CASE STUDY: OPTIMA ITALIA

A unified digital suite for customer self-service and field operations

Partner information:

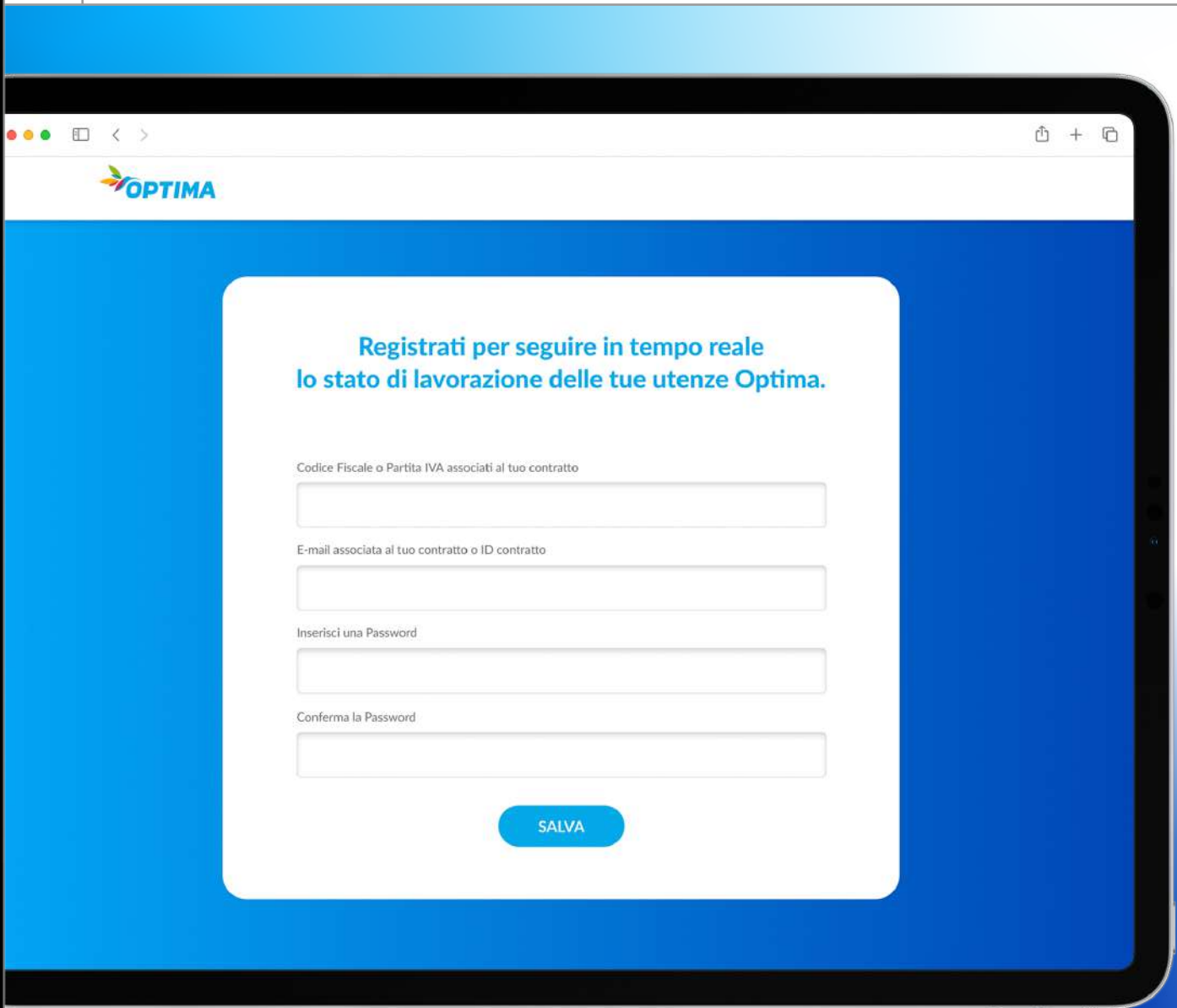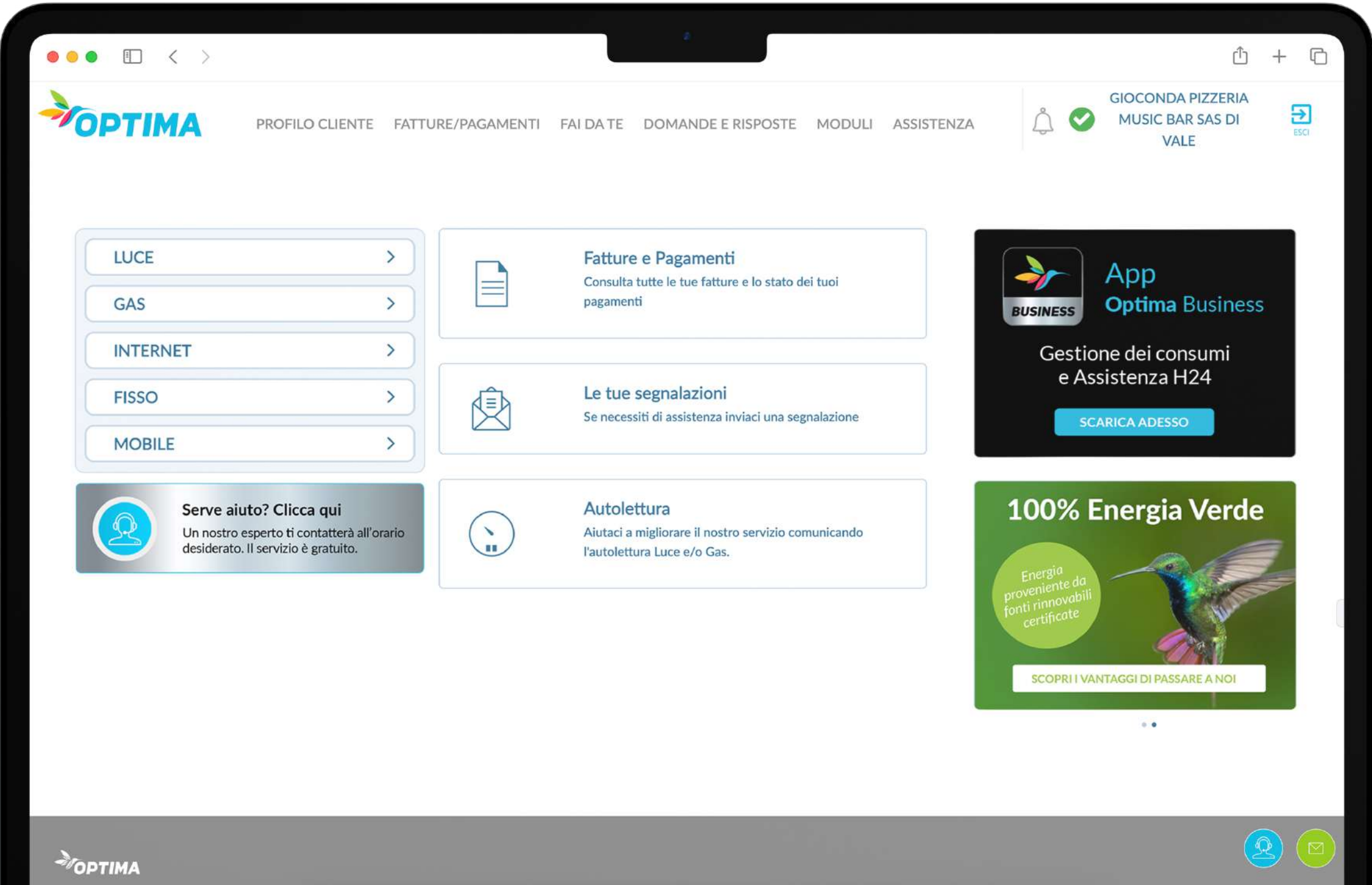Partner: **Optima Italia**

