

# DPG DIRECT CASE STUDY

Name of the customer: DPG Media

Start date of the project: 11<sup>th</sup> February 2020

Date when the project entered production: 17<sup>th</sup> December 2020

End date of the project: Active development in progress

## About the Customer

DPG Media is an ambitious, leading media organization passionate about its online and offline readers. AD, de Volkskrant, Trouw, and Het Parool are a few of the influential news brands owned by DPG Media that help to shape the social and political landscape in The Netherlands. DPG Media is also the publisher behind a unique website in the field of labor market communications: NationaleVacaturebank.nl. In addition, Tweakers.net, Independer.nl, and not to forget the leading car site in the Netherlands, Autotrack.nl, are all part of DPG Media's corporate portfolio. With its radio station Q-music, DPG Media is also active in radio broadcasting.

## Customer Challenge

DPG Media was rapidly growing and therefore needed to manage clients more effectively. The main challenge for our customer was to reduce the workload on their account managers, who communicate with the end-users mainly by phone, by allowing end-users to advertise directly online themselves with the trusted quality brands of DPG Media. The ambition was to have a MVP solution in the shortest possible time.

## Partner Solution

Since our customer uses a Chaos Engineering approach in all AWS environments, we decided to use an end-to-end serverless architecture for the backend system to guarantee fault tolerance and scalability, which are provided out-of-the-box with AWS. A serverless approach is a cost-efficient solution for our customer, also considering our workload.

Our lambda functions are reachable through an API gateway and secured with Cognito Authorizer. For backend storage, we decided to use Aurora with a new entry, RDS Proxy, that makes applications more scalable, more resilient to database failures, and more secure. To achieve better availability and throughput, we use asynchronous communication over synchronous; SQS + SNS helps us with that.

The frontend app is hosted on S3 and served through Amazon CloudFront distribution.

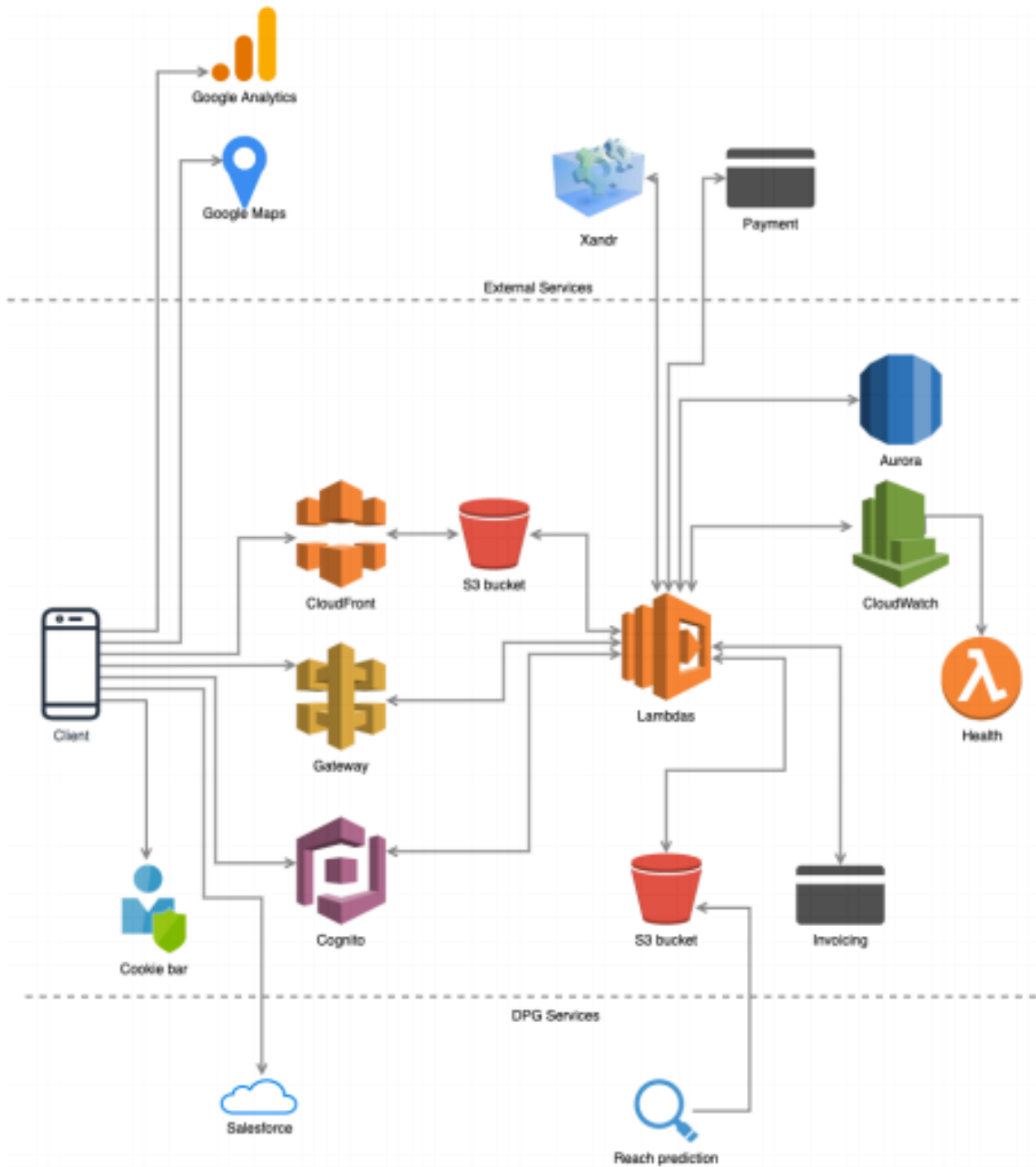
The development process and infrastructure management are entirely automated. Complete automation is achieved using CodeBuild, CodePipeline, and Terraform as a third-party solution for infrastructure management. The implemented automation allows the team to deliver software faster. After detecting source code changes, corresponding pipelines start. Pipeline automation

includes building the application, running automated tests, and infrastructure as code to setup infrastructure.

Multiple development environments are in use. Currently, the development team uses dev, test, and staging. The QA team uses these environments for automated and manual testing for all the features developed to detect potential problems in early SDLC stages before deploying to production. CloudWatch, as the default monitoring tool for Lambda functions, gives the option to check application logs and metrics and helps the team to faster solve detected problems.

Third-party applications or solutions used:

- Xandr Invest – DSP system
- Mollie – payment system
- D365 – invoicing system
- Google Maps
- Google Analytics
- Terraform – infrastructure as a code tool



## Results and Benefits

The application was developed from scratch. This developed platform offers the possibility for end-users to independently start marketing campaigns, set up a budget, enable targeting, upload creative materials or use available templates, manage their campaign (start, pause, cancel), and use analytics.

By utilizing AWS managed services and infrastructure as a code concept, the new platform is:

- highly scalable
- highly available
- development and testing are much faster
- there is no downtime, no need for maintenance windows
- faster deployment