



Designing a DevOps Delivery System with Digital.ai



The Environment

- XL Release
- Java, WebSphere, z/OS (COBOL), .NET, Tridion, AngularJS
- XL Deploy
- Oracle E-Business Suite, Oracle WebCenter, Oracle Business Intelligence

The Challenge

Five and a half million Dutch citizens depend on the availability of SVB's applications to pay their benefits checks. SVB knew from previous attempts that trying to deliver a reliable system using a big bang, "waterfall" approach did not work. SVB's release processes moved slowly, with many errors and bottlenecks. With dual challenges on the horizon of budget cuts and increasing demands to pay more benefits, they knew they needed to find a way to work smarter. SVB sought to create a DevOps delivery system to deliver software reliably, on time, and with high quality.

The Solution

SVB chose XebiaLabs—which is now part of Digital.ai—to create a system that deployed consistently and reliably to production, delivered quickly, and provided full visibility into the entire release process to create a culture of accountability.



With XebiaLabs, we have automated our releases and we deliver on time without failures. It used to take weeks, and now it takes less than two days for a release to move from development to production.

- David Engberts, Agile Coach at SVB



RESULTS

- ✓ Releases that took weeks now take less than two days
- Over 10 separate release processes reduced to one process for each application
- ✓ Teams are self-sufficient in their deployments
- ✓ Reduced time to set up a new DTAP environment and deploy software from 4 hours to 1 hour
- ✓ Improved deployment speed by 5X per deployment
- ✓ Because they were no longer scripting deployments, failure rates and errors decreased almost 100%, and overall software quality improved
- ✓ SVB's WebSphere configuration previously took 3 days to update and now takes only 2 hours to migrate services across all environments
- Decreased lead time for .NET deployment requests from 4 hours to 2 minutes

Background

Sociale Verzekeringsbank (SVB) is the Dutch government organization that handles social benefits for 5.5 million citizens in the Netherlands – about 1/3 of the population. SVB educates citizens on their rights and pays out government benefits for pensions and children.

Three years ago, SVB suffered a highly publicized failure as they attempted to deliver a new large system using a big bang, "waterfall" approach under the direction of a top-tier consulting firm. This failure generated negative publicity on a national scale and cost taxpayers approximately €40M.

SVB knew they needed a new approach. In these times of digital revolution, they wanted to demonstrate value as a service organization and a partner, now and in the future. They needed to transform to provide first-class self-service applications online and to implement Straight Through Processing. They also wanted to automate processes to improve integration with partners, such as their External Service Provider (ESP), the Dutch tax agency, care organizations, and city governments. To accomplish this digital transformation, they turned to DevOps.

SVB also knew that to meet their goals of reducing costs, delivering faster, and releasing reliably to production, they needed a culture of accountability. They required visibility into critical release data to move from a culture of blame to a culture of trust across functional teams.

SVB's most critical applications are two mainframe COBOL applications, which distribute pensions and child benefits. SVB has more than 20 teams that focus on various IT business needs.



For example, the tooling team provides agile tools for other teams to use in a Continuous Delivery framework as they build and release software; the business intelligence team develops and maintains Big Data applications; and the Java team created 25 applications for benefit requests.

SVB manually performed their deployments, which produced error-prone, difficult-to-maintain deployment processes. Their release process involved many hand-offs, multiple steps with different owners, and various teams responsible for the same process. No one had an overall view of the process; release managers contacted individuals by phone to get the latest status. SVB's release process across their teams and their ESP was slow and disjointed. With budget cuts on top of the pressure for digital transformation, SVB needed to quickly develop a Continuous Delivery pipeline that could successfully support the growing use of self-service applications, Straight Through Processing, and partner integration.

