- Customer in control as part of journey
- Encrypted and pseudonymized



CASE

E-Commerce transformation
with smart data analytics and
integrations



PLATFORM TECHNOLOGY

DRIVERS FOR TRANSFORMATION

Break down silos

- Central store of customer and order data
- Single source of truth
- Store customer data only once (GDPR)

Integrated application processes

- Order history from Magento and Hybris on Hybris
- Integration to ESP, Customer Service, Warehouse Management System, PIM, ERP

Business analytics and AI

- Combine multiple sources GA360, Hybris, Magento, Clang, RobinHQ
- Trustworthy reporting
- Democratizing actionable insights
- Data foundation for AI
- Recommendations AI

Automate business processes

- Transactional emails
- Product review invites
- Abandoned cart emails

WHY?

- Re-use proven existing GCP integrations from Crystalloids between Hybris - Magento - Clang Robin HQ (customer service) - GA360
- Native Integrations with GMP stack
- Scalable to support future growth
- Leading in AI and ML
- Low maintenance
- Open commitment of GCP



Google Cloud

crystalloids



Data



Integrations



Migrations

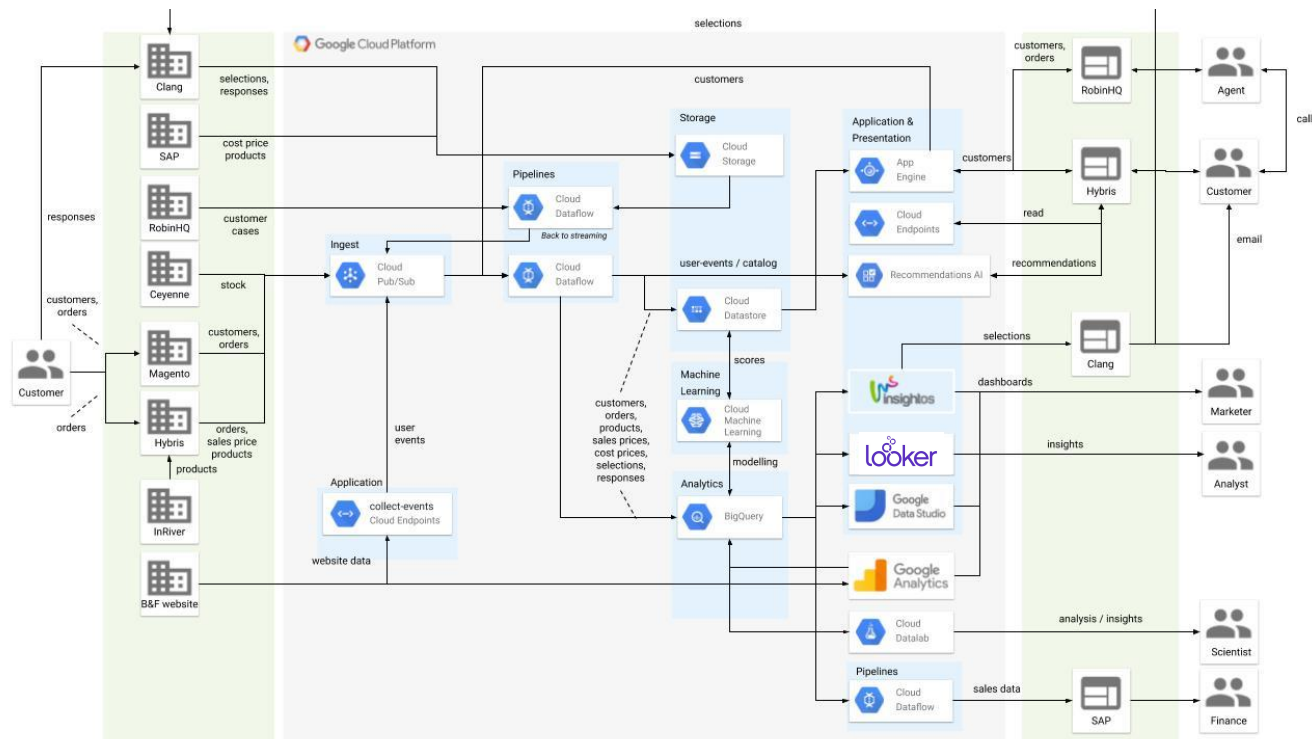


Analytics



Maintenance

HEADLESS CDP

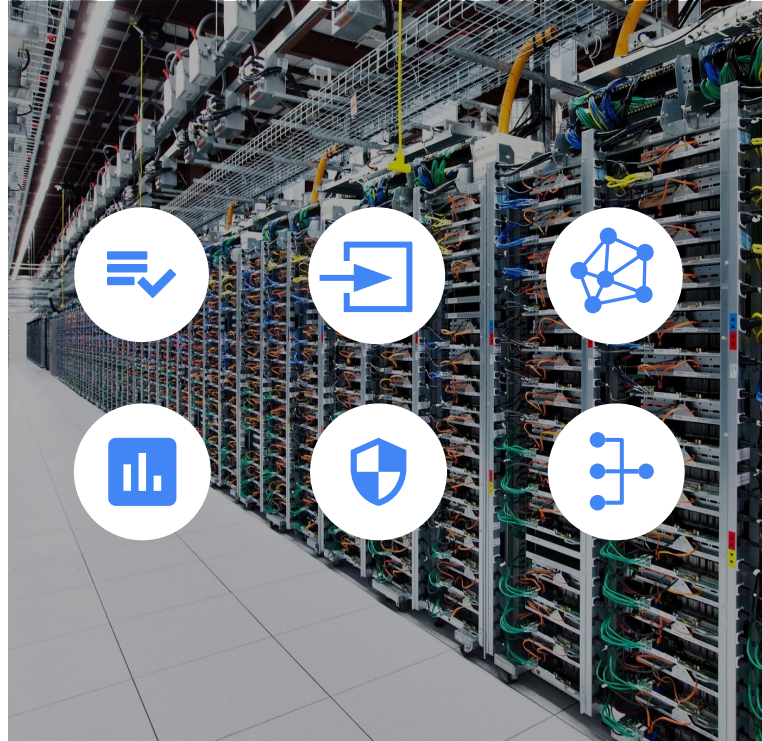




Unlock real-time business insights Google BigQuery

<https://cloud.google.com/bigquery/>

Google Cloud





An introduction to Looker

Paul Goddard - Alliances Manager DACH, Benelux and Ireland

Looker at a Glance



Close to 2000
customers



Google Cloud intends to acquire Looker for
\$2.6bn



800+ employees



Global Offices
Santa Cruz, San Francisco,
London, Dublin, Tokyo,
New York, Boulder, Chicago



Major Partnerships
Google, Amazon,
Cloudera, Microsoft,
HPE, IBM



5 of top 10 Fortune Org.
use Looker

Customers across the globe

eCommerce & Marketplaces



Media



Technology



Retail



Finance



Netherlands an important territory

eCommerce & Marketplaces

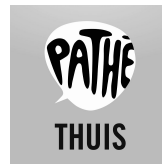


Technology



Media

DE PERSGROEP.