Company size: **251-500**

Headquarters: **Italy**

## Team size:

Mobile developer: 1
Full-stack developer: 1

PROJECT OVERVIEW

Optima Italia is a national multi-utility provider delivering electricity, gas, telecom, internet, mobile, and insurance services to over 200,000 customers across Italy. Since 2011, our team has been their trusted technology partner, helping build, modernize, and maintain a suite of digital solutions that support both their internal operations and public-facing services. Over the years, we've contributed to the development of six major products, including web portals for end users and internal systems for agents and administrators.

As of today, our work focuses on two strategic solutions that anchor Optima's digital customer journey. The first is Area Clienti—a web-based Java portal that lets B2B and B2C clients manage personal accounts, monitor utility consumption, pay bills, adjust mobile plans, purchase insurance and more. The second is Tuttunizzatore, a native Android app designed for company agents to create, configure and finalize contracts directly with customers in the field.
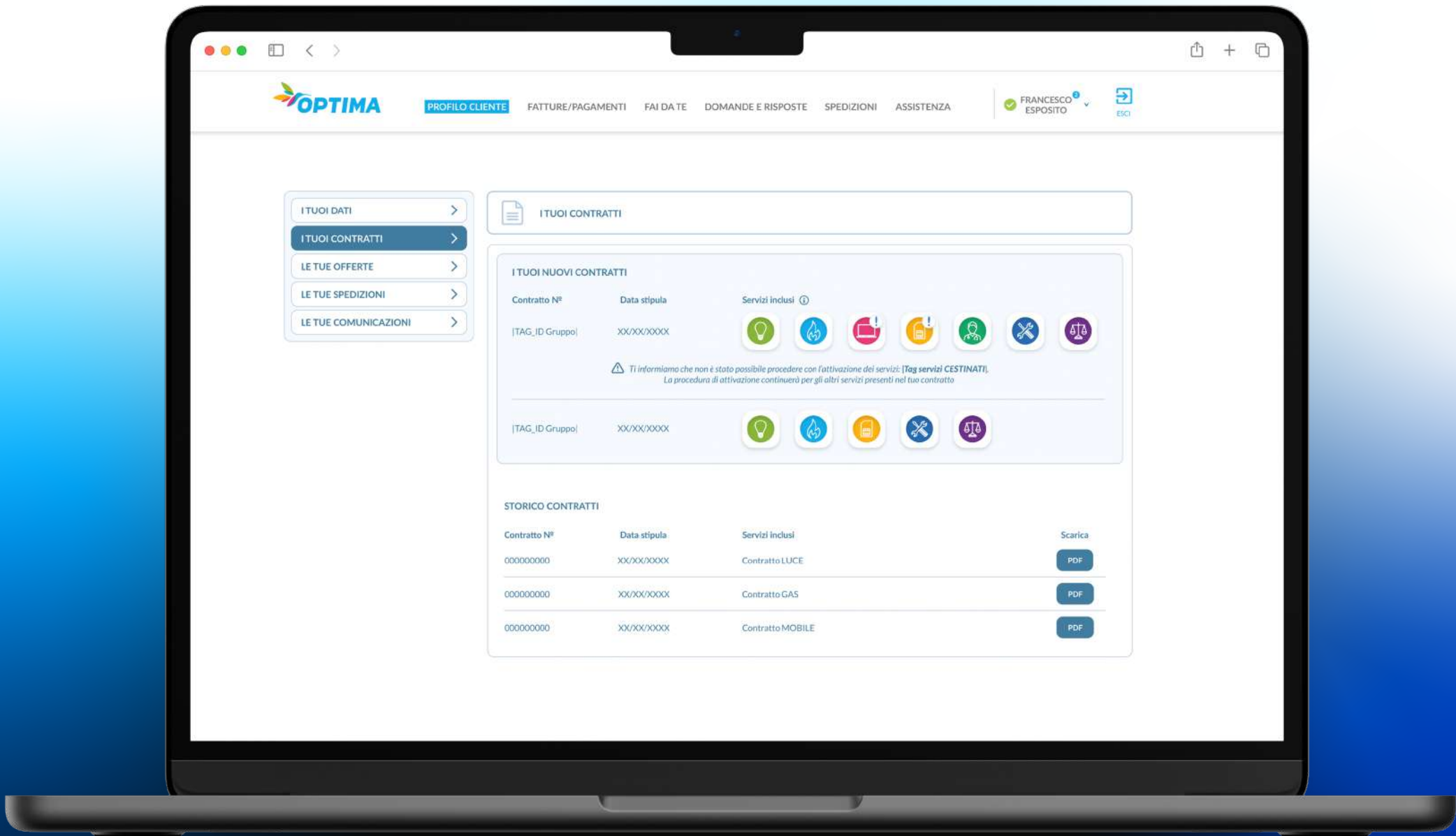
Together, these products support a seamless and efficient service model: customers can self-manage accounts online, while agents can quickly onboard new users and activate services face-to-face. Both solutions are deeply integrated, sharing backend infrastructure, security layers, and real-time data exchange mechanisms.

Now in its **14th year, our partnership with Optima Italia** has grown from delivering individual features to shaping the architecture, performance, and long-term scalability of their core solutions, keeping them responsive to business growth and evolving market needs.

