The Asiakastieto Group builds data service to cut personal debt with Red Hat

asiakastieto

The Asiakastieto Group is a leading provider of innovative digital business and consumer information services in the Nordic region. To support an industry shift to open banking, comply with new European Union (EU) personal data privacy and security requirements, and help solve high levels of debt in the Nordics, the company decided to create a data-based credit assessment solution. Using Red Hat OpenShift Container Platform and Red Hat Integration, Asiakastieto developed the Account Insight application. Launching in 2020, Account Insight will reduce personal debt and payment defaulting with more accurate assessment of an individual's repayment ability.

Solution

Red Hat® OpenShift® Container Platform

Red Hat Runtimes (formerly Red Hat Application Runtimes)

Red Hat 3scale API Management

Helsinki, Finland ●

Headquarters
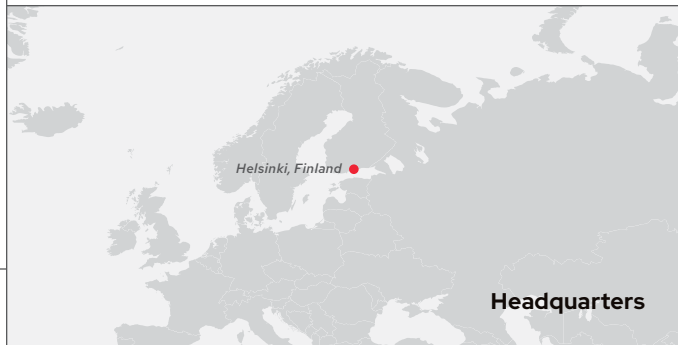
Financial data services

450 employees

Benefits

- Improved loan payment assessment accuracy, resulting in fewer repayment defaults and lower debt levels

- Reduced development time for credit application

- Established long-term partnership for collaborative innovation

"*Red Hat's people share their technical competence and expertise and work together on potential solutions. We think of them as an extended part of our team.*"

Eero Arvonen
Solution Architect,
Asiakastieto Group

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Building trust with simplified, compliant data access

The traditionally risk-averse financial services sector has been transformed by technology advancements, giving customers instant online and mobile access to a wide range of new products and services. However, broader access to personal loans and lines of credit means that vast quantities of personal and financial data are now in circulation. With cybercrime occurrences becoming more frequent, Europe's national governments, regulators, and the European Union (EU)have introduced controls to balance open banking access to approved third-party partners with protecting citizens' privacy and data security.

Based in Helsinki, Finland, The Asiakastieto Group is a leading provider of innovative, digital business and consumer information services in the Nordic region. In the banking, financial services, and retail industries, Asiakastieto's products and services support for risk management, finance and business administration, credit- or loan-related decision-making, and sales and marketing.

When the EU introduced its revised Payment Services Directive (PSD2) in 2018 to increase competition, promote innovation, and improve security in the payments industry, Asiakastieto began evaluating how to help its customers manage the impact of the directive. This initiative aligned with one of the company's key corporate social responsibility goals: to increase trust in society.

Additionally, Asiakastieto sought to help reduce personal debt and loan payment defaults, described in an article by The Helsinki Times as at a "record high" in Nordic countries.[1]

To provide this guidance and meet its strategic goal, Asiakastieto sought to offer a single, trusted source of information and point of access for banks and third parties. This offering would use generate credit scoring information using more accurate and relevant, transaction data, provided with consumer consent.

Creating a microservices-based solution with enterprise open source technology

Building on the established business practice of collaboration in Nordic countries, Asiakastieto invited key customers and contributors to a series of workshops to help to shape a potential solution.

"There was an unprecedented level of interest," said Eero Arvonen, Solution Architect at The Asiakastieto Group. "While many of these organizations are direct competition, they saw the value of working together to create something that could have a positive impact for citizens and our wider society."

As a user of Red Hat technology for several years, Asiakastieto knew Red Hat OpenShift Container Platform would be an ideal infrastructure foundation for its new PSD2 application. The company also decided to use Red Hat Runtimes and Red Hat 3scale API Management, both part of Red Hat Integration, to support this new environment. Red Hat Runtimes offers tools, lightweight runtimes, and frameworks for highly distributed cloud architectures, such as microservices. 3scale API Management helps organizations share, secure, distribute, control, and monetize their application programming interfaces (APIs).