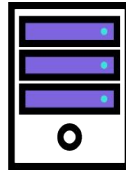
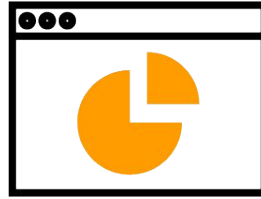
Finance



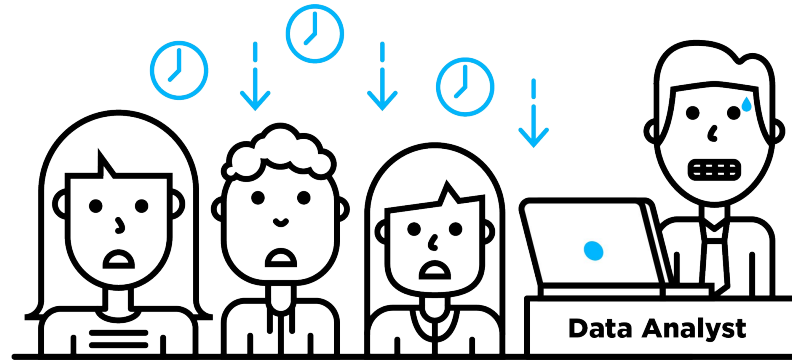
The Dawn of a New Age

FIRST WAVE

The Monolith BI Stack



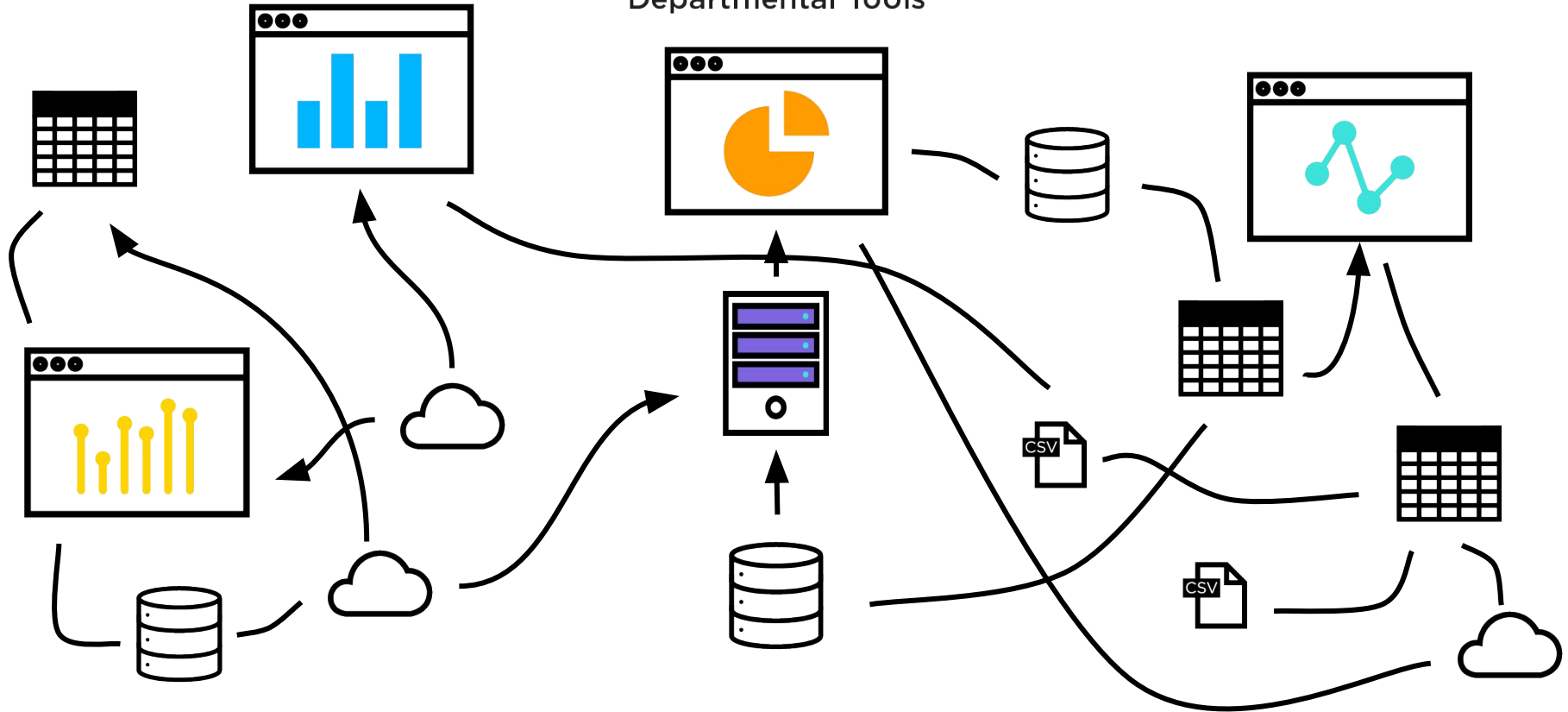
Data Was Inaccessible



Data Breadlines

SECOND WAVE

The Era of Self Service
Departmental Tools



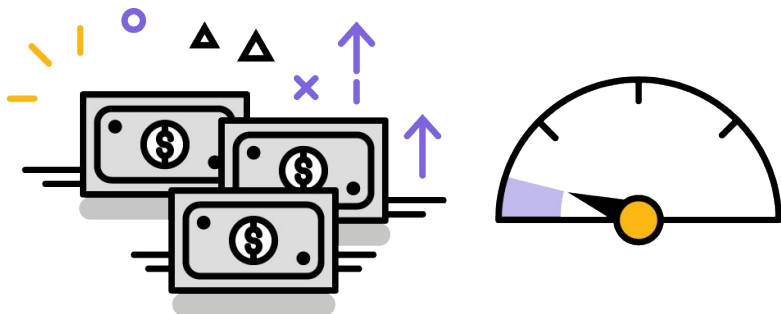
No One Can Agree



Data Chaos

A Revolution Under The Hood

Then

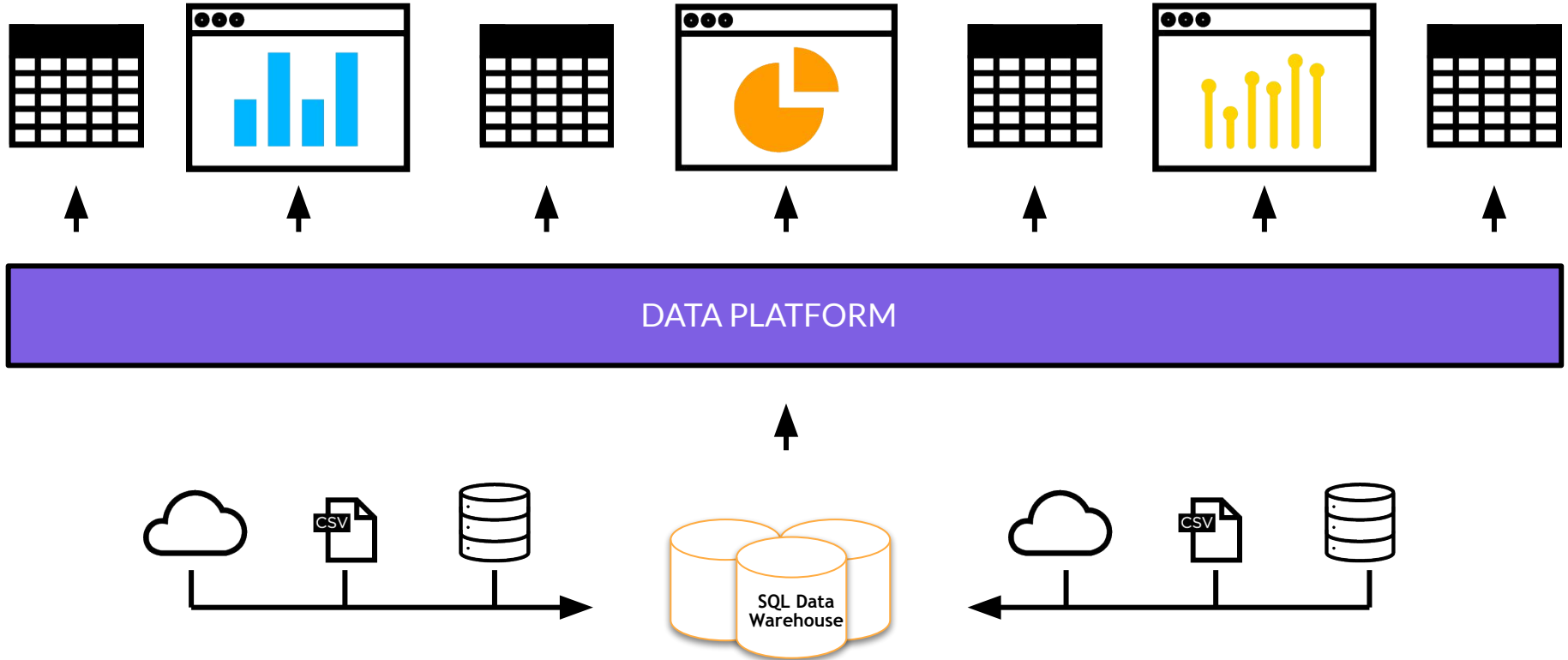


Now



THIRD WAVE

Data Platform Services



Best-in-class Business Intelligence

Unlimited experiences

Best-in-class BI, plus anything else you want to build

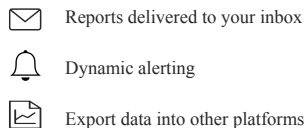


Integrate insights

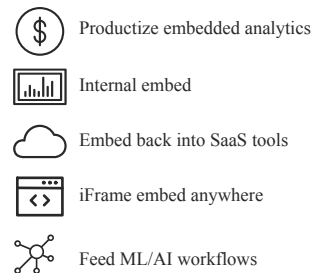
Take actions in tools



Data everywhere



Build with Looker

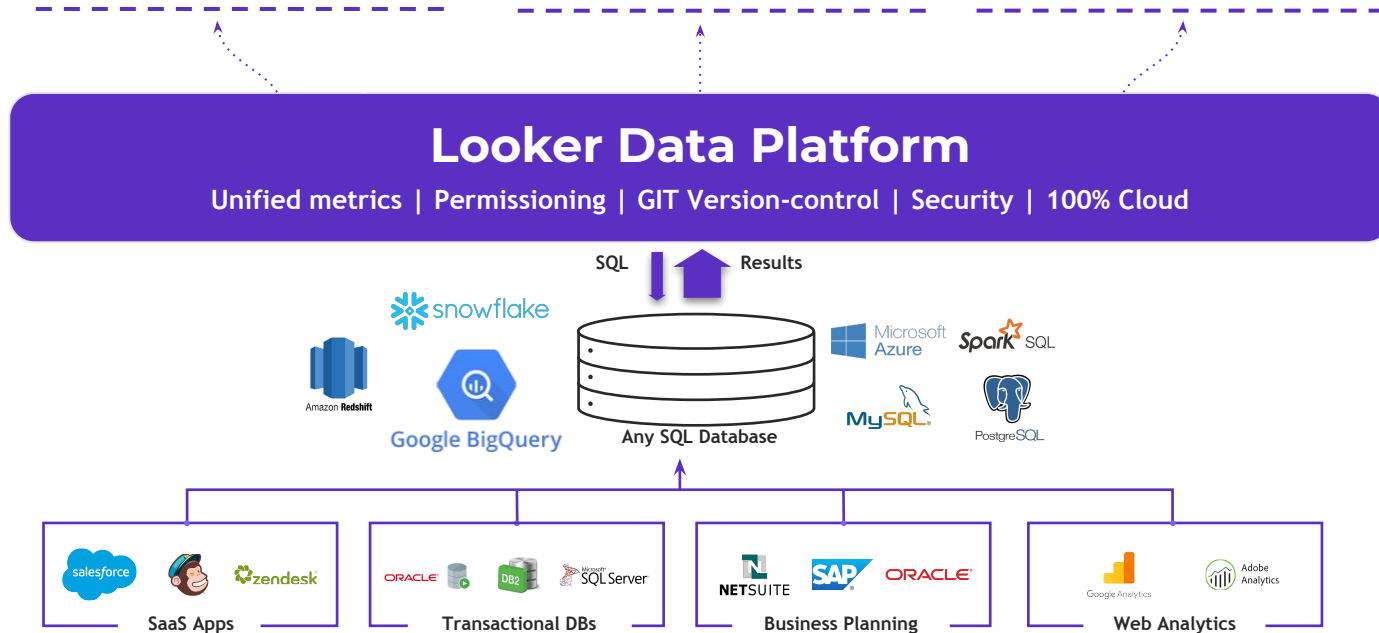


Robust platform

Unified understanding of data & metrics

Complete picture

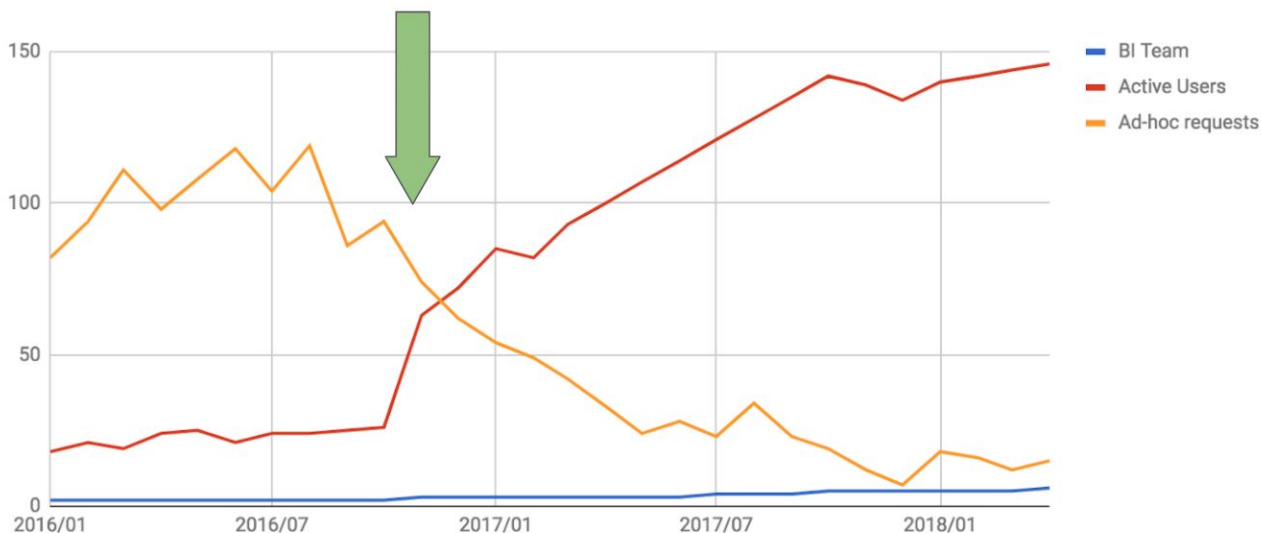
A rich view with all your company's data



Customer Case GYG: Dissolve Bottlenecks & Drive Growth

