



PT Indonesia Comnets Plus

Integrated Issue Management Application

Summary

Client: PT Indonesia Comnets Plus

Subject: Integrated Issue Management Application

On the Web: www.iconpln.net.id www.pln.co.id

By Technology: Business Intelligence, Trouble Ticketing, Geographical Information System, Enterprise Resource Planning

By Industry: High Tech

Bening worked with PT Indonesia Comnets Plus to develop Public Service Application for PLN (Perusahaan Listrik Negara). The main vision is that of a high-performance, centralized, all-purpose-and-accessible call center facility, and fast man-in-field response in order to problem recovery. The solution gives PLN better analyze their electricity energy services performance and troubleshoot system problems.

Business Challenge

PLN needed to team with a lead resource that had deep customer relationship management (CRM) capabilities, solid large-scale integration experience and the ability to deliver an ambitious solution within a short time frame. PLN also desire to find an Integrated Problem Management Application (Aplikasi Management Gangguan Terpadu – MGT), such a comprehensive PLN customer service center that address all of these below dimension:

- **Customer Satisfaction**
Focusing on more satisfiable electricity energy services. It is focusing on delivering the highly electricity energy services and solve service problems quickly with minimal risk.
- **Human Resource Management**
MGT System can accelerate cash flow by more efficiently managing more accurate human resource allocation. Organization can reduce ineffective human investment for their on field problem recovery, this result in accelerated cash flow.
- **Material Resource Analysis**
MGT System can accelerate cash flow by more efficiently managing more accurate material resource analysis. Organization can reduce ineffective material supply management for their on field problem recovery, this result in accelerated cash flow and recovery speed .
- **Analyst Productivity**
In the past, call center users, field manager, field workers, had to spend most of their time gathering problem information with only less time left over to perform recovery. With MGT System, we are seeing those number reversed.
- **Quality Dimension**
MGT System exposes electricity energy services quality by field worker group, field area, and electricity network.
- **Geographical Analysis**
MGT System have been used to detect electricity energy services problem coverage area, visually and fashionably real time.
- **Better and Faster Decision (Decision Support System)**
MGT System produces OLAP Business Intelligence Report from huge energy services problem information data at fast time.
- **Human Resource Real Time Tracking**

MGT System can be used as an automatic tools for monitoring human resource (in field man worker) location accurately its geographical position on earth (latitude and longitude). It absolutely generate high efficiency in which group should take over problem in which area, at real time manner.

- Highly Customizable Application (Flexible across Business and Time Changing)
No doubt, each PLN branch produces their own system design at their own configuration. Takes additional effort to accommodate multi PLN branch configuration types to have global visibility. MGT System gives global flexibility across all system configuration.
- Foundation for Further Data Operation
MGT System Datawarehouse is a foundation for further data operation, such as Building OLAP Business Intelligence at other form; Data Mining.

How We Helped

PLN is the only electric provider in Indonesia. With the increasing size of customer, PLN should be Responding to unavoidable increasing of customer size challenges, where effective and efficient energy services operation should be awarded. Working closely with ICON+, Bening initiated a professional team to quickly and efficiently build and launch the new MGT System (1-2-3 Call Center System). This team was charged with:

- Building an entirely new, integrated call center operation. Bening took the lead in establishing a facility to house up to any possible call request and supporting to at least 500 concurrent calls/hour. Other performance key strategy includes best inter component system message transfer mechanism choice, it is based on push messaging service, which made the system workload so thin and fast.
- Developing an automatic, intelligence, and fast call response mechanism. The call center media used, those short message service, web interface, wap interface, telephony and web service system, has enabled MGT to respond quickly to callers' inquiries. The result was a comprehensive speed of request response dealing with more than 500 customer requests per day.
- Introducing a host of new – better – simpler operational processes. Bening leveraged mainly on how recovery mechanism runs well, fast, and flexible. In includes the material and human resource (man in field – workers) move to problem location efficiently, and well monitored. Through MGT, supervisor can aggregate, analyze, and monitor visually the electricity problem recovery team. The customers also could visually get information, in fashionable real time about which area in which condition – based on the electricity condition. This means PLN customers have a single point from which to get such electricity service information. This greatly improves the management and delivery of information, while ensuring the delivery of consistent information to the city's call center applications, as well as to the city's website, and sms service.
- Defining best algorithm, inexpensive and fast real time tracking via GPS System, automatic PABX Telephony response, and visual generation via Google Earth application. The main issue is in huge PLN Customer data and its processing with related system modules.

The integrated, MGT 1-2-3 call center solution provides multi point of entry to access electricity information and problem services. It gives a single point of entry to the PLN management board in managing electricity services management and its quest for high performance. Services offered include:

- Responses to requests for information about specific customer billing information or other information.
- Assistance information about customer billing state, (in relation with) customer electricity services condition details, and electricity services on some coverage area on well recently

- updated information.
- Action on requests for a broad range of services, from repairing fuse and broken electricity cable to repairing electricity tower and arranging for scheduler black out on certain area.
- Reports on quality of electricity problem issues or complaints with the PLN services.
- First line of communication to PLN customer during large-scale emergencies.

The project involved significant business process change and content design and collection, as well as new computers a new system and a creative combination of technologies. The MGT System is designed to help deliver these value-added benefits:

- Maximizes accessibility to PLN Call Center for information and services.
- Maximizes service fulfillment efficiency and effectiveness.
- Maximizes impact of service delivery
- Optimizes PLN Call Center administrative burden.
- Maximizes public safety.

Technology Involved

Bening used a set of technology to accomplish the project.

Software:

Oracle 10g, SUN Java Application Server 9.0, Java SDK 1.5, Java Enterprise, Java Messaging Service, Java GSM/CDMA System, Google Earth System, Pentaho BI, Java GPS Driver System, Atlassian JIRA 3.10

Hardware:

Quad Core Intel® Xeon® 5300, 1.86GHz; Wavecom M1306B, Garmin GPS System.