PROVIDED SERVICES & TECHNOLOGY STACK

Provided services

- Web development
- Mobile development

Technologies & tools

- **Platform:** Java, Android
- **Frontend:** Angular 5, TypeScript, NgRx, Redux-Saga, Webpack
- **Backend:** Microsoft SQL, Spring stack, Spring Boot 2
- **Mobile technologies & tools:** Kotlin, AndroidX (Lifecycle, Navigation, Room, DataStore), Material Design
- **QA tools:** Postman
- **Third-party tools:** Retrofit, OkHttp, Firebase, Encrypted Preferences, Hilt, Uni Credit, PayPal, Nexi
- **Additional tools:** JUnit, Git, TSLint, npm, Yarn, GitFlow
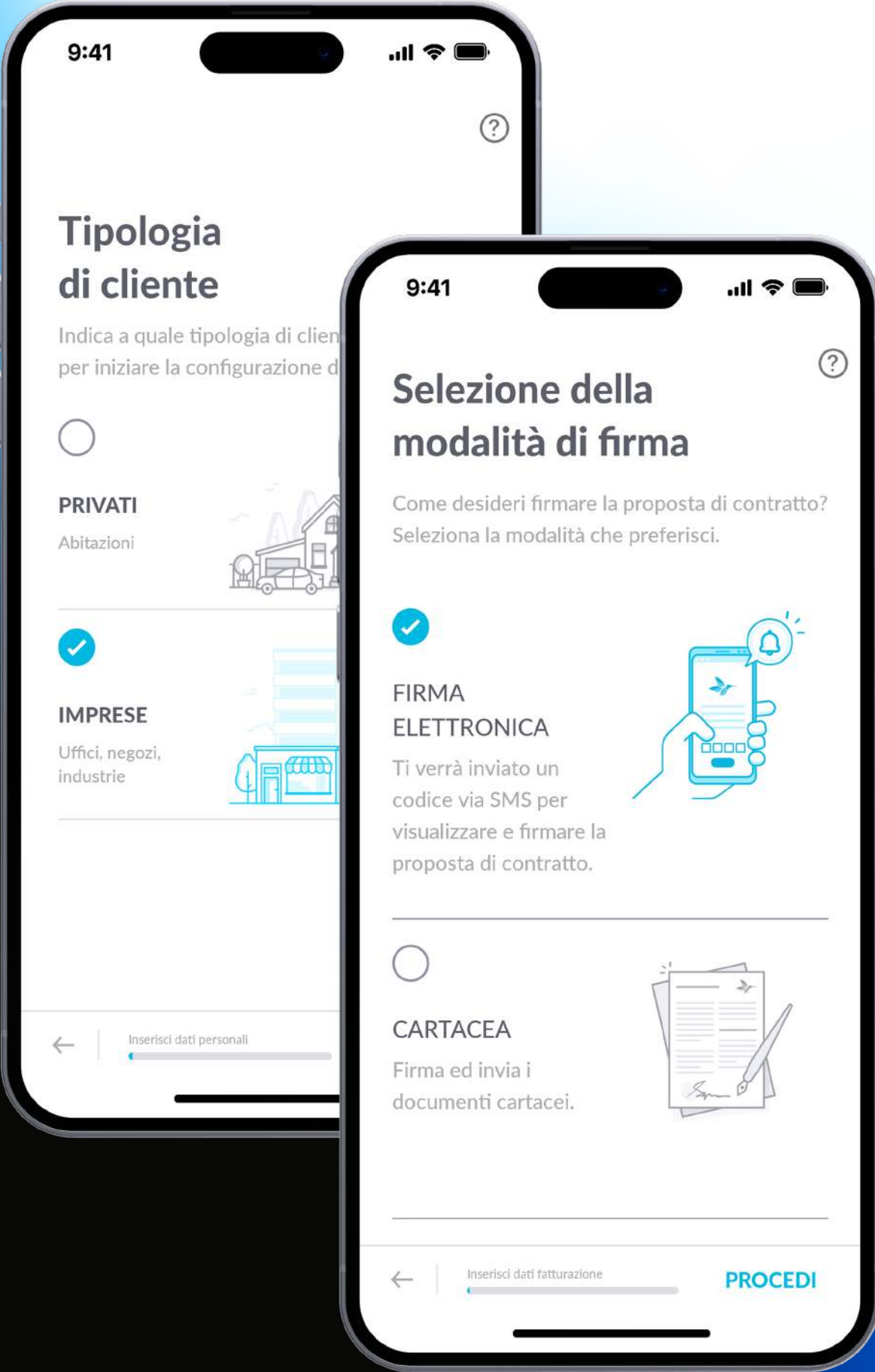
REQUIREMENTS & CHALLENGES

Our collaboration with Optima Italia began in 2011 with a request to develop a custom Liferay theme, a focused UI initiative that marked the start of our partnership. After our team completed that first task, we became responsible for building and maintaining a suite of Optima Italia's interconnected systems. We were tasked with balancing rapid delivery of new functionality with long-term ecosystem stability. This included updating aging components, maintaining high performance as the user base grew, and ensuring that mobile and web apps built at later stages remained consistent in handling data and user interactions.

Each solution brought unique challenges. The portal had to serve users with a unified experience across utilities, telecom and insurance, while the Android mobile app had to support complex, multi-step contract flows for field agents. The common challenge was to add features strategically, without disrupting Optima Italia's services. Overall, our team has been responsible for maintaining high development standards across all solutions, ensuring each product aligns with Optima's evolving digital strategy.

Unifying multiple services in a single customer platform

The customer portal had to support electricity, gas, mobile, internet, and insurance offerings, and ensure clarity, speed, and a coherent user experience for both individuals and businesses.

Building a hybrid service model across digital and in-person channels

Optima's products have to support a seamless customer journey. The customer portal and Android app had to work in parallel, with real-time sync and shared service logic. We had to make data structures, UX behavior, and backend infrastructure consistent across both apps.

Maintaining a structured, multi-step contract workflow

The app had to support a two-phase configuration and e-signature process for each customer contract, including collecting user data, configuring services, validating documents, and confirming contract finalization.

Synchronizing real-time data for bills, usage and contract status

Our team was tasked with building a system that provides up-to-date information across all touchpoints, including downloadable bills, consumption graphs, meter readings and contract signature tracking, all rendered in an intuitive UI.

Refactoring the legacy Android app

At our developer's initiative, we figured out the mobile codebase would benefit from a migration from Java to Kotlin while preserving full app functionality throughout the migration. The goal was to improve development speed and app performance, reduce code complexity, and make future maintenance more efficient.

Safeguarding sensitive data

Both the web portal and the Android app required tight security. This meant securing API requests with Spring Security and hashing logic on the backend, as well as implementing delayed syncing to ensure sensitive customer data remained protected and never lost, regardless of network availability.