GET
YOUR
GUIDE

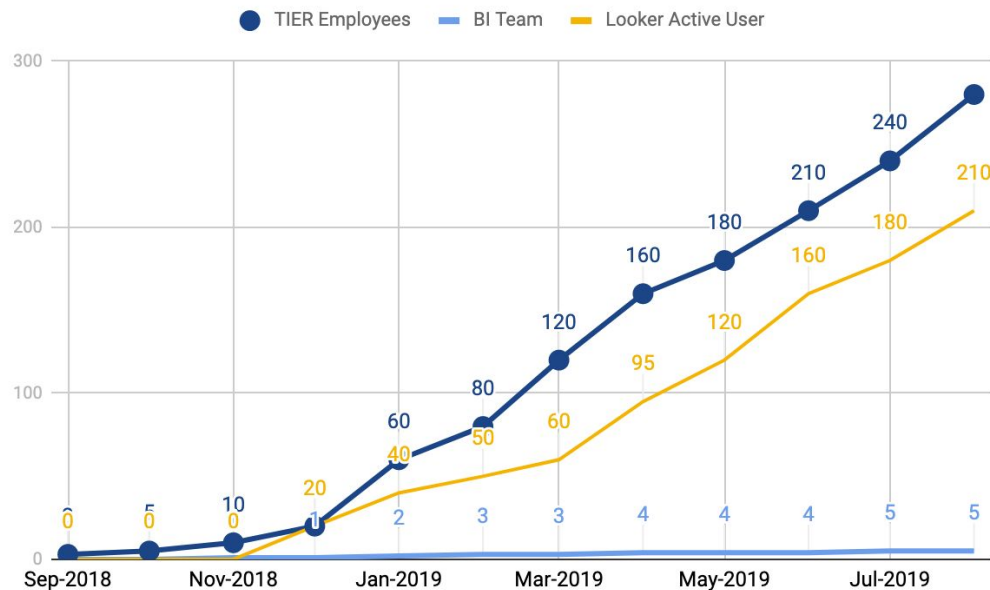
The Impact



“If we didn’t have Looker, it’s very likely we wouldn’t have had a lot of the wins that we had. Looker has clearly helped us drive an increase of more than 400% on a lot of the key metrics we look at every single day.”

(Johannes Reck CEO & Founder GYG)

Customer Case TIER Mobility: Create & Scale a data-driven organization



~70% of TIER employees use Looker to drive insights and act in real time

>300 employees serviced by team of 5 Data Analysts

All departments leverage and collaborate on data insights (Operations, Product, CRM, Marketing, Finance, C-Suite)

Travix



Google | Looker

Prior to the migration, Travix regularly had to assign 10 to 15 staff to maintain and operate the various databases and dashboards. Now, the company only has to assign 3, allowing the IT team to deploy its resources in more valuable ways, saving hundreds of hours a week since the migration.

Travix: Cruising to new data-driven heights with Looker and Google

With Looker and Google BigQuery, Travix built a powerful, scalable business intelligence platform, empowering business users to analyze data and make better business decisions.

Google Cloud Results

- Creates a dashboard and data science platform capable of accessing over 50TB of data
- Increases the power of its streaming data services with a throughput of 10,000 messages per second with Cloud Pub/Sub
- Redeploys IT staff and resources to help the business grow with managed services from Google supporting infrastructure maintenance

Increased data
usage from
12 to 150
dashboard users

Formed in 2011, Travix is a leading online travel agency, providing flights, hotels, car rentals, insurance, and other travel-related services around the world. Travix prides itself on providing the right solution to customers at the right time, which has helped drive sales higher and higher. The company's five main brands generate over 20 million unique searches, which in turn creates enough business intelligence (BI) data to help Travix tailor its services to suit its customers.

