

# CASE STUDY: PlatformX Communications

# Aimprosoft helps build and scale the UK's leading wholesale telecom platform

## Partner information:

Partner: PlatformX Communications (a part of TalkTalk)

Company size: 1001-5000

Headquarters: UK

Ongoing since: 2010

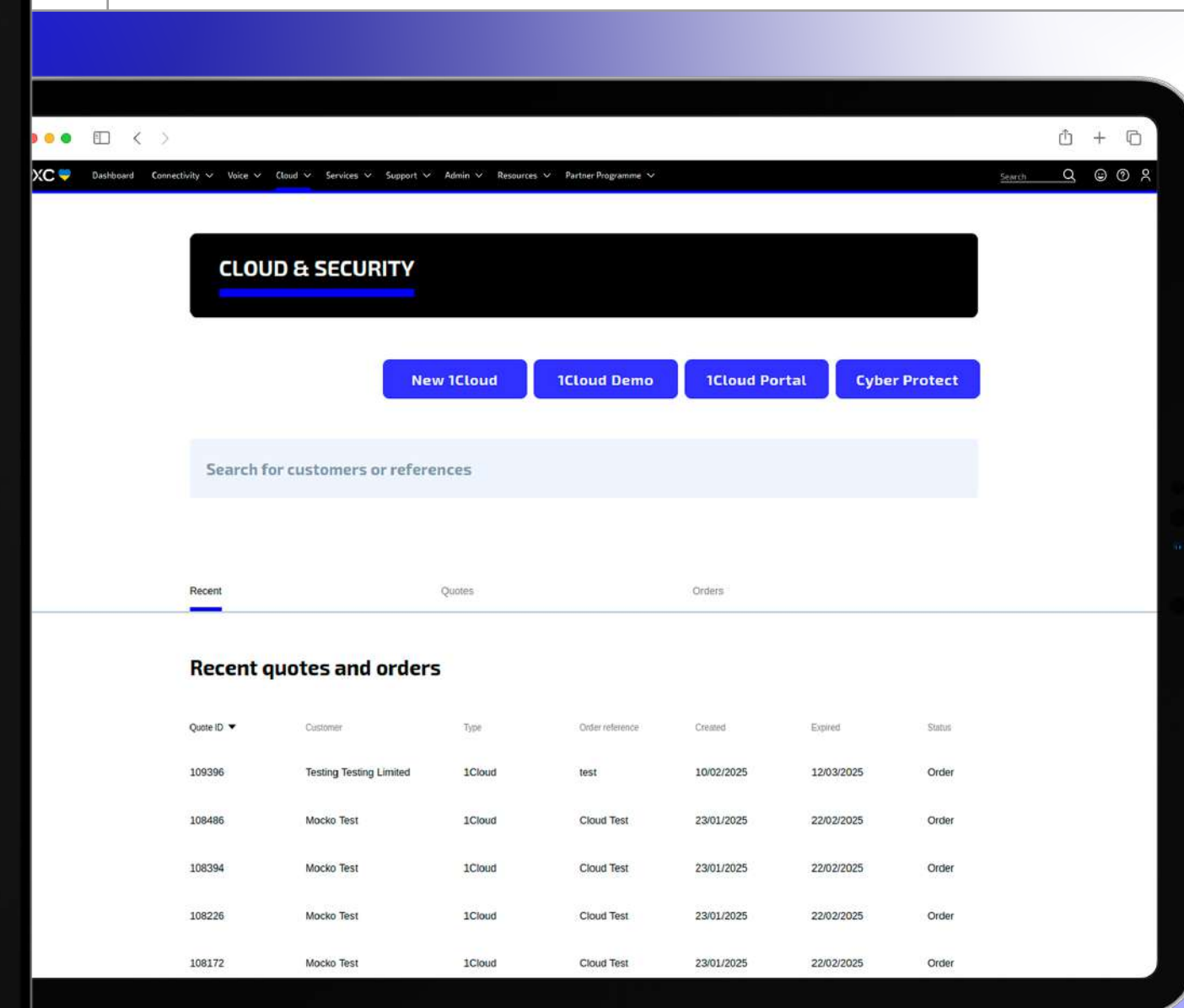
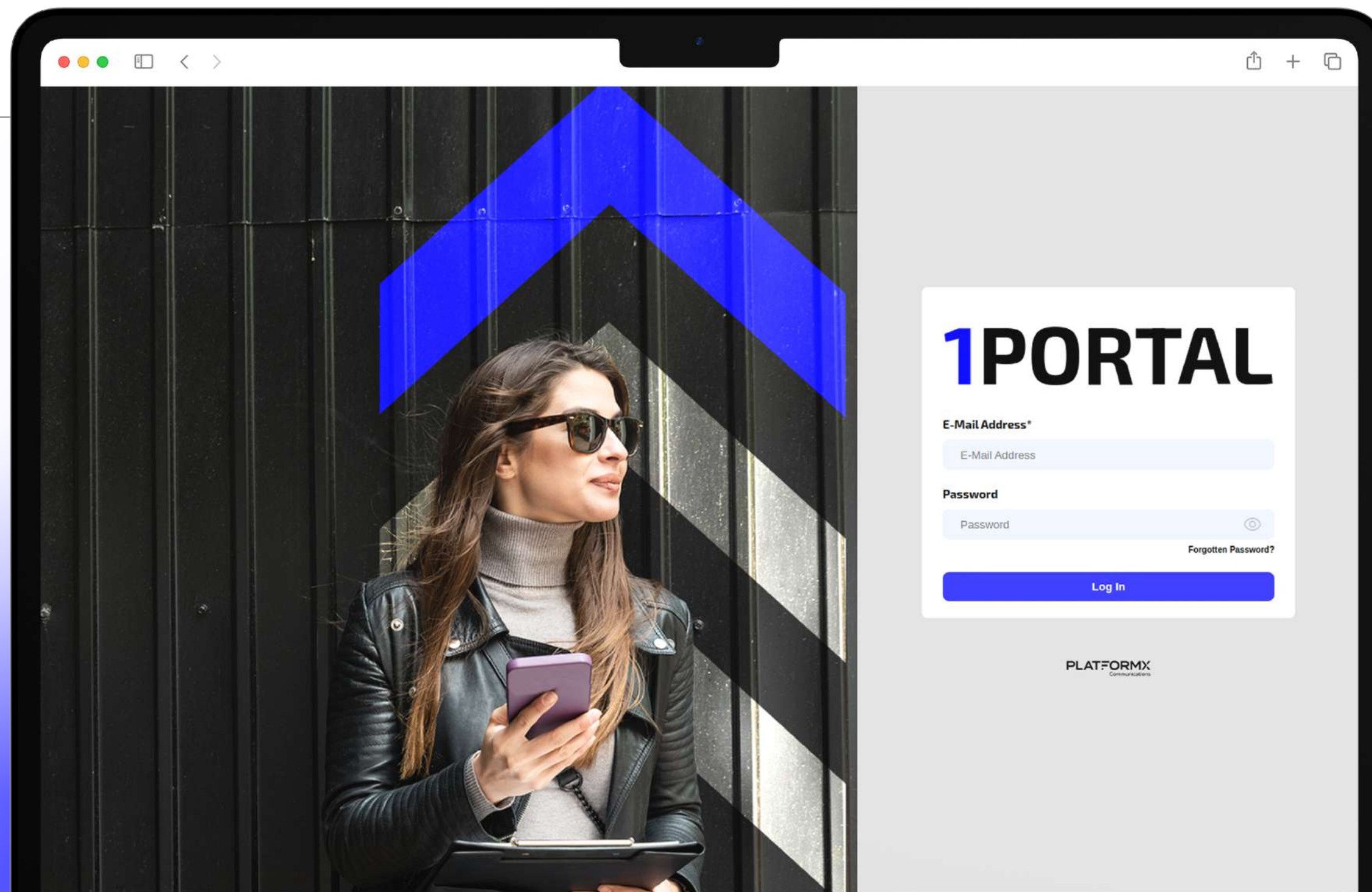
## Team size:

