# CASE STUDY

# Analytics help app developer conceive of new possibilities

#### Client: Flo

Industry: Health and Fitness, Mobile Challenges: Migration from parse.com & advanced analytics adoption

**Solution:** New cloud infrastructure and a powerful backend analytics system

Service provided: Data strategy consulting, big data engineering Technologies: Python

"We chose InData Labs for their professional and sophisticated approach, from analyzing the business and technical aspects of our objectives to developing and implementing data strategy."

> - Marina Davidova Managing Partner Flo



### Client

A mobile app Flo is a smart period tracker that accurately predicts women's menstrual cycles, ovulation and fertile days.

"Our goal is for Flo to be a simple tool and health companion," says Marina Davydova, managing partner at Flo. "However, behind the simplicity hides a sophisticated system that collects data on overall health, analyzes it with a help of artificial intelligence and provides recommendations for healthier living, so Flo can provide really valuable insights to its users."

# Challenge

Flo has collected a vast quantity of data in the few months since the app launched, but until recently it lacked the means to do much with it. Flo was built on Parse.com, a mobile-back-end-as-a-service that Facebook Inc. acquired in 2013. Early in 2016 Facebook unexpectedly announced that Parse would shut down in 2017. That gave Flo enough runway for launch, but they immediately had to turn their attention to a migration strategy. That process, in turn, prompted their team to think about ways to derive more value. If they were already switching hosting services, why not build out analytics capabilities at the same time?

Flo went searching for a partner that could make the migration seamless to its rapidly growing user base and also build out the advanced analytics.



# CASE STUDY

"We are dealing with a huge amount of very intimate information, so it was crucial for us to provide both privacy and security,"

> - Marina Davidova Managing Partner Flo

The partner needed to be able to tap into the richness of the information the app was collecting while also being attentive to the sensitive nature of the data.

Changing backend infrastructure for a cloud application that already has more than one million active users is not unlike replacing the transmission of a car while speeding down the highway. "It's a sophisticated process that involves many stakeholders," Davydova said. "We could not afford to make any mistakes."

Fortunately, InData has experience with such complexity. "After careful consideration of options available on the market we've chosen InData as the clear leader."

# Solution

The kind of analytics that Flo envisions wasn't possible with the original Parse platform, which "doesn't provide any ability to conduct analytics. It's an easy to use but pretty database-centered kit" says Sergey Enin, delivery manager at InData Labs and solution architect of the project. InData designed a high availability lambda architecture using a tried-and-true object-relational engine that supports hundreds of sophisticated data manipulation and analytics routines. The backend was designed to support Flo's evolution into a full-scale lifestyle advisor.

InData Labs created a hybrid batch/real-time process that enabled it to ease off the pressure on the production servers while creating batch extracts that could be moved in small batches. The entire migration took about three months, and Flo users didn't notice a thing.

The new intelligent system will aggregate mountains of data to tease out relationships that aren't evident to human analysts. For example, pain symptoms can be compared against diet, exercise, sexual activity and mood to give advice on likely causes, or women can be advised on how to modify their diet and exercise routines during their period. Flo is expected to become more than just a diary; it will be an advocate for better health.

#### Result

Thanks to new cloud infrastructure and a powerful backend analytics system built by InData Labs, Flo extracts greater amounts of intelligence from its database. The app developer plans to sell subscription services that incorporate data from external sources, provide detailed analytics and personalize recommendations. For now, the app remains free and the rewards are principally in the glowing user feedback that streams in.



Interested in learning more?

Call us at +375 293 406 170

www.indatalabs.com

Email us at info@indatalabs.com