In 2015, it was clear that Travix's existing IT infrastructure was struggling with so much BI data. The company needed to find a new scalable, cloud-based, high-speed solution. For that, it turned to [Google Cloud Platform \(GCP\)](#) and [Looker](#).

"We were looking for things like performance, scalability and reliability," says Koen Mevissen, Principal BI Developer at Travix. "If you're a global operator and want to serve different parts of the world, you have to aspire to a certain level of performance. Google helped us do that."

Online travel is a high-volume, low-margin business. To stay competitive, Travix wanted to build on its data-driven environment and improve agility. "If we can incorporate data into our

"What's not to love about Google BigQuery? It's easy to use, and there's a lot of optimization you can do. You can also separate data for security, which is important for GDPR."

—Koen Mevissen, Principal BI Developer, Travix

decision-making process, it helps us to move and respond quickly," says Koen. The existing BI solution consisted of several dashboard tools and databases, hosted on servers maintained by several IT staff. By 2015, the infrastructure was straining under the pressure of so much traffic. "It became costly to have an ops team going into data centers, plugging in hard drives, and doing all of the other maintenance," says Koen. It was time to look for a cloud-based solution.

Travix tested the biggest and best cloud providers over the summer of 2015. In the end, Google Cloud Platform won out because of its ease of use, high performance, and flexible pricing. Travix had two tasks in particular it wanted the new infrastructure to handle: batch processing and streaming data jobs.

[Google BigQuery](#) became the main tool for taking in and storing the data along with services in [Kubernetes](#) to schedule and run the jobs that needed executing. "What's not to love about Google BigQuery?" says Koen. "It's easy to use, and there's a lot of optimization you can do. You can also separate data for security, which is important for GDPR."

For the streaming data jobs, Travix used [Cloud Pub/Sub](#) and [Cloud Dataflow](#) to help ensure smooth performance with consistent results whatever the load. Meanwhile, [Cloud Storage](#) proved ideal for holding static files in a safe, easy-to-access space online.

Once the infrastructure was in place, Travix began hunting for a new tool its BI team could use for analytical dashboarding and data exploration. A generous trial period allowed Looker to stand out from other solutions on the market, letting the team at Travix explore the platform fully and adapt it to their needs.

From an IT point of view, Looker integrated quickly and easily with Google BigQuery which was an important selling point for Koen and the IT staff. For the users, the combination of power and ease of use meant that Looker catered to all levels of analysis, from exploration via dashboards to one page summaries.

"Almost all of our business users work with Looker," says Koen. "There's a lot of great analysis and exploration you can do through the dashboard and the standardized data reports. When we need to do more complex data science, that's when we turn to Google BigQuery."

With Looker and GCP, Travix built a platform that streamlines business intelligence within the company, allowing for higher level analyses without compromising on performance or scalability. "We've ramped up the data usage in Travix since we went to Looker," says Koen, citing approximately 150 concurrent users on Looker compared with just a dozen on the previous dashboards.

Customer Feedback on Looker



"Looker has made our meetings 10x more data driven. Questions can be answered and ideas can be explored straight away. This is a tremendous value add" - Linnar Schwar, COO @Candis.io

"Removing the bottleneck of having to go through an analyst, **Looker has made data exploration accessible to everyone** in the organization. More eyes on the data has led to valuable insights that we otherwise wouldn't have discovered."
- Linnar Schwar, COO @Candis.io

"Since we implemented Looker, our business has more than quadrupled. **If we didn't have Looker, it's very likely we wouldn't have had a lot of the wins that we had.**" - Johannes Reck, CEO & Founder @GetYourGuide



"We can use Looker to negotiate commission with suppliers. We can use it for embedded analytics to our partners. We can use it to analyze funnels. We can use it to do real-time channel attribution. There are so many things we can still explore in order to improve the data experience at GetYourGuide using Looker."

With Looker, Data Platform team receives 75% fewer ad-hoc requests. This has relieved three to four full-time employees to focus on bigger-impact projects for the business.
- Yonatan Aharon, Engineering Manager @GetYourGuide

"Looker has been a tremendous success in enabling Casper, and really evolving our data driven culture."



"Ultimately, we chose Looker because it could enable our whole company with relatively little training, and lets everyone at Casper answer their own questions" Scott Breitenother, VP of Data and Analytics @Casper

