

“With Cap4Lab and MuleSoft’s Anypoint Platform, we have been able to realize the modular architectural vision for the bank. This composability and reuse approach is the catalyst for the majority of the bank’s initiatives and regulatory projects”

Hugues Prevoo,  
Head of Architecture, Banque de Luxembourg

## Building a modular bank to unleash the power of innovation

As one of the largest financial institutions in Luxembourg, handling over €68bn of client’s deposits, Banque de Luxembourg has been offering wealth management solutions to the local and European market successfully since 1920.

In an increasingly complex world, Banque de Luxembourg strives to provide clients with objective advice and concrete long-term solutions. Their belief is to stay away from passing fads or solutions with limited transparency, and this belief extends to their technology landscape as well.

### Building for change

Like many industries, the banking industry is undergoing an increased speed of change, compounded by upcoming regulatory requirements such as MiFID2 and the second Payment Services Directive (PSD2). To better anticipate these challenges and opportunities, Banque de Luxembourg recognized that they needed to build in more flexibility and agility into their technology estate.

### Stifled innovation and agility

Banque de Luxembourg recognized that they needed to change as their IT landscape was built upon point-to-point connections, based on individual project and line of business definitions. Hugues Prevoo, Head of Architecture at Banque de Luxembourg, admits that with the multiplication of business and regulatory initiatives, thus involving new products and components, it was becoming very complex and time consuming to integrate and capitalize on existing architecture.

The bank acknowledged that a number of upcoming projects such as their web banking system and Visa 3DS System would not see good return on investment from this tight coupling between front end and core banking systems. The bank set out to understand how they could improve efficiency in their organization and reduce time to market.

### Challenge Overview

- New regulatory requirements and heightened customer expectations increased the need for agility and flexibility in the IT department to develop opportunities
- Point-to-point integration, based on a fast delivery driven approach, slowed time to market and added global complexity

### Solution

- Embracing a modular approach to architecture to decouple core backend and front-end systems
- Enabling reuse locally so that teams can focus on higher value innovation of processes and experiences, without compromising security

### Key Outcomes

- 2x quicker time to market for digital initiatives
- Increased focus on innovation, able to dedicate 70% of time on innovation projects, versus 40% previously

## Breaking down siloes

In parallel, Banque de Luxembourg initiated a global reflection focused on the future challenges that the bank had to face regarding user expectations and regulatory constraints, e.g. PSD2. This resulted in a strategic IT vision named “Customer Centric Architecture.” This vision became a global transformation initiative in which there was a distinct voluntary switch from what was once a heavily siloed approach to a modular, open service oriented one. The efficiencies that a global modular approach encourage made executive level buy-in relatively simple.

Following this, Bank de Luxembourg made the decision to go to market with a connectivity solution that would help them realize their vision quickly in the short term. With an existing partner, Cap4Lab, the bank had MuleSoft deployed in an ESB capacity which was initially utilized to implement the Visa 3D Secure protocol. After researching the capabilities of MuleSoft’s Anypoint Platform further, the bank recognized there was more value they could be leveraging from the Anypoint Platform, both in terms of tooling and in terms of the modular approach it enabled.

The first major project they came to test this on was in 2014, when the Bank made the decision to upgrade their web banking solution, to enable new customer experiences. Banque de Luxembourg received buy-in to use the project to experiment with this new modular mindset in practice with their partner Cap4Lab, and MuleSoft’s Anypoint Platform. As the team migrated systems, they built with reuse in mind so that, in completing their project, they would produce core assets which would be open to and made for reuse by other teams in the future (user profile, client details, client portfolio, payment transaction, etc). This ROI was then realized shortly afterwards when a new requirement to develop a mobile banking application emerged. Having taken this reusable approach on their initial project, the team was able to reuse and tweak the logic and the services from the web banking service via MuleSoft’s Anypoint Platform. The back-end accesses for client assets, security profile, cash transfer, etc were mainly reused through the MuleSoft platform.

## Reaping the benefits of reuse

By reusing existing assets and code, the team only took 6 months from mediation to production to launch the mobile application, spending only 4 months of development, since the focus was mainly on the front-end side. As the local team could self-serve these assets, it meant that they could innovate and work more effectively. Prevoo, Head of Architecture, estimates that this would have taken twice the amount of time previously. This new mobile experience provides an optimised user experience with an instant consolidated view of client’s assets and securities portfolios.

With reduced dependency now on creating from scratch, Prevoo said it is clear that the bank spends more time on innovating on the ecosystem than in the past. New projects on the horizon include embracing the opportunities presenting by the upcoming PSD2 regulation and new digital products for advisors, and Banque de Luxembourg is enabled to approach each project with a ‘what can we reuse?’ mentality. They are also looking at moving toward the use of APIs and API-led connectivity to realize the next step change in building in speed to their business and better serving their clients.



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Cap4Lab extensive experience in the Financial Services and Insurance sectors makes it the ideal partner for organizations that want to innovate safely and build for the future in an ever-connected marketplace. [cap4lab.com](http://cap4lab.com)



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