Backend developers: 6

Frontend developers: 2

DevOps engineer: 1

Project manager: 1





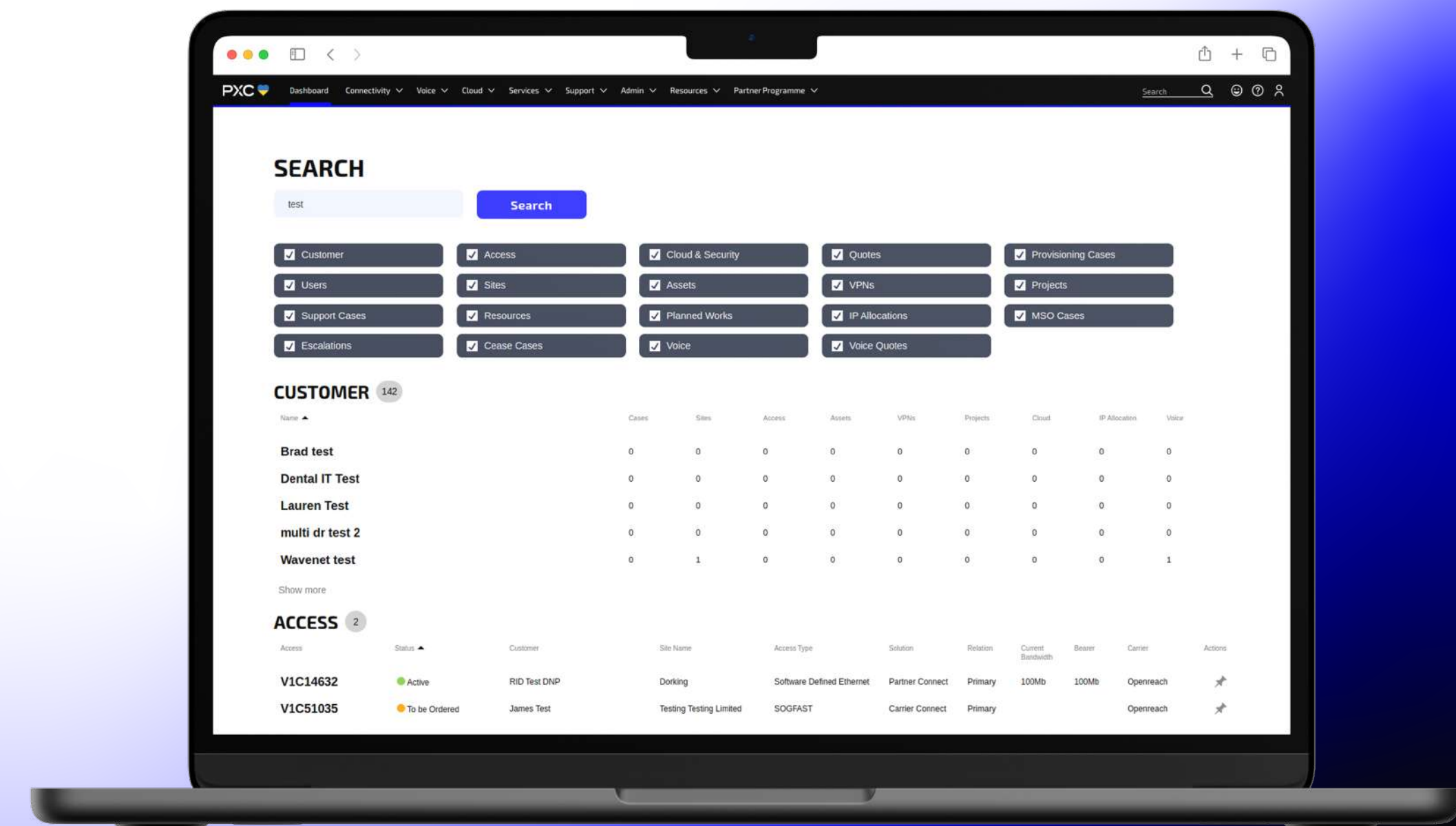
# SERVICES & TECHNOLOGY STACK

## Provided services

- Custom product engineering
- Project management
- DevOps services
- Software migration and modernization