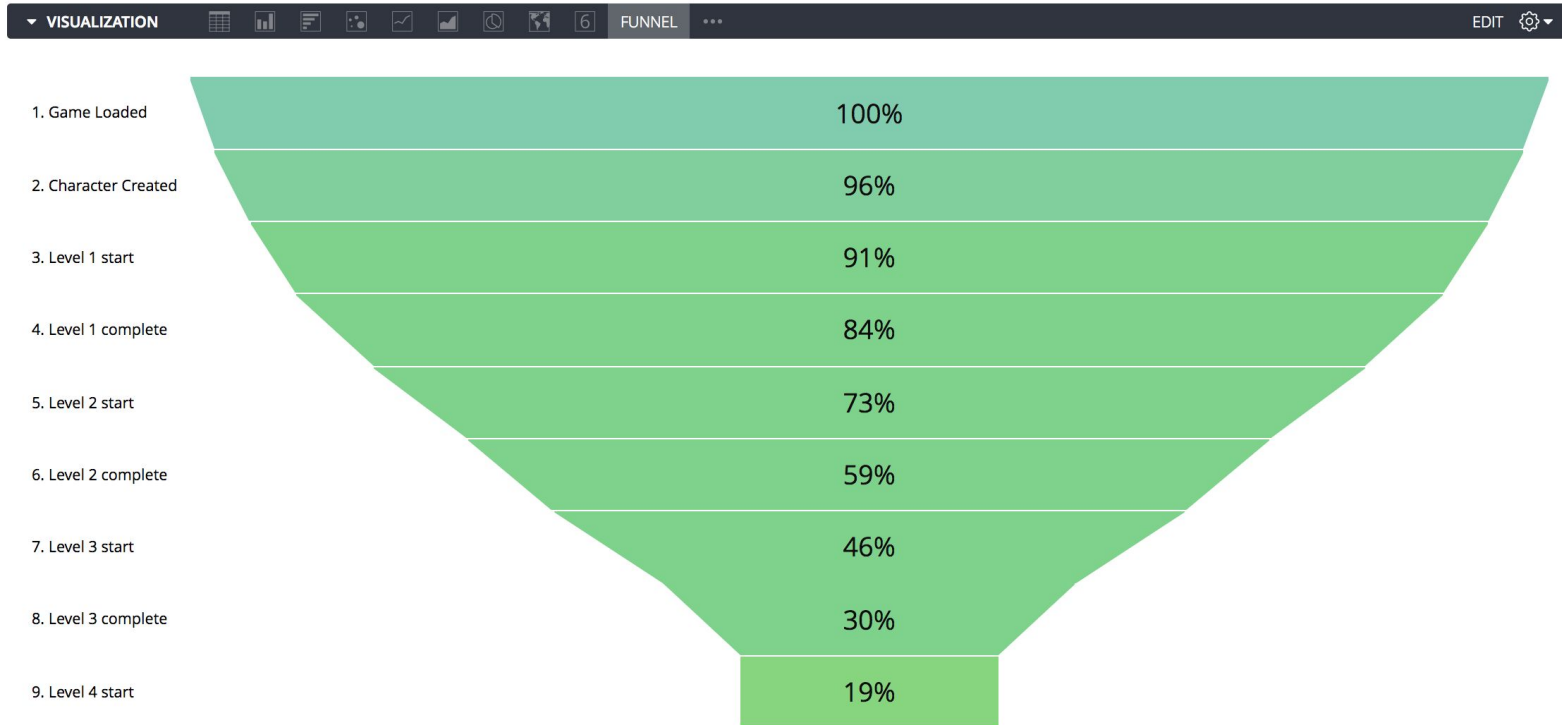




Actions

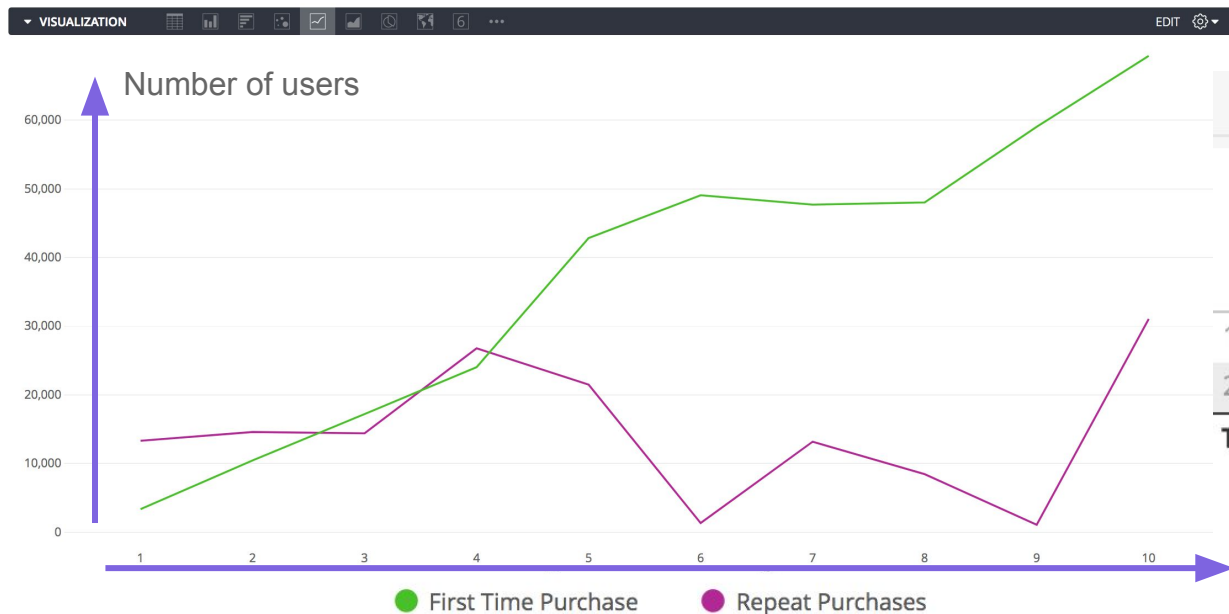
How we doin'?

- User retention funnel
- Vanity metrics



Wait, that's not so hot...