HOW WE WORK

Collaboration approach & process

Our partnership with Optima Italia has been defined by **unfaltering reliability, mutual trust,** and **a flexible and lightweight approach to collaboration.** Since 2011, we've worked not as an outsourced vendor but as an integrated extension of their internal development efforts.

The development process is **strategic and highly autonomous.** For both current projects, our team is trusted to not only implement new features but also recommend technical improvements, initiate refactoring efforts and take ownership of system stability. This level of autonomy lets us make architectural suggestions, such as migrating from Java to Kotlin, and i**mprove performance proactively** without disrupting service.

Over time, our partnership and approach have taken on a mindset of **shared technical ownership,** with our team taking responsibility for the sustainability and maintainability of core systems. This confidence in our abilities has streamlined processes and allowed us to **deliver consistent value while keeping complexity low and quality high.**

Partner testimonial

"Our collaboration with Aimprosoft started back in 2011, and since then, they've supported us through multiple stages of growth and transformation. From building a customer portal to maintaining and expanding the tools our agents use every day, they've shown a solid understanding of both our technical needs and how we work as a business. What we've always appreciated is their consistency, reliability, and the way they integrate with our internal team. It's a long-standing partnership that continues to deliver."

Salvatore Matino,
Team Leader at Optima Italia S.p.a
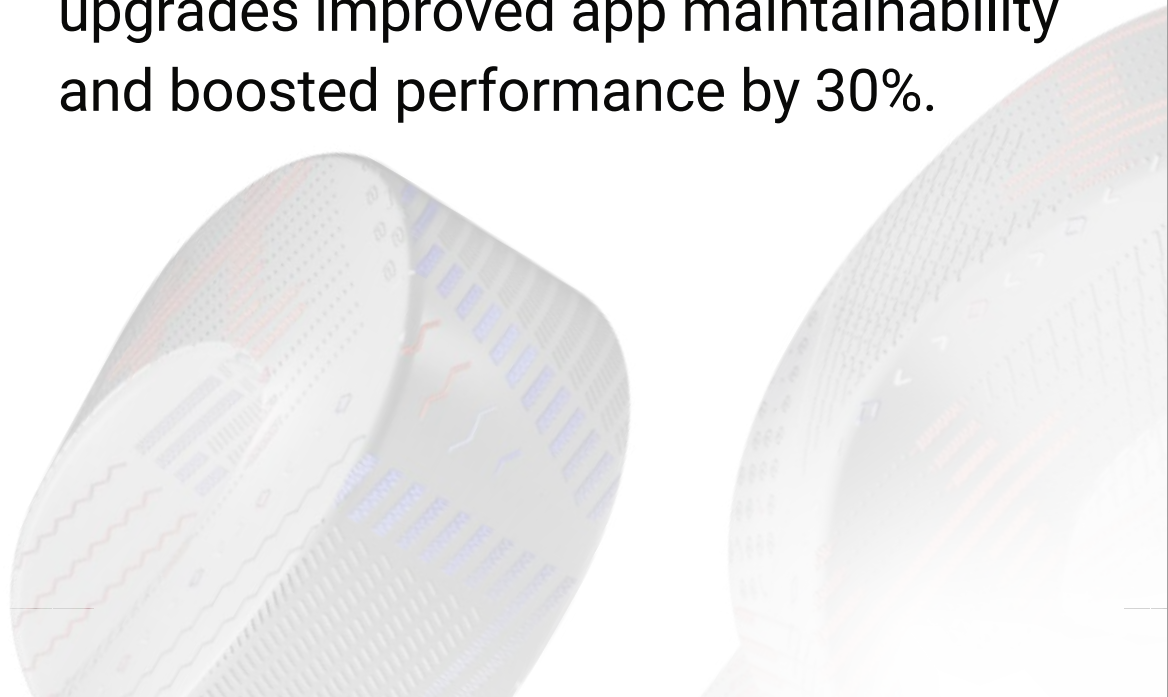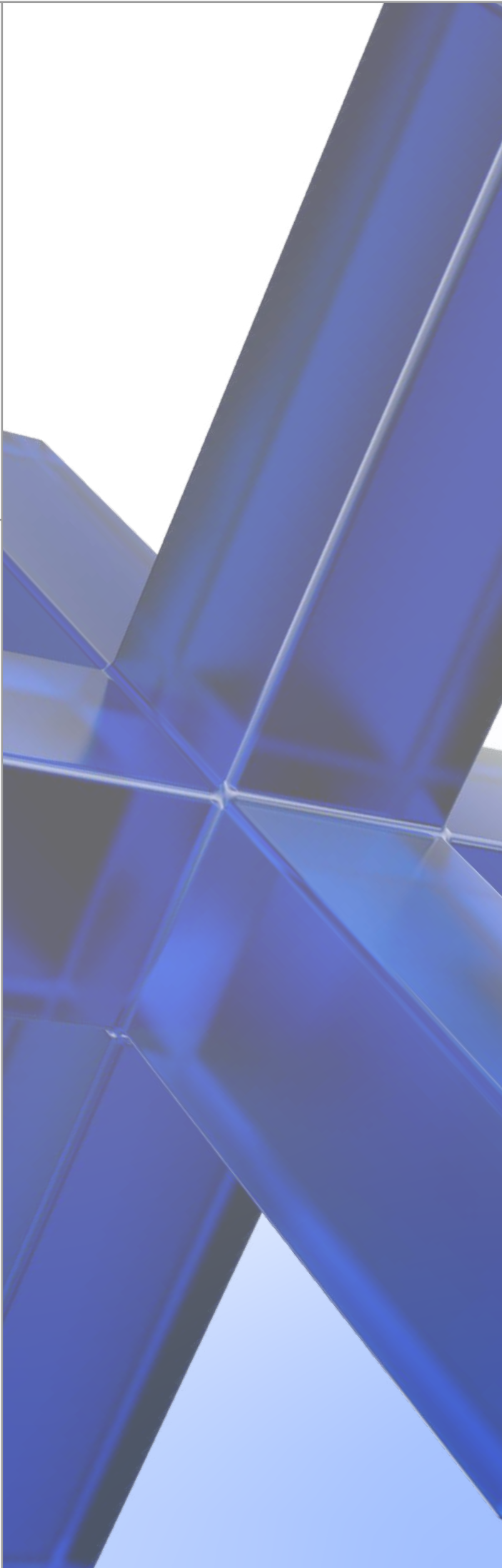
STEP-BY-STEP PROJECT FLOW