## Technologies & tools

- **Platform:** Liferay, Keycloak
- **Frontend:** Angular, ReactJS, JSP, Servlets, jQuery, D3.js, Velocity
- **Backend:** Java, Spring Boot, Spring (Core, MVC, Integration, Security), Hibernate/JPA, Elasticsearch, Apache Camel
- **Databases:** PostgreSQL, MySQL, MariaDB
- **DevOps:** Docker, Kubernetes, Helm
- **Third-party tools:** Salesforce, BECS, PRTG, RIPE
- **Additional tools:** IntelliJ IDEA, Jenkins, Git, Gradle, Maven, Swagger



# REQUIREMENTS & CHALLENGES

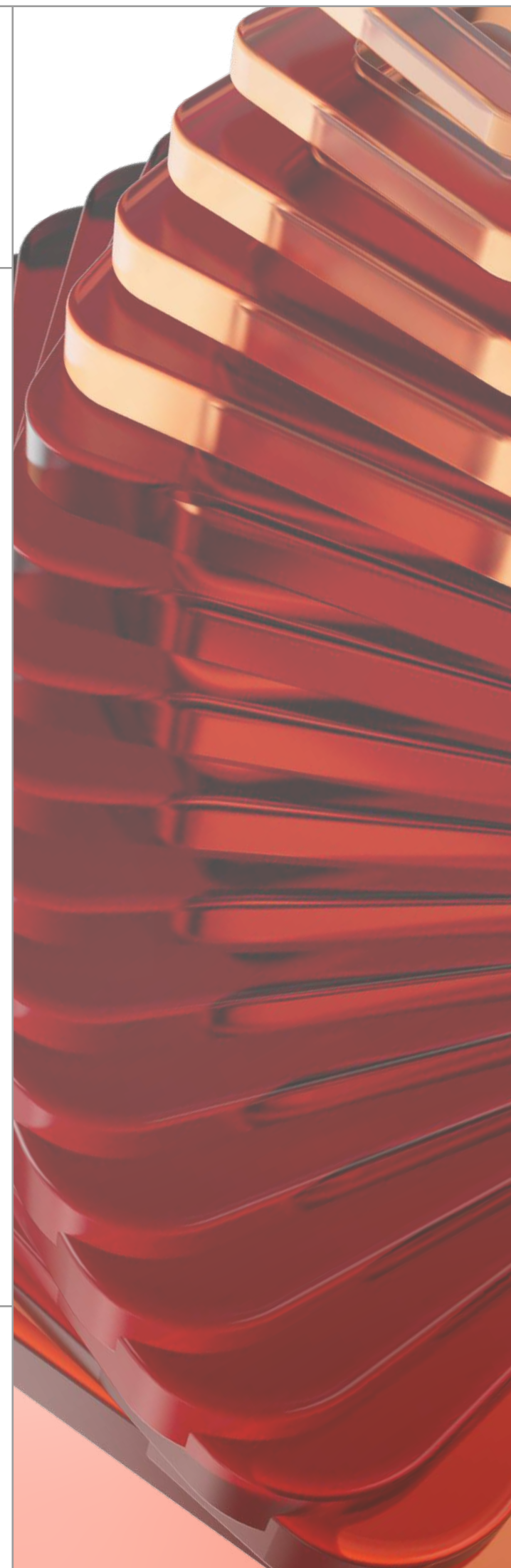
Virtual1 (now PXC) wanted a competitive edge in the telecom industry, so their platform needed to offer seamless performance, security, and reliability.