- Next Level Detail
- User Value, ROAS



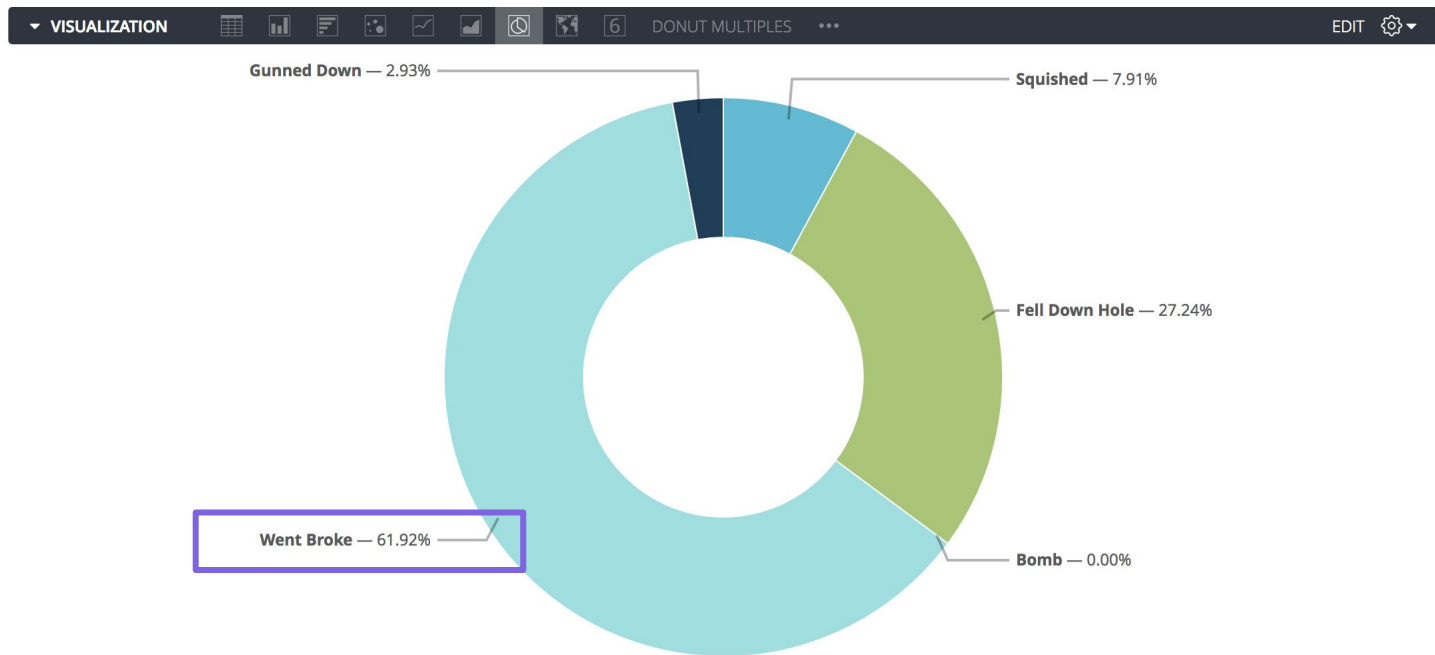
AdSpend ♥

AdSpend ROAS Check

	Ad Source	D7 ROAS	D90 ROAS
1	AdWords	39%	98%
2	Facebook	38%	95%
Total		39%	97%

What is going on!?

- Going deeper underground
- Data insights



Oh. What do we do?

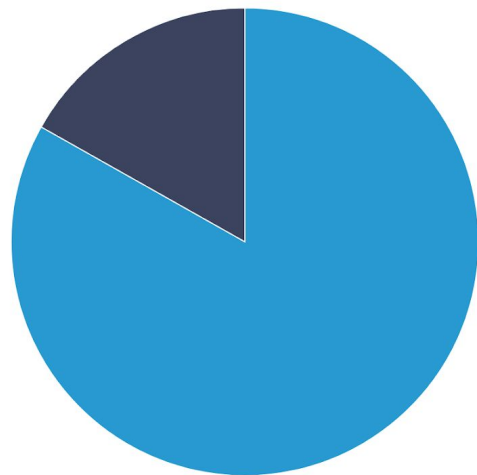
- The root of the problem
- Actionable insights

Cohort Breakdowns ♥

America - Los Angeles Run Edit

► FILTERS Date is in the past 400 days Game is any value Category is any value

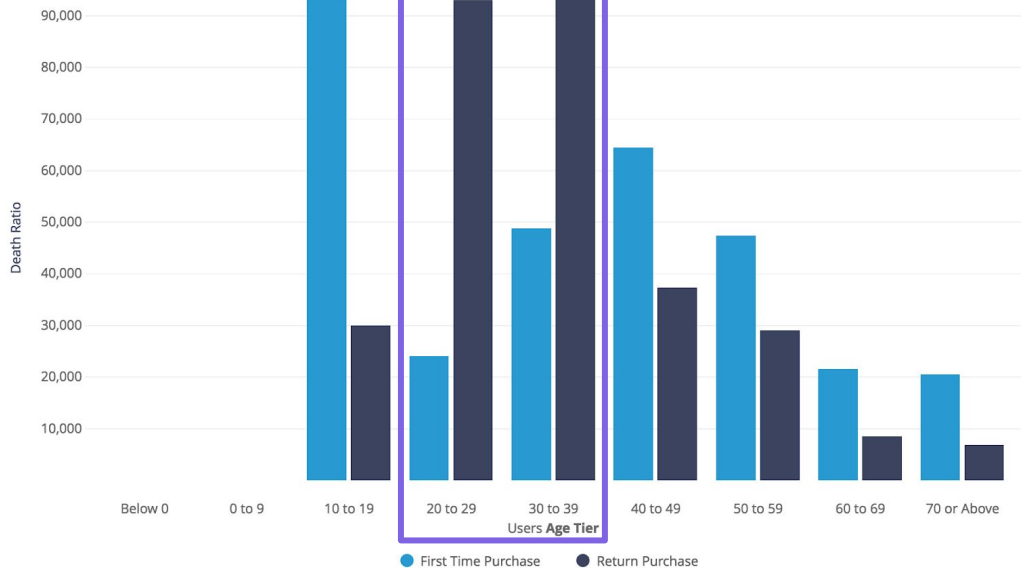
Geo



● USA 83.17%
● United Kingdom 16.83%

Cohort Purchasers

8m



Data Actions

- Take action within Looker
- Leverage the platform

FILTERS (2)

Users **Age**

is between

[inclusive]

20

and

39

×

+

Users **Country**

is equal to

USA

×

+

VISUALIZATION

DATA

RESULTS

SQL

⚠ Row limit reached. Results may be incomplete.

	Users Phone	Users Email
1	+353 087277669	zsnyder@g
2	+353 087573410	zseward@y
3	+353 087117240	zola.wex
4	+353 087199483	zjohnson@
5	+353 087679504	zheaton@g
6	+353 087367380	zgrieve@g
7	+353 087975490	zgause@aol.com

ACTIONS

Twilio - Send Message...

EXPLORE

Filter on "+353 087573410"

Twilio - Send Message

Message *

Hi Zelda,

Thanks for your loyalty to The Game! As a reward, here is a special bonus code you can use to redeem a free coins package to continue your battle!

Your friends at The Game!

Submit

“Democratising Data”

