# InPho Interactive





InPho Interactive provides tailored mobile and interactive voice response (IVR) products and services. The ability to provide fast and scalable communication solutions is a critical element to their business.

InPho Interactive partnered with Pythian to resolve customer facing performance issues and reduce service delivery risk. Pythian used its skills and experience in both Oracle and MySQL environments to:

- Greatly improve performance of a critical business process by decreasing response times from 40 seconds to 2 seconds
- Enhance scalability and business continuity of MySQL database architecture with secondary system redundancy

## The Performance Challenge

InPho engaged Pythian to conduct a remote database performance and tuning audit of the main Oracle database which supports InPho's SMS gateway applications. The SMS batch process took upwards of 40 seconds to complete. This performance bottleneck forced InPho to compromise on the volume of SMS batches the SMS gateway could process. Customers and users were also frustrated by the poor performance during the update.

#### The Solution

After completing the initial audit, Pythian found several major bottlenecks in the database architecture that were limiting the throughput of the main SMS batch process. To resolve the issue, Pythian used Oracle's function-based indexes to allow the SMS batch process to complete much faster.

Pythian conducted the necessary code change to the index structure and the programming changes to the Oracle PL/SQL packages. The entire operation was remotely coded, tested and transitioned to production with no disruption.

### The Results

The SMS gateway application response times dropped from the original 40 seconds to 2 seconds per batch. Consequently, several of InPho's customers noted the dramatically improved performance and responsiveness of the application.

# The Service Availability Challenge

InPho had several new SMS, Chat and IVR applications and different versions of MySQL to balance as it rolled out these new applications. All of these news services needed to scale gracefully and offer redundancies in the event of a server failure. Pythian was engaged to audit the runtime environment to reduce service delivery risk.

### The Solution

Working with the InPho team, Pythian's MySQL experts determined the business and scaling requirements for the new applications. With that understood, Pythian then provided detailed guidance on structuring their MySQL database architecture to deliverable performance and availability under load. To ensure scalability, Pythian recommended the separation of applications onto individual servers and MySQL instances. For cost effective redundancy, Pythian recommended a secondary slave server running multiple MySQL slave instances that also ran specific MySQL versions as required by each application.

#### The Results

InPho's new SMS, Chat and IVR applications run within a MySQL database architecture, which is both application centric and scalable. The new environment offers cost-effective redundancy and can scale with virtually no disruption. InPho engaged Pythian to remotely implement the recommended solution and to continue monitoring the environment on a 24x7 basis.



Throughout the many years of our relationship, Pythian has been instrumental in maintaining our most critical applications. We've come to rely on their expertise for our daily support."

- Graeme Campbell Technical Director, Operations

### **Contact Us Today**

Pythian is a global industry-leader in remote database administration services and consulting for Oracle, Oracle Applications, SQL Server and MySQL.

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