Their initial portal provided limited scalability and automation potential and lagged behind business goals. Our primary objective would be to modernize and scale their product to keep up with the demands of their fast-growing partner base.

Over the years, they required we shift focus to centralizing their platform and enhancing its capabilities and flexibility to support ambitious plans for more growth. As their partner base expanded across the UK, we concentrated on improving the platform's reliability with features like 1Access and preparing for a transition to more modern tech without disrupting day-to-day operations.

When Virtual1 was acquired by TalkTalk in 2022, we worked with them to preserve the platform's core functionality and value while expanding reach, improving offerings, and entering new markets. But new goals came with a fresh set of challenges: We needed to adjust their system to accommodate a broader audience, integrate rapidly advancing new tech, and further automate processes to support all PXC's partners and their end customers. We buckled down to:

- Streamline the main portal's user experience.
- Implement new functionalities without disrupting current use.
- Finalize migration from outdated tech.
- Plan for future expansion.



# REQUIREMENTS & CHALLENGES

## Migration from legacy systems

Their monolithic Liferay-based portal had to be replaced with a modern microservice architecture to improve scalability, security, and development efficiency.

## Stability amid innovation

The Aimprosoft team had to continuously adapt to industry trends, rapidly implement new features, and ensure seamless integration with legacy systems. All alongside best practices to minimize risk and maintain stability.

## Scalability

Their platform needed to withstand increasing load from over 1,000 partners while ensuring minimal downtime and optimal performance for PXC's real-time telecoms services.

## Continuous feature development

We prioritized implementing new features alongside fresh tech and approaches while maintaining existing functionality. This step, in particular, created significant technical complexity and required strict adherence to best practices.

## Security improvements

After TalkTalk's acquisition in 2022, new security standards became a top priority as we simultaneously addressed older gaps in their system.

# COLLABORATION APPROACH & PROCESS

Our partnership with Virtual1 (now PXC) is based on three key pillars: **continuous collaboration, trust, and shared growth**. We've weathered two acquisitions and leadership changes together, quickly adapting to new circumstances while remaining reliable.

Their trust in our expertise has grown steadily, too, reflected in the **increasing autonomy** and **responsibility** we've been granted. Whether integrating cutting-edge tech, playing a supporting role in scaling their platform, or addressing urgent challenges, we've remained a **steadfast** and **dependable partner**. To us, our work with PXC is more than a gig – it's a **shared vision**. Their platform's constant evolution, plus their increasingly ambitious plans and subsequent technical challenges, keep us deeply engaged in the process, motivated, and aligned on goals.

Ultimately, our teamwork has given them **continuous growth**. By adapting to changing needs and communicating transparently, we've been able to **prioritize both stability and innovation**. And become an integral part of the journey that has contributed to PXC's success. We're proud to remain part of this evolving story – a 15-year journey of continuous growth and fruitful partnership.

# STEP-BY-STEP PROJECT FLOW



## Stage 1: The start of our partnership & 1st acquisition (2010–2015)

It all started with a start-up named Upshot. Our team worked on their portal, expanding functionality to support growing needs. During this stage, Liferay was the backbone of Upshot's platform, offering modular resources to quickly build partner sites. We maintained and improved the platform to meet the demands of early partners, laying a solid foundation for the product's future growth. In 2015, Upshot was acquired by Virtual1, marking a new chapter.

## Stage 2: Portal expansion & transition to centralization (2015–2019)

As Virtual1 expanded rapidly across the UK, our focus shifted toward building a centralized resource. The previous decentralized model, in which partners had their own customized portals, was replaced with a unified solution that streamlined operations and improved scalability. We helped add features like 1Access while improving backend efficiency and user experience. And began the groundwork for the migration away from Liferay.

