

# Debt Resolution System from an MVP to a first client delivery

Flexys Case Study



## **CLIENT PROFILE**

using targeted language.

## **PROJECT OVERVIEW**

#### INDUSTRY

FINTECH

#### CHALLENGE

EVOLUTION FROM AN MVP INTO THE FIRST CLIENT-READY PRODUCT WHILE HELPING WITH THE TEAM SETUP

#### PROJECT DURATION

2 YEARS

#### **TECHNOLOGIES**

SCALA, AKKA, CASSANDRA, POSTGRES, SLICK, KAFKA, DOCKER, KUBERNETES, ANGULAR 6













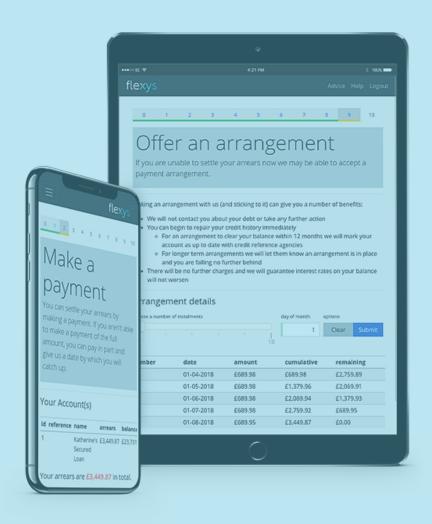
#### BENEFITS

- Thanks to our support Flexys has been able to deliver to their first client.

## BACKGROUND

Changing the way some sensitive business functions like debt resolution operate requires both in-depth understanding of the business and bold thinking. At SoftwareMill we're proud to be working with the company whose founders merged both and created Flexys. Flexys is a British tech company that is redefining the way debt collection industry operates.

SoftwareMill helped Flexys with turning an MVP into the first client-ready product but also supported the team with the transition from a small group of in-house engineers to a much larger team.



## **CHALLENGES**

On the technical side, Flexys had an MVP of the product that proved the business model is successful. The client needed an experienced team extension that would help not only with the product kick-off but also the team setup.

Our main task was to help Flexys with the technical side of the project while they built the team from the ground-up. We functioned as part of Flexys team and provided them with deep expertise in some of the technologies they use, primarily Scala programming.

At the beginning, we focused on code review and identifying opportunities for improvements. We started implementing quick fixes and came up with a plan for making major architecture improvements.

Our next goal was transferring good practices to the team. We introduced the in-house team to the remote work best practices, shared the code review culture and encouraged the start of a technical reading club.



## **SOLUTION**

We work in a TEM (Team Extension Model) in which we augment the in-house IT team with developers that support the team with the expertise in a variety of areas including designing project architecture, developing high-quality code and mentoring. This is an ongoing development effort to build new features and functionalities for the market.

We helped to develop project architecture including Akka (http, persistence), Cassandra, PostgreSQL, and Angular. The current software architecture involves building applications into Docker containers and making deploys on Google Cloud platform which requires Microservices, an event-sourced CQRS architecture, functional programming, http4s, cats-effects and other.

"SoftwareMill's experience of this style has been very useful and they have deep expertise in technologies that support this - in particular programming in Scala on the JVM and using frameworks like Akka as well as functional programming libraries like cats and http4s. Magda and Marcin are also proficient with frontend development where we have a single page application based on the Angular framework. The fact that they are full stack and can work on the backend or frontend has been really useful." comments Brian Smith, Flexys CEO.







## Debt Management Solutions for the Digital Age









## **RESULTS**

We contributed both to the product's code and team setup by sharing our best practices. The joint effort of the whole team resulted in the successful migration setup. We managed to launch the back-office part of the app, as well as brought the customer-facing part of the app to the next level.

Thanks to our support Flexys has been able to deliver to their first client.

"We've been impressed by the depth of experience that the SoftwareMill team have on the technologies we use and in modern architectural practices.

On a personal level, they have engaged with the workforce here in Bristol and are fully part of the team. I think remote working takes time to develop as a skill and they are very good at it, which provides a good level of comfort.

When remote working isn't done this way it causes silos and management issues, we have avoided this through a collaborative approach. The flexibility to work on both front and back-end development has helped to keep our project flowing and so has their willingness to tackle any task assigned to them while always producing quality work."

BRIAN SMITH, CTO @FLEXYS



## GOT AN IDEA? WE'LL MAKE IT HAPPEN

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We believe that focus on quality, self-improvement and a true engineering approach can result in systems that do their job, bring value to clients, help them scale and grow.