



THE SOFTWARE & COMMUNICATION HOUSE

## **Sample Case Studies**

**Client Name:**



**The Challenge:**

HP was implementing a CISCO enterprise call centre for a new GSM operator in the Middle East region. The call centre will be responsible for handling the requests of call customers concerning everything from service activation, to bill enquiry, to asking about new offers. The client required that the Call Center integrate with ORACLE CRM solution that held all the customer information and billing. HP commissioned SAND to do the integration part between CISCO and Oracle.

**The Approach:**

When SAND started on the project, we first explored our implementation options based on the technologies being used, and the architecture of the systems that we should integrate. After a the initial investigation and with the help of HP's person in charge of the project we found out that the version of CISCO used an ICM (Intelligent Contact Management) which has only one TCP/IP protocol interface (GED 145) for sending requests and receiving responses for the things that needed implementation. The ICM protocol was analyzed and the needed functions/messages were identified. On the Oracle side, we were supposed to either make direct database operations to retrieve the needed information, or to work with the Oracle implementation team to build some stored procedures for our use.

**The Solution:**

After several prototypes were developed to test the best approach for situation, we decided to implement a standalone middle wear between CISCO and Oracle instead of developing java helper classes for the ICM to call directly. The decision was based on the expected number of requests per second, the server configurations, and on the complexity of the transactions. Developing a standalone middle wear allowed us to decouple the software from both sides, and gave us the flexibility to optimize our code without fearing an impact on both ends of the transactions. The middle wear developed using Java and implemented the ICM protocol for the CISCO side. The middle were would receive requests from the ICM, parse them, identify which piece of information is needed form Oracle, and then execute the needed Database transaction on Oracle, and return the results to the CSICO ICM.

We finished all the needed functions (from bill enquirer to service activation and much more), conducted the installation on the customer's premises, and supported the software until the launch of the service in the GSM operator.

**The Result:**

Everything went smoothly and the customer never experienced any service interruption in the call centre although the actual traffic exceeded the planned traffic by more than 500%.In the end SAND delivered what they promised, guaranteed customer satisfaction and a stunning success for our partner.

**Client Name:**



**The Challenge:**

Orascom Telecom Holding S.A.E. ("Orascom Telecom") or ("OTH") established in 1998, and grown to become a major player in the telecommunication market. OTH considered among the largest and most diversified network operators in the Middle East, Africa, and South Asia. It is a leading mobile telecommunications company operating in seven emerging markets. OTH was using Excel, emails and Microsoft access in the group reporting system to define regular report on their plans, this provide less safety on the critical information in the reports as it was easy to access these reports. Moreover, there were complex types of reports that couldn't be easily designed and used through reporting tools like excel sheets (the Key Performance indicators).

**The approach:**

Orascom telecom has chosen SAND to implement their technical group reporting system for their major subsidiaries. SAND has been responsible for different phases in the project from analysis to quality assurance. SAND planned to develop an accurate, reliable system to organize the reporting process providing it with a high security to allow only the right users to manage, control and edit reports.

**The Solution:**

SAND offered OTH the Group Reporting System for this mission critical task. The system provided an intelligent way to handle the reports securely. Group Reporting System handles the cycle of service outage reporting and tracking, these facilities the generation of information such as downtime, influenced services, and life-cycle tracking. Users will have a list of available services to select from, complete the required data in order to report the case, and submit the form to OTH administrators. On the other hand, OTH administrators will be able to generate reports on selected services based on submitted data. OTH administrators could assign certain services to selected group of users. Therefore, no one else can report a service outage case except these users.

In addition, Group Reporting System handles the management of achievement reporting and issue escalation. The system provides administrators with tools to define escalation rules and alerts.

Administrators can define events, select status associated with this event (active, not active, new, deleted), and groups of users in different levels. Different types of alerts can be selected (i.e. Email, SMS, or both) on each level of users. Once an event fired, the system will keep monitoring the event status and period in order to escalate the issue to the next level.

The system provides a Weekly operation reports, these are set of reports that used by OTH in order to monitor the performance of the subsidiaries. They used to track the operation progress, quality of provided services, and other important indicators. It is divided into two main categories: Rollout master plan; these are sets of predefined indicators that subsidiaries report their values on weekly bases. These indicators are reported for both On-Air (already installed) and RFI (ready-for-installation) status. The second category is KPIs (Key-Performance-Indicators) these are set of predefined factors (or indicators) that determine different aspects of the subsidiaries' performance. Administrators can create KPIs to measure service quality, customer satisfaction, network performance, etc....

The new system organized the process covering mistakes and errors that occur. Accuracy, reliability and quality were the goal, and that is what was delivered.

## Client Name:



## The Challenge:

Mobinil is the leading mobile service provider in Egypt and strives at providing the best quality service for the customers. One of their main departments is the Risk management Department; (is the overall systematic approach to analyzing risk and implementing risk controls. The department was lacking a system with the ability to track any problem that may cause a risk, the time the problem happened, the losses resulting from the problem and how to calculate the costs of these losses. Therefore, they were seeking a system that is able to facilitate and ease the work of Mobinil's Risk Management Department.

## The Approach:

Based on SAND extensive experience in software development and the several, Mobinil turned to SAND to handle the Risk Management Project. After various meetings and discussions with Mobinil Risk Management team, SAND started developing a new system to handle all the requirements for the Mobinil's risk management. The system target users were Mobinil Directors, officers, executives and secretaries. The system is divided into a set of sections covering all Risk Management aspects and work together in harmony.