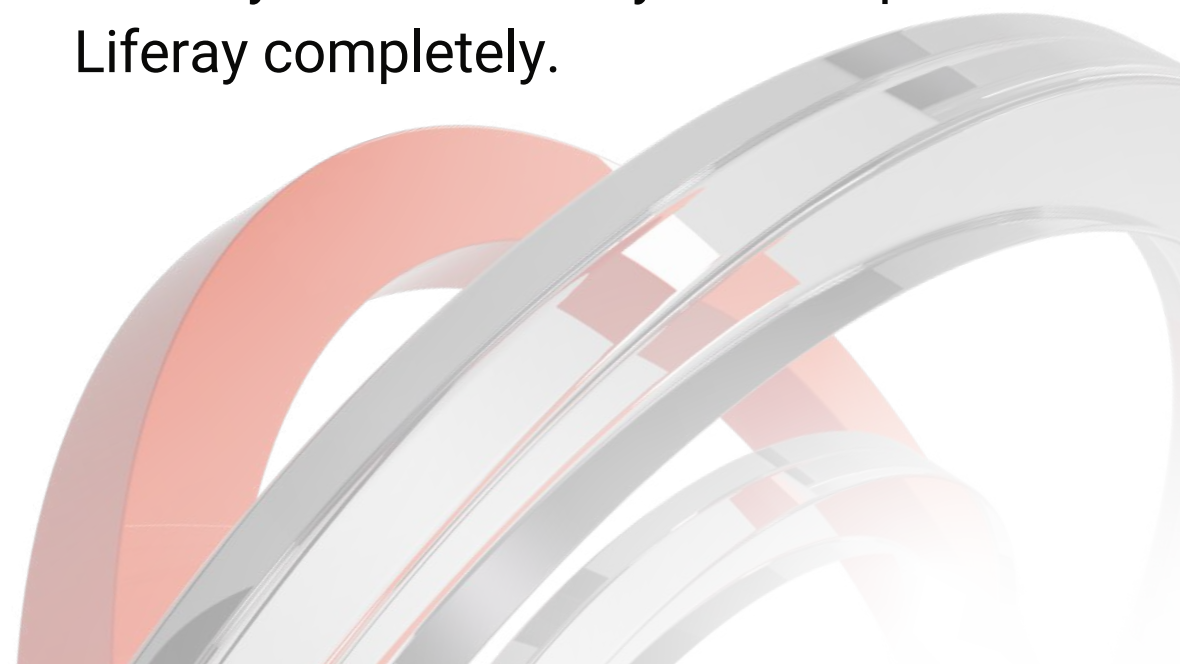


## Stage 3: Migration. Phase 1 (2020)

Moving from a monolithic architecture to microservices, we replaced the Liferay-based front end with a single-page application (SPA) on Angular, creating a more unified front end. The shift introduced flexibility for scaling and integrating new apps while delivering a modern, user-friendly interface. These improvements boosted competitiveness and enriched the user experience, ultimately attracting new partners and clients.

## Stage 4: Migration. Phase 2 (2022)

Then, the full-scale migration to microservices began with the development of standalone applications, such as 1Cloud. This phase involved refactoring existing features into independent services using Spring Boot and we introduced Keycloak for authentication. Liferay transitioned into a middleware role, connecting the SPA front end with microservices. Ultimately, this was when we laid a strong foundation for a fully modular and scalable architecture that prioritized the platform's long-term stability and eventually let us replace Liferay completely.



# STEP-BY-STEP PROJECT FLOW

## Stage 5: 2nd acquisition & strategic shift (2022)

In 2022, Virtual1 was acquired by TalkTalk (now rebranded as PXC). The acquisition marked a major milestone for the platform and its future direction. TalkTalk wanted to expand the platform's reach, enhance automation, and integrate it into their service ecosystem, all while preserving the core functionality and value it offered as Virtual1. Our depth of knowledge of the project allowed us to help make the transition seamless, ensuring that PXC could remain aligned with TalkTalk's growth trajectory after its rebranding and maintain its position as the region's largest independent wholesale telecoms platform.