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1 *"#PSD2: Over-indebtedness may now be prevented by means of account data." The Helsinki Times. 24 Oct. 2019. https://www.helsinkitimes.fi/business/16877-psd2-over-indebtedness-may-now-be-prevented-by-means-of-account-data.html.*

"Open source technology is very cost-effective when compared to proprietary solutions," said Arvonen. "Red Hat's enterprise open source products are very popular, so they provide a common language that everyone understands. It's easier to get work done quickly and efficiently."

After a one-year technical development program, Asiakastieto has created Account Insight, a pay-per-transaction credit assessment solution for PSD2 compliance. The application was implemented in a microservices architecture running on Red Hat OpenShift Container Platform. Java™-based microservices are developed in Thorntail, an open source solution, and cached by Red Hat Data Grid, part of Red Hat Runtimes. APIs are exposed to external partners and customers using Red Hat 3scale API Management.

Asiakastieto plans to launch Account Insight in early 2020. "This solution gives us, for the first time, irrefutable data about financial behavior and ability to pay, gathered securely with the permission of the data owner," said Arvonen.

Simplifying data access with faster, collaborative development

Improved loan processing accuracy with data insight

With record-high personal debt in Nordic countries, one of Asiakastieto's corporate goals is social responsibility through helping citizens reduce their debt. With Account Insight, lenders can more accurately assess an individual's ability to repay loans using applicants' bank account data. API-based connections to other banks and credit providers using 3scale API Management help Asiakastieto reliably and safely access this information through a centralized integration interface.

As a result, the company can help reduce repayment defaults and alleviate some of the challenges high personal debt creates for both borrowers and society.

"Over-indebtedness is no longer an occasional trend, but a multinational problem. Account Insight gives our client companies the ability to invest in responsibility," said Reetta Sinelampi, Development Director at The Asiakastieto Group. "An applicant may have other regular income in addition to their salary or pension, such as income from rents. There often have recurring expenses, such as gym fees," said Reetta Sinelampi, Development Director at The Asiakastieto Group. "Bank account transactions give a holistic view of how much money is made and remains in a household."

Reduced credit application development time

By adopting OpenShift Container Platform as the scalable, flexible foundation of its collaborative development project, Asiakastieto has reduced the length of the Account Insight development and deployment cycle. For example, OpenShift lets the company move its Thorntail microservices from the coding stage to testing in less than five minutes.

"OpenShift Container Platform let us share the test environment with the customers who collaborated with us on this project to do their integration testing," said Arvonen.

Additionally, 3scale API Management lets the company customize how its APIs are published to more quickly make and launch changes to its integrations. "We can test different end-customer pricing models for our APIs, all via configuration and without any need to build and redeploy code," said Arvonen.

Gained expert technology insight through collaboration

During the collaborative development phase of the project, Asiakastieto's teams worked closely with Red Hat to take full advantage of the attributes and features of OpenShift, 3scale, and its other Red Hat technology.

"We had some challenges during the project around technology choices for storing process session information, caching, and data mapping, but Red Hat's Helsinki-based team gave us sound advice and insight to make the correct choices for us," said Arvonen. "Whenever we have any issues, Red Hat's people share their technical competence and expertise and work together on potential solutions. We think of them as an extended part of our team."

Working toward a successful launch—and beyond

Looking beyond the launch Account Insights in early 2020, Asiakastieto is already planning improvements to its application, including migrating from Thorntail to Quarkus to optimize its hardware use by improving microservice start-up times, memory use, and server density.

After the app is launched, Asiakastieto anticipates that Account Insight could become its universal solution for credit assessment requirements, for businesses and individuals applicants across all market sectors. In particular, it wants to take advantage of the solution's scalability to expand its use—and the individual and social benefits—beyond Finland and Sweden to the entire European Union. With this goal in mind, Asiakastieto plans to continue collaborating with Red Hat on enhancements and new ways to innovate.

"We've had a strong relationship with Red Hat for a long time and they're a great support to us," said Arvonen. "Our relationship is one of mutual respect."

About The Asiakastieto Group

Based in Helsinki, The Asiakastieto Group is one of the leading providers of digital business and consumer information services in the Nordic countries. Its products and services are primarily used in the banking, financial services, and retail sectors for risk management, finance and administration, decision-making, and sales and marketing purposes.

About Red Hat

Red Hat is the world's leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500. As a strategic partner to cloud providers, system integrators, application vendors, customers, and open source communities, Red Hat can help organizations prepare for the digital future.

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