

Infrastructure and Service Assurance System (INSERA)

Implementation Partner: PT Itasof Pelagus Global (ITAsoft) | Customer: Telkom Indonesia

ABOUT PARTNER

PT Itasof Pelagus Global (ITAsoft) is an IT solution company specializing in software and web development as well as training consultancy.

Established in 2012, ITAsoft handles various business sectors with IT as their main focus, covering industries like banking, financial services, manufacturing, oil & gas, telco and more.

CUSTOMER AT A GLANCE

PT Telkom Indonesia (Persero) Tbk (Telkom) is a state-owned information and communications technology enterprise and a telecommunications network in Indonesia. As it transforms to become a digital telecommunications company, Telkom implements a customer-oriented business and operational strategy.

The transformation aims to streamline Telkom's organization to be leaner and more agile in adapting to the fast-changing nature of the telecommunications industry. The new organization is expected to improve efficiency and be more effective in producing a quality customer experience.



Industry:
Telecommunication



Firm Size:
10,001+ employees



Country:
Indonesia



28,000
Daily tickets handling



22+ MM
Total transactions in 10 months and counting



1,000
Daily active users

CHALLENGES

Telkom faced challenges with its existing ticketing system and had numerous features that were not relevant to their needs. The objective was to optimize their workflows by transitioning to a customized ticketing solution using a microservices architecture, enabling greater flexibility and customization, especially in forms and workflows. This initiative aimed to tackle immediate inefficiencies and lay the groundwork for potential future enhancements.

SOLUTION

ITAsoft and Sigma (Telkom's IT arms) co-developed **INSERA**, an application built on Joget that integrates Ticket Incident Service via API, consisting of 5 apps (modules) including the **Asset App, Incident App, Person App, Work Order App, and Scheduling App**.

This solution was developed using the Joget platform along with a combination of other software and technologies, including Red Hat OpenShift container platform, Oracle database, and Keycloak for Single Sign-On (SSO) access. It was custom-designed to efficiently manage issue tickets from all Telkom subsidiaries and clients, serving both corporate and private entities. Tickets raised by clients would initially be directed to INSERA, which oversees the distribution of work orders and schedules technicians for issue resolution.

- **Incident:** Serves as the primary helpdesk portal, managing tickets submitted by end users through various channels via API. It is the central hub for the support team to access and monitor tickets. The app captures submissions, triggers new tickets based on issue identification, and updates end users through various channels, including mobile apps, upon ticket completion.
- **Asset & Area:** Serves as master data for storing existing service-related data within Telkom.
- **Person:** Enables user management and permissions configuration.
- **Work Order:** When end users create service incident tickets, corresponding work orders are generated for technicians, whether Telkom employees or vendors, to conduct inspections and repairs. This module handles tasks assigned to technicians, including addressing internet disruptions at customer locations. Tickets created by end users through channels like mobile apps are termed 'passive,' while 'proactive' tickets are triggered by monitoring tools identifying issues.
- **Scheduling:** Facilitates the scheduling of technicians for fieldwork.

The solution has been implemented in various regions of Indonesia, spanning the Eastern and Western parts such as Bandung, Bogor, Bekasi, Papua, Maluku, Gorontalo, Makassar, and more. The consulting and development services provided by ITAsoft extended over approximately 10 months, from initiation through piloting (real-life testing), followed by an additional 8 months for nationwide preparation to go live.

RESULTS

- ✓ Successfully handled more than 16,300 corporate and private customers during its initial launch in February 2023 (piloting phrase, which then went live partially for several regions)
- ✓ 25,000 to 28,000 daily ticket handling (total number of daily transactions) with time-to-resolve (TTR) under 3 hours. Up to 22,296,162 total transactions from February to November 2023
- ✓ An enterprise solution that went live with modern architecture, with deployment across 150+ pods (containers) and microservices architecture
- ✓ Transitioning to Joget resulted in over 30% cost savings on development, a 60% improvement in development downtime, and the ability to cater to 800 to 1,000 active users per day
- ✓ The success of the INSERA project has catalyzed Telkom's future plans, propelling the development of additional solutions such as Workforce Management (WFM) and the Change Request Activities App (CRA)