# AVISO CASE STUDY #2

**Themes: Management, Biz. Consulting, Docker/Devops**

# AVISO CASE STUDY - DELIVERY PIPELINE IMPROVEMENTS

## Meet Aviso

Aviso is an Irish financial services company that provides flexible EFT switching with its "Novate" product. Aviso and its parent company FEXCO provide their services to partners like Barclaycard, First Data and Global Payments.

Novate is a large financial switch with nearly 100k lines of code. It is built in Clojure, uses Postgres, and runs on the JVM.

## The Project

**Timeline:** 2015-2016

Following an internal review of their delivery process in 2015, Aviso identified bottlenecks in the quality of releases and the reliability/repeatability of their release process. Aviso wanted to modernize its approach; adopting new tools/techniques like Docker and Continuous Delivery to better software in less time.

Over the course of several months, Homegrown Labs sought to design and implement a release packaging and delivery pipeline scheme that would increase test coverage and decrease cycle times.

## The Work

At the outset of this project, Aviso's delivery pipeline consisted of roughly 3-4 disparate builds—some unit tests, integration suites and a few legacy builds—the most of important of which took upwards of an hour to run (or fail). When a release needed to be made, a developer would manually package and upload the release artifact using some convenience scripts.

After an evaluation of Aviso's most important suites and pain points, Homegrown Labs designed a Delivery Pipeline on Aviso's existing CI infrastructure (Bamboo).

There were three primary goals in undertaking this work:

1. Reduce cycle time — Slow test feedback and run time interrupt development and prolong the release cycle.
2. Decrease defects — Defects happen and that only means we have to try every bit harder to catch them before they bite us.
3. *Repeatably* package release artifacts

Through multiple milestones and many months, Aviso gently transitioned away from its existing build plans towards a new, more flexible delivery pipeline.

## Results

It's been nearly 2 years since the outset of our work and I am proud to say Aviso is largely transitioned to the new delivery pipeline.

In lieu of the previous monolothic build that took over an hour, Aviso now has a speedy pipeline of build and validation tasks. This new pipeline not only runs faster—coming in at close to 30m—but has increased coverage and reliability.

Part of this transition has also involved educating and distilling knowledge. I'm proud to report Aviso's team has happily adopted the new practices and pipeline, and actively work to keep the build green. Since the project, Developers at Aviso have transitioned into new roles and have been able to manage the pipeline on their own.