Stage 1: From task executor to technology partner (2011–2020)

Our collaboration with Optima Italia began with the development of a Liferay theme. Over nine years, we helped deliver various solutions, including a single-page CRM interface, a contract and pricing tool for agents, a web app for converting photos into PDFs, and a mobile app for remote medical consultations and medicine delivery. With each product delivery, our team proved consistency and reliability, and trust grew.

Stage 2: Launch and evolution of mobile app for agents (2014–present)

In 2014, we began working on a mobile app for sales agents. Initially, the app was designed to help agents configure, finalize and sign contracts in the field. Over time, it grew into a robust tool that supports multi-phase contract flows, tariff customization and secure document attachment. By 2024, we had initiated a major refactoring effort: migrating the codebase from Java to Kotlin, introducing MVVM (Model-View-ViewModel) architecture and replacing outdated libraries. These upgrades improved app maintainability and boosted performance by 30%.

Stage 3: Updating the customer portal (2018–present)

We were tasked with rewriting a legacy web portal from PHP into a new platform based on Angular 5 and Java 8. The goal was to create a stable, modular system for unified customer self-service across Optima Italia's full range of offerings. We also built native Android and iOS apps that give customers full mobile access to manage services and accounts. Today, the portal supports both B2C and B2B customers. Both can view dynamic energy consumption visualizations and select payment providers with the option to set up automated billing.

Stage 4: Continuing growth and platform stewardship (2020–present)

Today, both the web portal and the mobile app for agents remain in active use and development. Our team continues to support their stability and growth, delivering new features, optimizing legacy code, and aligning with modern security and usability standards.

As trusted partners, we make sure that both solutions evolve in step with Optima Italia's business strategy and customer expectations.