From on-premise to cloud-based data stack

Koen Mevissen, Principal Engineer Data @ Travix



Travix at a glance



5.000.000+
passengers a year

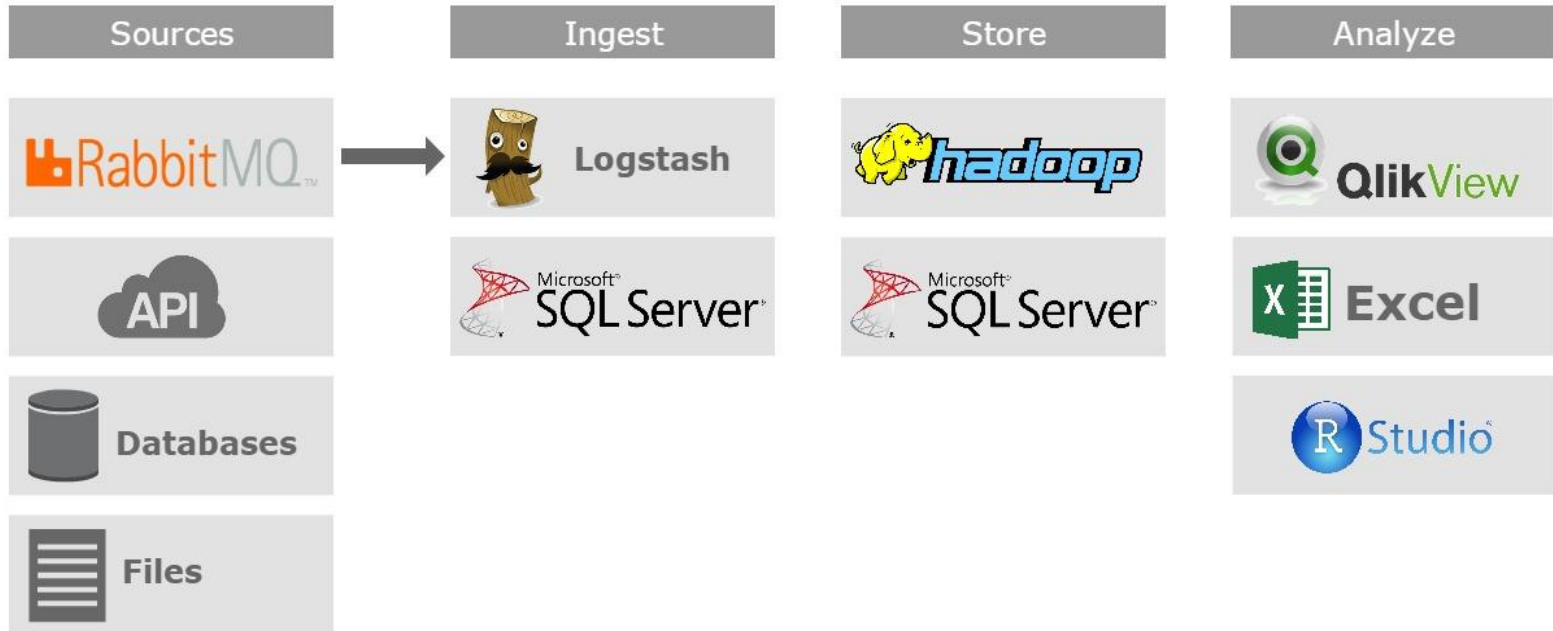


50+
planes filled every day



550+
employees

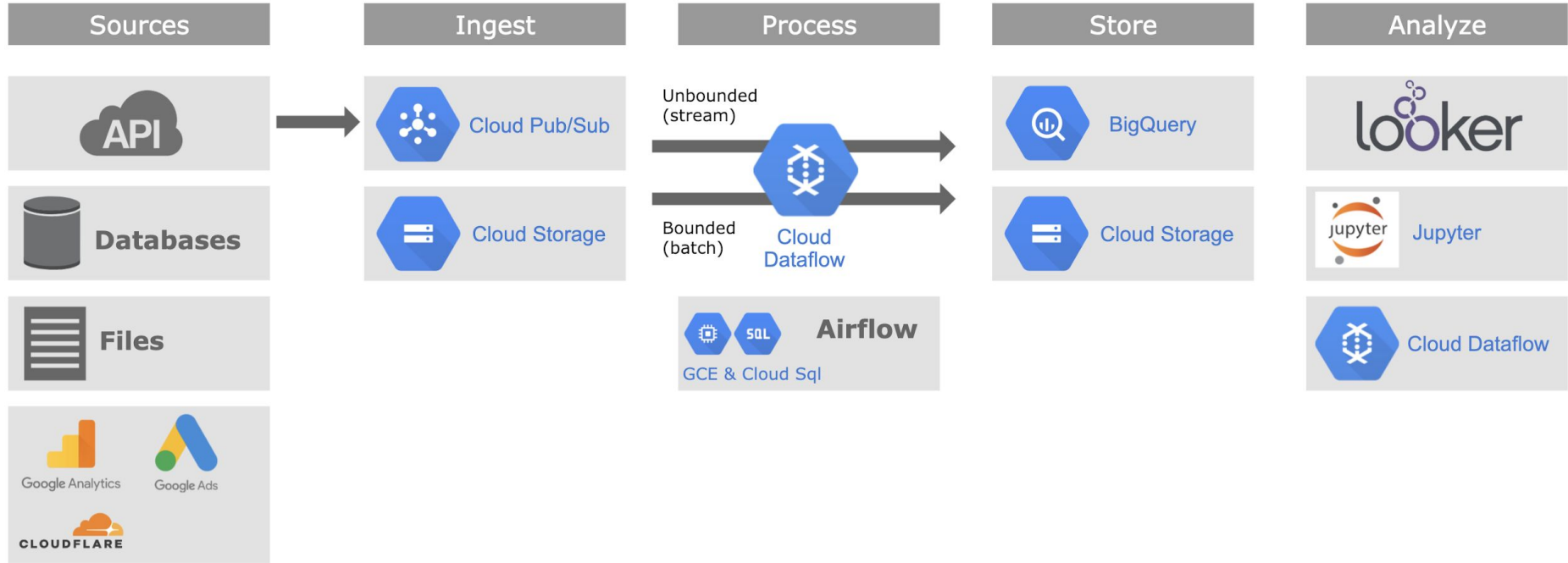
Legacy



Data strategy

- Reduce engineering & operational effort
- Increase agility
- Accessible data & analytics
- Data-informed decisions
- Open source technologies

Architecture



Transition Challenges

- Changing tech is 'easy', culture is harder
- Modelling decisions
- Replacing pivot-tables / tabular results
- Governance
- Domain expertise

Culture change

- Looker champions (domain experts)
- Looker developers, creating PRs
- Trainings (video, hands-on)
- Single source of truth



Transition Results

- Single source of truth
- 200+ Looker users
(self-service & autonomy)
- Reduced engineering and operational effort (unquantified)
- Near real-time data
- Analytics on mobile devices
- Increased 'data-mindset'
- Looker champions (hub & spoke)

Gains

- Standard dashboards serving dozens of users
- Data quality validation en monitoring
- Cloud cost transparency
- Near real-time booking behavior information
- Easily analyse TBs of data
- Scaling, agility, elasticity of compute resources (“plug and play”)



Learnings

- More end users > more questions > support > governance
- Democratising data with a single analytics team is a challenge
- A single data team doesn't make an organisation data-driven
- 'Victim' of own success

Future

Product Development

Increase data driven mentality

- Empirical knowledge
- Data science

Improve data landscape

Tools and services to improve autonomy of teams

- Data discoverability (metadata)
- Data lineage ("Where is this data coming from")

Organisation

Grow maturity and mindset within the business

- Improve alignment through expert groups (guilds)
- Incubation in and collaboration with data teams (hub & spoke)



LinkedIn: <https://www.linkedin.com/in/koenmevissen/>