

Building and Stabilizing a Business Communication Platform With AI

The company is building a unified business communication platform that brings external and internal business communication into one place.

For external communication, the platform enables businesses to have an inbound business number and manage customer communication through calls and SMS/MMS. For internal teams, it brings together team messaging, channels, voice and video calling, contacts, and notifications.

The goal was to create a single communication platform that could serve as an alternative to traditional business phone systems for external communication and tools like Slack and Teams for internal collaboration.

Challenges

The business needed to build a communication platform that could reliably handle very different types of conversations and workflows in one product.

The challenge was not simply building individual features. Calling, messaging, notifications, contacts, and team communication all needed to work together seamlessly across devices and network conditions.

The platform also needed to deliver:

01 Reliable voice and video calling	02 Consistent messaging and team communication	03 Timely notifications and call events
04 A smooth experience across iOS & Android	05 Strong testing and regression coverage as the product evolved	06 Production readiness for continuous releases
07 Reliable performance across different devices and network conditions		

The Solution

Invimatec worked as an engineering partner to build, test, stabilize, and continuously improve the platform.

We worked across the product lifecycle, from implementing core communication workflows to validating complex calling and messaging scenarios, strengthening mobile automation, and supporting production releases.

The solution brought together:

- Business calling and SMS/MMS
- Team messaging and channels
- Voice and video calling
- Contacts and notifications
- SSO authentication
- Mobile automation and regression testing
- Continuous release validation across iOS and Android

This allowed the product team to continuously add and improve capabilities while maintaining focus on reliability and production readiness.

How We Build With AI

We deployed Forward Deployable Engineers (FDEs) who used AI across the engineering lifecycle through our **Build → Prove → Run approach**.

01 / BUILD

Move faster.

AI-powered engineering helped accelerate development, implementation, debugging, and product changes.

02 / PROVE

Validate reality.

Critical product behaviours were continuously validated through automated testing and QA across calling, messaging, notifications, devices, permissions, and network conditions.

03 / RUN

Keep learning.

The same engineering team stayed involved through releases and production, using issues and learnings to drive fixes and the next cycle of improvements.

This creates a continuous loop of building faster, proving what works, and continuously improving the product.

Results

The platform moved toward a more stable and production-ready communication experience, with stronger reliability across its core workflows. Key outcomes included:

- 01 More stable voice and video calling
- 02 More reliable messaging and notifications
- 03 Stronger automated regression coverage
- 04 Better consistency across iOS and Android
- 05 Faster identification and resolution of critical issues
- 06 Continuous release validation and production support

Technology Stack



Flutter



KEYCLOAK



SignalR



Firebase
Cloud Messaging



Asterisk



LiveKit

cucumber



appium



WEBDRIVER I/O

Key Takeaway

By combining AI-powered engineering with continuous testing, release validation, and ongoing product support, Invimatec helped turn a complex communication platform into a more reliable, production-ready product that could continuously evolve.