DELIVERED PRODUCTS & FUNCTIONALITY
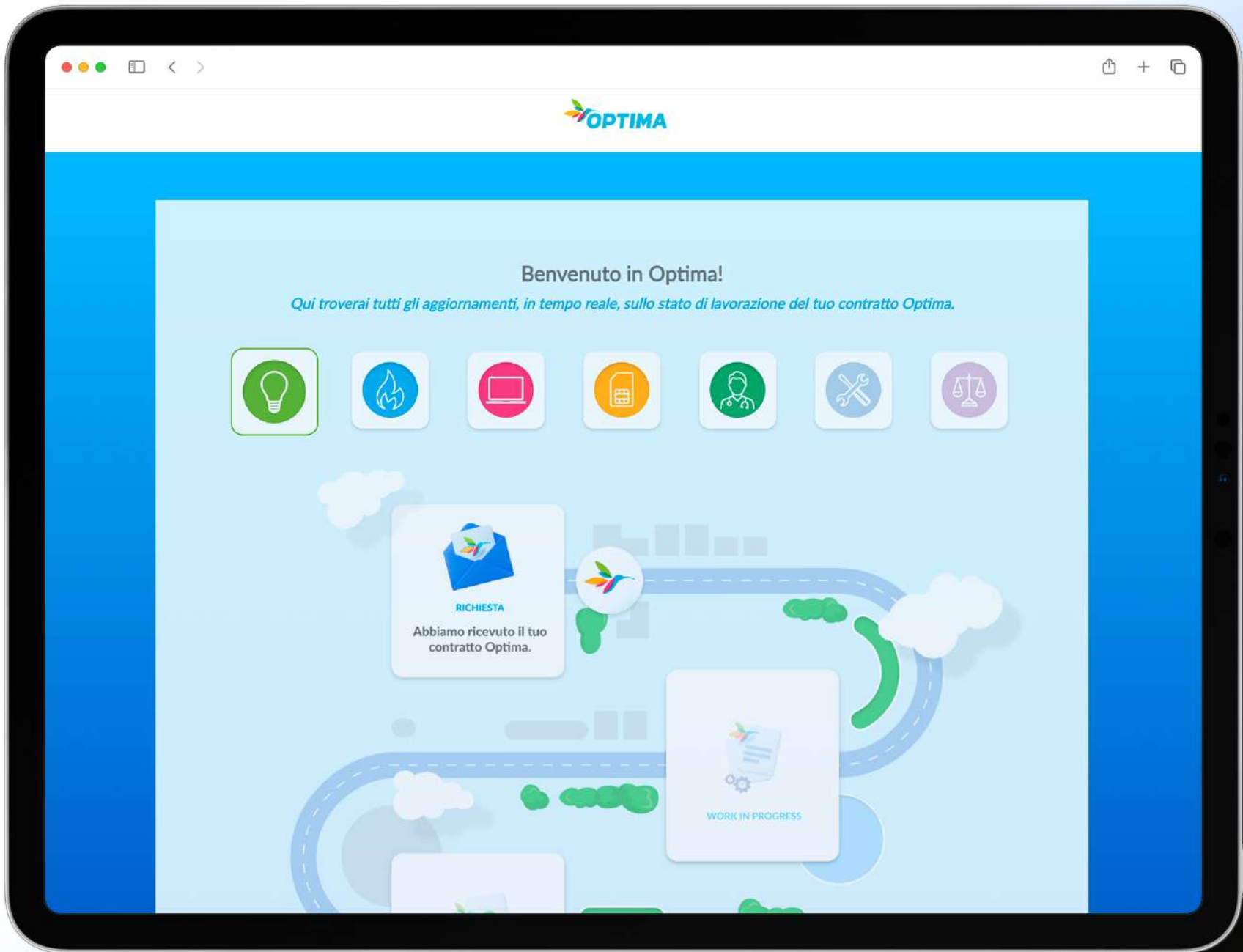
- **A unified multi-service dashboard for B2B and B2C users:** Our team built a responsive, role-aware dashboard that lets individual and business users manage electric, gas, internet, mobile and insurance services in one place. Its interface is dynamic, and includes sections for billing, contract status, personal data and promotional offers to streamline user experience and reduce support load.

- **Real-time consumption tracking with visualizations:** Customers can now monitor electricity and gas usage by day, month, and year through interactive charts built with Chart.js. These visualizations provide clarity around usage patterns and billing logic, enhancing transparency and user trust.

- **Integrated multi-provider payments with automation:** The platform supports direct payment through PayPal, Nexi and UniCredit. It also lets users configure automatic recurring payments and check payment history in real time, improving convenience and reducing missed transactions.

- **Mobile plan management and personalization features:** Users can now manage their mobile services directly within the web portal, from changing tariffs and setting up automated payments to purchasing additional service packages. Bringing these features into the same interface as utility billing created a more cohesive and convenient self-service experience.

DELIVERED PRODUCTS & FUNCTIONALITY

- **Two-phase contract creation and configuration flow:** The contract wizard we developed guides agents through a two-step process: first, gathering customer data and selecting services, then finalizing the contract with required documents, signatures and payment details. Each step includes validations and dynamic fields based on selected service types.

- **Local document scanning and attachment:** Thanks to the integration of Google's ML Kit Document Scanner API, agents can scan and attach documents (e.g., IDs, utility bills) directly within the app. This speeds up the contract signing process and reduces manual errors in the field.

- **Integrated chatbot for real-time support:** The chatbot we developed and integrated connects users to Optima's technical support directly. It helps customers resolve issues, lets them ask service-related questions, and receive assistance without leaving the platform, improving customer satisfaction and reducing support delays.

