

Case Study

# App-store Client Application

Completely modernised the user experience and technology platform for a major bank's portfolio of services.



# App-store Client Application

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## Business need

A tier 1 investment bank needed to modernize and re-architect their app store client application. The bank's existing application was installed on thousands of their clients' desktops. This allowed these clients, which included buy and sell-side institutions as well as internal users, to authenticate with the bank, browse a catalogue of apps, and launch their choice of apps to perform a variety of tasks from reviewing research to executing trading activity. The delivery mechanism allowed the bank's business units to release apps independently of each other and provide the end user with a unified view of the bank's e-commerce platform.

The project, spanning twelve months, presented several challenges to maintain and enhance this functionality:

- **Resilience.** When the platform is down, the bank's clients can't trade. The new system had to be resilient to failures of various backend systems.
- **Efficiency.** The system must be fast, lightweight and have a minimal footprint on the user's desktop.
- **Smart install.** Users needed to be able to install the software without administrator rights.

## Adaptive's solution

Adaptive was selected by the client for our technical expertise and proven ability to deliver client-facing platforms. Working with the clients offshore development team, Adaptive's services included:

- Creating proofs of concept to validate the **feasibility** of the most technically challenging areas.
- Designing the high-level and detailed **architecture**.
- Developing the **lightweight installation mechanism**, which allows end users to download and install the application without administrator rights.
- Delivering the **auto-update mechanism**, which allows desktop applications to be updated to new versions automatically. This included a sophisticated algorithm allowing large applications to be upgraded by delivering only tiny binary patches. This reduced the average required download size from the previous delivery mechanism by over a magnitude, reducing bandwidth and resource consumption.
- Implementing different launch mechanisms, including **web** applications with an embedded browser, and **desktop** applications in .NET and Java.

- Reviewing failure scenarios and implementing strategies to ensure the high availability of the system.
- Implementing a client side MIS API to continuously track functional and non-functional KPIs (main user activities in the platform, application install time, application start-up time, etc.).



## Results

The system is now live in production and offers significant competitive advantages:

- The client can release desktop applications as easily and securely as a web application, but with all the power and additional features of a desktop application.
- The new system does not require administrator rights, which means new clients can be on-boarded quickly without having to contact their local IT support, and existing users to be easily migrated.

# Thank you

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## The Real-time Trading Experts

Adaptive is a global financial technology consultancy with clients throughout Europe and America, supported by offices in London, Barcelona, Montreal and New York. Their clients include tier-1 investment banks, brokers, asset management firms, commodity trading houses and fintech providers. They provide expertise in designing, building and operating bespoke software solutions such as electronic trading systems, real-time workflow solutions and digital platforms on internal infrastructure as well as public cloud.