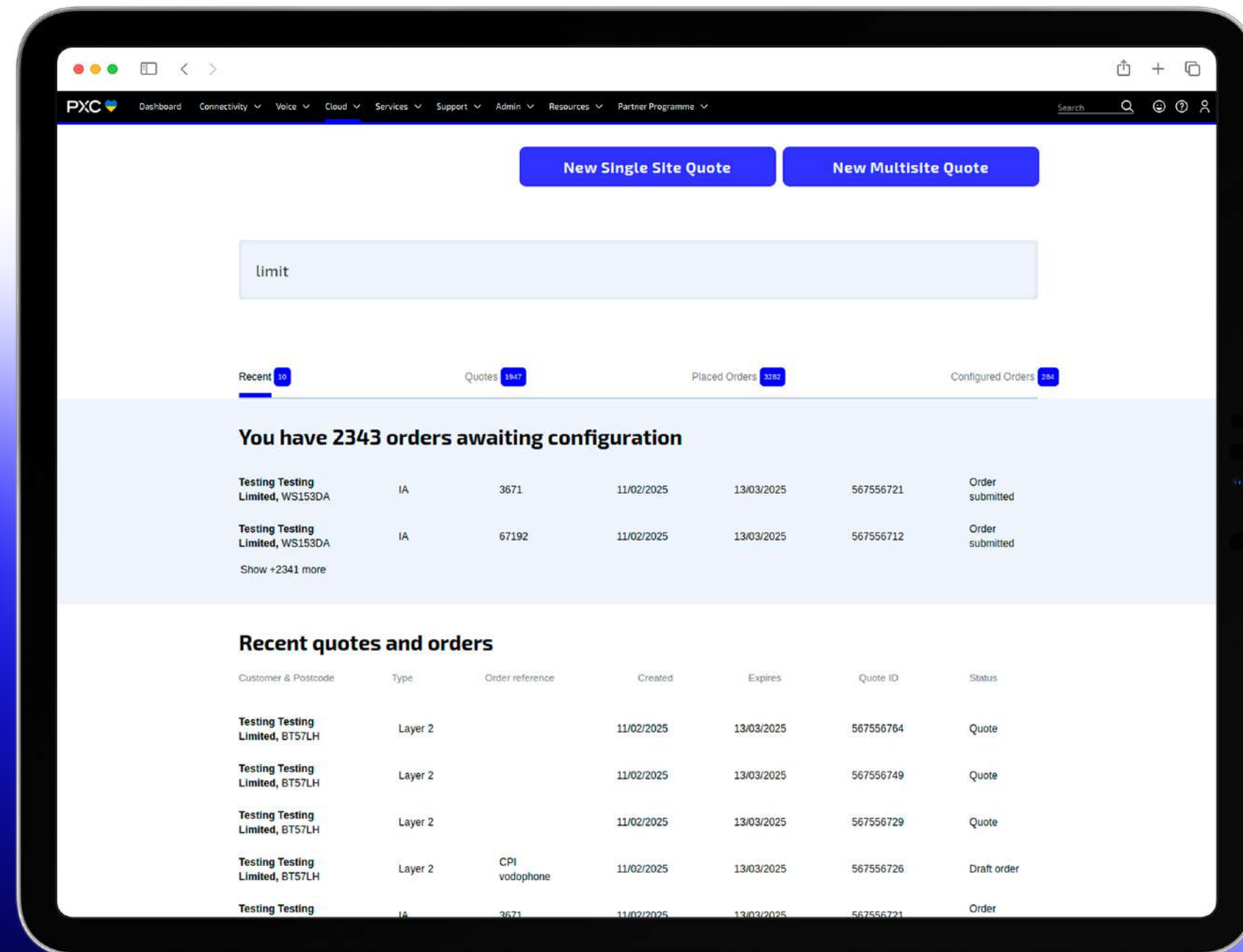
## Stage 6: DevOps & CI/CD automation (2023)

With a growing platform and increasing demands, we integrated DevOps practices into the workflow. CI/CD pipelines ensured seamless updates. These changes enhanced system reliability, reduced deployment risks, and sped up feature releases so PXC could stay competitive in an unstable market.