## The solution:

SAND worked on the project and developed the RMS (Risk Management System) using bundle of technologies to develop and implement a web-based system using Microsoft technologies. The system was divided into three main sections covering the most critical business areas for the Risk Management Department. First section is the Business impact analysis, it's an essential component of an organization's business continuance plan. It includes an exploratory component to reveal any vulnerability, and a planning component to develop strategies for minimizing risk. Second section is concerning the Vital Documents; these are important documents that have vital information for the business to keep going in case of any emergency or failure. . Third section is the Crisis Management Center. In case of emergency such as natural disasters or serious accidents, it gives directions quickly and properly to the departments concerned, while it collects real-time information. Main ways of connection are phone calls, Mobile SMS, Emails and WAP. Crisis Management Center Technical personnel collect information and issue incidents and/or update existing ones with new data collected. So, upon any changes in any incident, an email and/or SMS will be sent to managers, technical personnel or any other concerned party such as executives, engineers, and so on.

## The Result:

After using the RMS system, everything went orderly, easily managed and opportunities for errors removed, and the risk management team was easily tracking any problems and calculating the amount of losses that might happen. Thus, target revenues achieved more efficiently through a reliable system powered by simplicity. Therefore, guaranteed customer satisfaction was achieved and a stunning success for the Risk Management Department.

**Client Name:**



**The Challenge:**

LG has a large customer base in, and they take pride in their after sales support and maintenance services. The business hours are from 9:00 AM until 5:00 PM. They receive maintenance orders through phone calls, and some of the callers call after they regular business hours. Not wanting to disappoint their customers, LG decided that it needed a system to record user calls after business hours, and allow customers to state their requests for fast response.

**The Approach:**

LG Electronics turned to SAND to help increase the customer satisfaction, and allow customers who call after business hours to get the service they request. SAND recognized that LG's needs are critical although they seem simple, but since customer satisfaction and loyalty is a major goal for this international giant, SAND took a new approach in fulfilling the needs. SAND also recognized that LG's customer service center does not have people well trained in IT operations, so we decided to make things as simple to operate as possible.

**The Solution:**

SAND chose to use its Stingray Lite IVR platform, but with some extra external modules. The Stingray Lite platform used to answer the phone calls and allow customers to leave their messages. An external module used to allow the system operator to listen to the system recorded calls. During holidays and vacations, the system should takes over entirely. In addition, a simple web interface allowed the employees to hear the voice requests that the customers left after business hours on their PCs. The web enabled interface also allowed the managers and employees to access the requests from any computer (after authentication of course), and not just from the computers on the premises. The system also produces reports used to track the requests and their numbers. It also tracks how the problem was resolved. At any point in time, the ticket status (open, pending and closed tickets) can be shown to the user.

**The Result:**

Thanks to the Stingray Lite platform, LG Electronics Egypt never missed a customer phone call 24 hours a day, 7 days a week, and 365 days a year. The incidence of error became very few, Stingray Platform made the operation accurate.

**Client Name:**



**The Challenge:**

Novartis Egypt has launched a new line of products for the common cold. They were looking for a new way to give the market awareness of the new cold treatment they developed. Their marketing department decided that the best way to do it to let people call an 800 number and get the information they needed using the phone. They decided that this would be a new approach in marketing the product.

**The approach:**

Novartis turned to SAND for a robust system that can handle the expected large volume of calls for the new product. SAND recognized the needs quickly and promised Novartis a system capable of handling calls, and components that make the development of IVR application as easy as a point and click operation.

**The solution:**

SAND offered Novartis the Stingray Lite IVR platform, together with the new powerful Graphical User Interface development tool, for developing, editing and creating new IVR application and IVR trees, for the new product and any future IVR needs of the company. Novartis recognized the great capability and flexibility of the system and started adding to the IVR application originally intended for the new product. Soon Stingray Lite was servicing multiple applications created by Novartis including some lighter side on the health subject for the delight of the callers. It was a smashing success for Novartis and all was possible through the robustness and flexibility of Stingray Lite Platform.

## **Client Name:**

### **Siemens & Kuwaiti Ministry of Electricity & Water Bill**

#### **The Challenge:**

The Ministry of Electricity & Water in Kuwait found that they want to facilitate the billing inquiries so that Kuwait citizens can get their billing information through IVR (Interactive Voice Response) or Fax integration. They wanted to integrate and retrieve data from main frames to get electricity and water billing information and easily bring them to the user.

#### **The approach:**

The Ministry of Electricity and Water in Kuwait contracted with Siemens to integrate the data from main frames to get the billing information. Siemens entrusted in SAND technologies solutions based on SAND stingray powerful IVR system platform. When SAND started on the Kuwait Ministry of Electricity & Water project, we first explored our implementation options based on the technologies being used, after the initial discussions SAND used scripts integrate data for Electricity & Water bills information from the technology had been used in the Ministry to the technology that IVR system using.

#### **The solution:**

SAND had several meetings and discussions with Kuwaiti Ministry employers in addition to a co-operation with Siemens offered digital IVR system with E1 lines (E1 lines bear 30 call each) that helps the process of getting billing inquiries by users.

The system had done by integrating stingray system behind Siemens high path switch, achieving the best quality for the system in services provided and in the voice quality. The system is beneficial to the providers with an advanced features, digital IVR allows user to choose between both English and Arabic languages.

Users can also get the billing information via fax integration by entering the fax number, consequently the system will send the bill information to the given fax number.

#### **The Result:**

SAND offered reliable and professional IVR system. SAND Products ensure that Ministry runs a smooth operation. SAND systems ensure a consistent and a high level of service regardless of the medium used by the customer used for contact.