

**BPM & SOA enablement at Ufone:
A Case Study**



techlogix

Business Activity Monitoring: A Case Study

Ufone is Pakistan's 2nd largest cellular services providing company with a subscriber base of over 20 million. The company maintains network coverage across 10,000 locations. Ufone has focused on being the market leader in Value Added Services (VAS) by constantly introducing innovative services.

Challenge

Ufone was challenged with servicing requests across a huge customer base. These requests came through multiple channels (Call center, IVR, Web etc) and required responses in a time sensitive manner. All of these requests had to traverse across the intersection of the three critical operational systems: CRM, Billing and Network Provisioning. The current integration solution utilized point-to-point connectivity across these three systems. This had resulted in significant complexity in handling requests in a consistent manner. The point-to-point connectivity also implied that Ufone lacked a unified reporting or monitoring view across the entire process of handling incoming requests. A typical VAS provisioning request might entail more than 40 discrete process steps and gaining visibility overall execution of this complex process was a critical business need.

Apart from the process orchestration issue, the high volume of requests was also a major concern. The required solution had to handle an average load of 1.5 million end-to-end process transactions per day.

The Solution:

A joint IBM-Techlogix team proposed a Service Oriented Architecture (SOA) enabled, process centric approach to address Ufone's requirements. The team automated 22 key business processes. This work also consolidated current and new interfaces, built an SOA enabled platform to support integration of the key business processes and implemented business activity monitoring for insight into the process workflows for proactive improvement and root cause analysis.

Some of the key processes addressed were:

- ◆ New Customer Activation
- ◆ Package Change
- ◆ Change of SIM & Number Change
- ◆ Access Level Change
- ◆ VPN Activation / Deactivation/Deletion
- ◆ Customer Payments & Reversal of Charges
- ◆ Friends and Family Offering Activation/Modification/ Deactivation
- ◆ Credit Limit Update
- ◆ Service Barring and Restoration
- ◆ VAS Activation/Deactivation

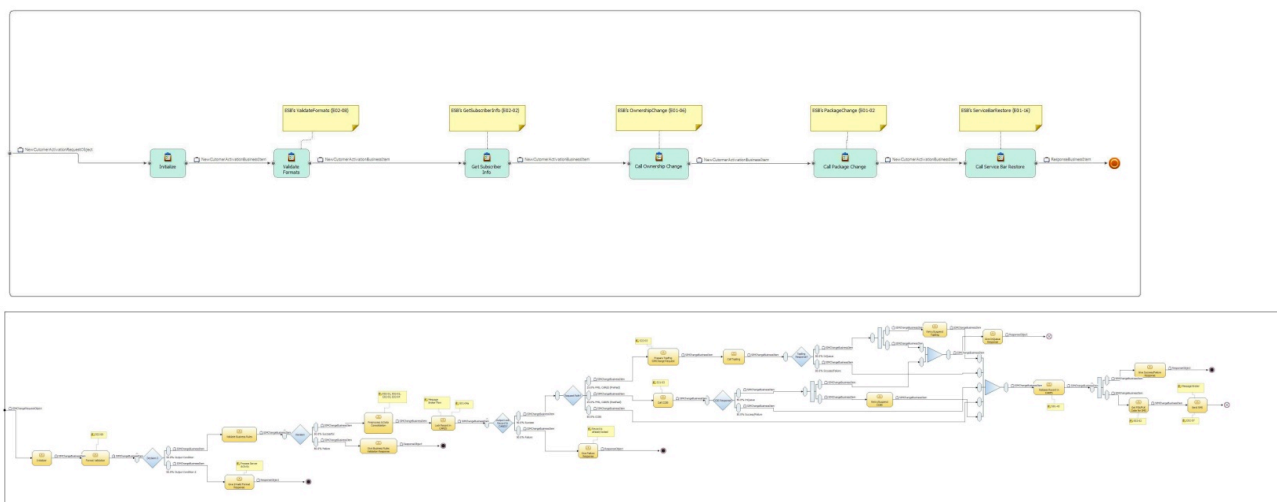


Figure 1 Complex Process Orchestration

Issues Faced & Strategy Adopted

During the implementation of the project, the major challenge faced by the team was handling the high volumes of process requests many of which were long-running due to possible process flow paths which included retries in calling services on participating system as well, in some cases, requiring human intervention in a work flow. The state of these long-running processes was necessarily persisted into the database that had significant consequences for throughput.

To handle this challenge, the Techlogix team in effect implemented two versions of each process to serve as alternative paths to each other. While the process encountered no exceptions, it was handled as a short-lived non-persistent process with very high throughput. If a process exception occurred, a new long running process was spawned and process execution was handed over to this instance. Since exceptions occurred in less than 5% of all process instances, this allowed Ufone to both have high throughput processes and handle exceptions in a controlled manner.

Technology

The team implemented the solution using the IBM Websphere platform including Websphere Process Server, MQ Broker and Websphere Business Activity Monitor.

Benefits:

The backbone architecture developed and delivered as part of this project will serve as a foundation for future business process automation allowing new services to be plugged seamlessly into this scalable service & process centric architecture.

Furthermore, the Business Intelligence delivered by the BAM dashboards is of enormous value to the customer adding visibility into their business execution.

About Techlogix

Techlogix is a global Consulting and IT Services company. With over 300 consultants in the US and Asia, Techlogix delivers solutions in seven key practices including BPM, Master Data Management, Business Intelligence, Application Integration, Project Portfolio Management, Enterprise Applications and Software Product Engineering. Our practices areas deliver breakthrough business value for enterprise customers.

Contacting Techlogix

781 933 1846
800 West Cummings Park, Ste 4950
Woburn, MA, 01801
bpmpractice@techlogix.com
www.techlogix.com