## Stage 7: Full migration & ongoing development (2024–Present)

This milestone marked the successful migration of the partner portal to a fully microservices-based architecture. Their front-end, authentication, and back-end services now work seamlessly without relying on Liferay. This launch also included a comprehensive infrastructure setup, ensuring scalability and readiness for future growth. With fully updated infrastructure, our continued collaboration is focused on enhancing platform capabilities and supporting PXC's evolving business vision.

# DELIVERED FUNCTIONALITY



- **Admin panel:** The admin panel is a comprehensive toolset that empowers PXC's partners to manage users and networks they wish to include in their quotes. Administrators can create and maintain individual user accounts, define roles, manage suppliers, and much more.

- **1Access:** As the heart of the portal, 1Access provides seamless access to Ethernet, Internet, and cloud services via one unified platform. PXC's partners can manage connectivity efficiently with API integrations. This end-to-end solution is central to PXC's operational success, combining robust automation with a user-centric approach.

- **Customizable dashboard:** PXC's platform allows users to see the company's latest updates and marketing information, and to quickly access important business tools in 1Portal. Users can also pin critical elements like orders, customers, and quotes so they can customize their dashboards to suit their own workflow. This feature enhances efficiency by providing immediate access so partners can act swiftly on critical tasks.

- **Universal search functionality:** A powerful search tool lets users find data across the entire platform, from orders and cases to service configurations. By integrating Elasticsearch, their search functionality provides instant results, saving time and improving overall productivity for PXC's partners.

- **Salesforce integration:** A two-way integration with Salesforce ensures that customer and order data between the portal and Salesforce syncs in real time. This streamlines operations for partners, enabling faster case resolutions, more efficient order management, and a unified customer service experience.

- **1Cloud & Security:** This feature integrates tools to manage cloud quoting, ordering, and requests for demos. Enhanced security functionalities (including IP monitoring), firewalls, VPN configurations, and many others establish robust network security and stability to meet the critical needs of businesses handling sensitive data and large-scale networks.

# PROJECT IN NUMBERS

Strategic collaboration has helped grow PlatformX Communications into a leading telecom company by providing exceptional scalability and efficiency to clients. Our work has helped drive impressive outcomes, setting new benchmarks in network coverage, order processing, and market impact around the UK.

**1,000+**  
partners

**98%**  
nationwide coverage

**500,000**  
completed orders

**60%**  
wholesale broadband market share

**14,000**  
users

# PROJECT OUTCOMES

## Flexible platform for over 1,000 partners

Through our continuous collaboration, PXC has evolved to serve over 1,000 partners, including prominent telecom providers and resellers. With a transition to microservices architecture and advanced solutions, we made operations more efficient for their partners, streamlining their service management and contributing to end-user satisfaction.

## Revenue growth enablement

By modernizing the platform's architecture and automating key processes, we helped PXC improve revenue streams. Implementing 1Access and integrating Salesforce made user interactions frictionless and provided a more competitive resource to partners and end users.

## Transition to modern technologies

The migration to modern tech transformed their platform, offering independent microservices for new features, and simplifying resource allocation and deployment. More efficient solutions improved overall scalability, security, and stability. And made for smoother updates, uninterrupted service, and enhanced security while prioritizing targeted growth and cost efficiency.

## End-to-end solution

Together, we turned PXC's platform into a robust ecosystem ready for new partners, services, and evolving business needs. Their newfound operational flexibility provides efficient onboarding processes, improved automation, and streamlined service delivery - so PXC can beat the competition.

## Scalability

The platform was designed to prioritize scalability for seamless and quick partner growth and system load. So PXC can scale effectively while maintaining service quality and operational reliability, especially during high growth periods.

## Automation as the platform's core

We continue to replace manual tasks with efficient, automated processes for faster execution, minimized error rates, and boosted user productivity. As automation has forever been one of our core principles on PXC's platform, it's helped secure their competitive advantage as leaders in the market and played a key role in their success.



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