Requirements

- ✓ Gain insight into the release process to best make improvements
- Unify their multiple release-related tools and processes into one system to orchestrate the entire process
- Automate deployments and manage dependencies
- ✓ Improve release process visibility for the broader teams and business units, highlighting progress, bottlenecks and failures
- ✓ Decrease lead time to resolve job ticket requests
- Quick learning curve

Visibility from Any Vantage Point

SVB sought to create a Continuous Delivery standard in their organization and make their teams self-sufficient. They wanted to connect their business, development, and operations teams through a common process, set of tools, and methodology. Ultimately their goal was unified end-to-end delivery of software to production, reliable release to production, and visibility into the entire process for any team member. SVB chose the XebiaLabs DevOps Platform to automate and control their release processes.

Over 250 SVB employees in IT, Development, and Operations now use XebiaLabs to automate deployments. And more than 50 people use it to orchestrate releases, plan improvements, and measure the effect of changes, with more teams trained and implementing soon. Armed with detailed information about each release, product owners can prioritize the most important work for their teams. They can focus on changing the areas that most need improvement and can measure the impact of each change.

SVB now has a unified release process, using only one tool, in which all departments collaborate effectively. Release managers now see real-time status and no longer need to call team members by phone. Line of business managers see the status of their project requests and the work that goes into each request, and managers know where to improve the process because they can see errors and bottlenecks. And, everyone is now operating within a culture of accountability – which is critical to the success of SVB's digital transformation.





With our new end-to-end release pipeline process using XebiaLabs, we gained the visibility to show IT management and the business teams the full process and work load involved in releasing applications and updates. This awareness of the process makes communicating and collaborating between the business, operations, and IT teams seamless.

- David Engberts, Agile Coach at SVB

Other clear areas of progress are the speed and quality of software delivery. If a new team wants a Continuous Delivery pipeline, they can get started right away. They can better manage risks, and releases no longer fail. Mistakes can happen in a safe environment, and the team learns from them. SVB succeeded in their goal to create a DevOps delivery system and avoid the problems they experienced with the big bang approach. They regularly release higher-quality software faster, at lower cost to Dutch taxpayers.

"Our releases had over 10 separate processes, and no single person had a holistic view over them. Now with XebiaLabs, we have automated our releases and we deliver on time without failures. It used to take weeks, and now it takes less than two days for a release to move from development to production," said David Engberts, Agile Coach at SVB.

"Training more than 100 people to use XL Release couldn't have been easier. I never need to give a demo myself. I ask someone in the group who is not yet familiar with XebiaLabs to give the demo as I talk them through it, and the entire room learns by watching within an hour - and they are all excited," David added.

The XebiaLabs DevOps Platform helped SVB deliver on their goal to automate deployments as well. Now that deployments are automated, SVB's developers are self-sufficient and no longer depend on anyone else to execute deployments. They have completely removed bottlenecks and increased deployment velocity by 5X. SVB's deployment-related error and failure rates decreased by almost 100% because they are no longer manually scripting code for deployments. Now deployment code is automatically generated and maintained using XebiaLabs' model-based approach.

SVB set out with ambitious goals to transform the way they operate, conduct releases, and handle deployment processes, and to completely change the culture within which they work - all of which they've done with XebiaLabs. Within a few months, SVB orchestrated a unified release process for several applications, created visibility for all stakeholders into the entire process, implemented self-service deployments, and improved deployment velocity. Now, SVB produces higher quality, production-ready software reliably, every time. They can also easily monitor their pipeline and make continuous improvements.

About Digital.ai

Digital.ai enables enterprises to focus on outcomes instead of outputs, create greater business value faster, and deliver secure digital experiences their customers trust. The Digital.ai Value Stream Platform seamlessly integrates all the disparate tools and processes across the various value streams, uses data and AI/ML to create connective tissue between them, and provides the real-time, contextual insights required to drive and sustain successful digital transformation. With Digital.ai, enterprises have the visibility they've been seeking to deliver value, drive growth, increase profitability, reduce security risk, and improve customer experience.

Learn more at digital.ai