Hyper-Growth with Open Source Cassandra and Kafka

Overview

Paidy offers real-time monthly consolidated credit services across Japan. The company launched its first-ever instant post-pay credit service for e-commerce consumers in 2014.

Paidy offers accessible, frictionless, and cardless payment methods using only an email, address, and phone number—providing a powerful method for persuading first-time buyers to transact online. The transactions are written in seconds with guaranteed payment to the Merchant. Paidy is currently one of the largest online payment businesses in Japan.

Use Case:
Financial Services

Technology:
Open Source
Apache Cassandra® and
Apache Kafka®

Service:
Instaclustr Managed
Platform and Consulting
Services

Website:
https://paidy.com/

> "*Technologies like Apache Cassandra and Apache Kafka can be complex to manage efficiently and effectively. Instaclustr abstracts that complexity and helps us to stay focused on building our applications and services.*"

Ken Izumi
VP of Engineering,
Paidy

Highlights

- Fast growing platform approaching 5 million users by the end of 2019

- Paidy's engineering team wanted to focus on the core aspect of product engineering without having to focus on data-layer and infrastructure management

- Instaclustr helped Paidy through the hyper-growth phase. The migration from self-hosted to managed by Instaclustr was seamless

- The company has grown at 200% since 2017 and is currently one of the largest online payment businesses in Japan

Challenge

The success of Paidy's business is dependent on a technology platform that offers no barrier to conducting online payments in a highly performant and agile manner.

Paidy's engineering team knew that to make the Paidy online payment platform highly successful and to manage the significant uptake of their platform, the focus had to be on building a robust and scalable infrastructure, capable of storing data in multiple data centers with redundancy and high-availability and without compromising on performance.

However, the Paidy engineering team was also aware of the complexity of self managing the data infrastructure and the level of expertise and effort required to tune and manage the environment for continued low latency and high performance. The team wanted to focus on the core aspect of product engineering without having to worry about database and infrastructure management.

Solution

Paidy engaged Instaclustr to manage data infrastructure to deliver reliability at scale. Having spoken with some of the Instaclustr's existing clients, they were confident about the company's capability and experience in managing similar environments and applications.

Paidy identified Apache Cassandra as the most suitable database technology for its event sourcing and reactive architecture, as it could provide for the scale and robustness required to align with Paidy's significant growth plans.

The Results

Instaclustr came onboard in 2017 and helped Paidy navigate through their hyper-growth phase. The migration of Paidy's cluster from self-hosted to Instaclustr Managed Platform was seamless. From that time onwards, Paidy has been able to focus on the core aspects of product engineering, without having to worry about infrastructure management.

Paidy is currently driving the creation of new products and services in an agile and scalable manner. They are using Apache Kafka to underpin that growth and connecting applications and data sources. Paidy worked with Instaclustr's consulting team to define an event-driven architecture and help the engineering team to decouple services and applications.

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About Instaclustr

Instaclustr helps organizations deliver applications at scale through its managed platform for open source technologies such as **Apache Cassandra®**, **Apache Kafka®**, **Apache Spark™**, **Redis™**, **OpenSearch®**, **PostgreSQL®**, and **Cadence**.

Instaclustr combines a complete data infrastructure environment with hands-on technology expertise to ensure ongoing performance and optimization. By removing the infrastructure complexity, we enable companies to focus internal development and operational resources on building cutting edge customer-facing applications at lower cost. Instaclustr customers include some of the largest and most innovative Fortune 500 companies.