- **Estimated consumption calculator:** The mobile app includes a tool that lets agents estimate a customer's expected gas or electricity consumption throughout the year. The calculator lets agents personalize service with tailored recommendations, simulate cost projections and make informed decisions when assembling contracts.
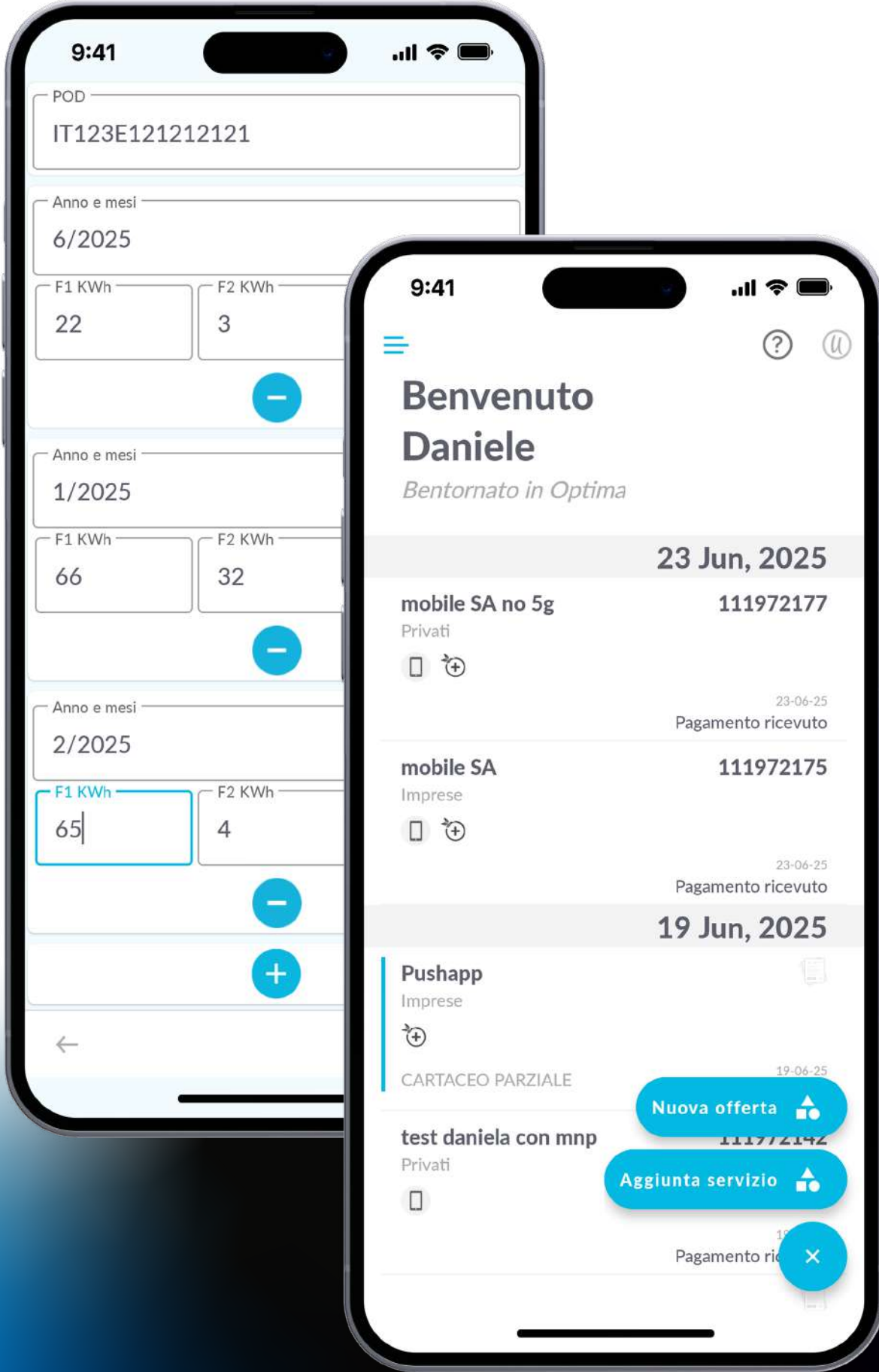
PROJECT IN NUMBERS

In over a decade of collaboration, our team has helped Optima Italia update digital infrastructure, unify services and create a consistent, user-friendly experience for both customers and in-field agents, leveling up the scale and longevity of the solutions we continue to support.

14+
years of continuous partnership and development

200,000+
Optima Italia customers supported by our solutions

30%
increase in mobile app performance

6
full-fledged digital products delivered across web and mobile

PROJECT OUTCOMES

Transformed Optima Italia's digital ecosystem

Optima Italia went from fragmented tools and legacy workflows to a unified digital ecosystem: from an internal CRM interface to mobile apps and a customer portal, our team has supported the evolution of their service delivery model at every level. Each product is built with long-term sustainability and adaptability in mind.

Sped up agent ops in the field with a reengineered mobile app

Our team led the refactoring of the internal, agent-facing app to improve maintainability, cut technical debt, and boost performance by 30%. We also added secure offline capabilities and advanced features like document scanning and consumption estimation to transform the app into a highly efficient field tool.

Integrated customer and agent-facing products into one cohesive infrastructure

By building systems that share common APIs, backends and data layers, we've helped Optima Italia reduce duplication and align its internal and external service logic. Contracts created by agents are now instantly accessible to customers, payments flow across systems, and services stay in sync, providing a consistent experience regardless of user entry point.

Delivered a scalable web platform for end users

We rebuilt their user portal from scratch with Angular and Java. The system now offers a broader set of services and integrates real-time billing, payments and consumption tracking. The responsive, unified portal supports thousands of users daily, and we continue to expand it to add new functionality.

Maintained ecosystem stability throughout ongoing upgrades

Throughout all stages of development, our team has built and adapted each solution to keep pace with new frameworks and security protocols. From major refactoring to replacing aging libraries and improving responsiveness, our work keeps core systems stable, fast and supportive of business growth.

Strengthened digital ecosystem with long-term partnership

Optima Italia still uses our team for architectural, modernization, and maintenance consultancy. This ongoing partnership has empowered their team to scale confidently, expand services, and focus on innovation rather than the integrity of their solutions.

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