Overview
A subsidiary of Telecom Italia Mobile, TIM Brazil is one of the most prominent mobile operators in the country, serving all Brazilian states. To improve customer satisfaction and gain market share, the company needed to optimize its customer service processes.

Challenge
TIM Brazil places a high value on customer experience. Nowhere is this more pronounced than in its call center, which features an interactive voice response (IVR) system designed to automatically connect customers with the answers they need quickly and efficiently. The IVR handles millions of calls per month. However, due to various system errors, a small percentage of these calls were being unnecessarily routed to a human agent, which had an impact on both the customer experience and the call-handling costs.

Complex Environment, Massive Data
- 65 million customers
- Tens of millions of customer calls per month
- 60GB of log data generated daily
- Need for near real-time information

TIM Brazil relied on a business intelligence reporting system to gather data, but with the high volume of calls and complexity of the IVR infrastructure, accessing this data was limited to history reports that were generated with a two-day delay. Consequently, it could take days to detect a problem—such as unnecessarily routed calls—making timely troubleshooting and resolution a costly challenge.

Solution
Unlike a typical point solution tool, Operations Bridge Analytics provided TIM Brazil with a state-of-the-art platform that uses innovative machine-learning intelligence to deliver intuitive log and event insights and real-time anomaly detection. From a single-dashboard view, the IT team was able to access near real-time visibility into business and technical metrics.

At a Glance
- **Industry**: Telecommunications
- **Location**: Sao Paulo, Brazil
- **Challenge**: Gain real-time visibility into IVR-supported systems to enable optimization of performance, customer satisfaction, and revenue.
- **Products and Services**: Operations Bridge Analytics

**Results**
- Reduce the main KPI—the number of IVR system errors that misdirected calls to a human agent—by 40%
- Detect, correlate, and address business data flows and IT infrastructure deviations in near real-time
- Gain a single dashboard from which to manage IVR health
- Use alerts to proactively address anomalies and resolve issues before damaging KPI

“Micro Focus Operations Bridge Analytics provides SMEs the ability to reduce the amount of time spent troubleshooting problems. With Operations Bridge Analytics, we can identify a problem in a few minutes instead of days.”

PEDRO BOMENTE
IT Manager
TIM Brazil

Case Study
IT Operations Management
They could then correlate them to understand the impact call volume was having on service bus and IVR application performance. Instead of waiting for a reporting system to accumulate and aggregate data, and attempt to find errors, IT could extract information from the massive amounts of raw IVR data, normalize it, index it, and detect issues automatically and in near real-time. Increases in the volume of live-agent calls could be compared against the current or historical flow of data, enabling IT to identify failures early and respond accordingly.

**Results**

Using Operations Bridge Analytics to continuously monitor the health of their IVR system, TIM Brazil was able to reduce the number of misrouted calls by 40%. Understanding and optimizing the performance of IT infrastructure enabled TIM Brazil to enhance its newcustomer onboarding experience as well. This resulted in a positive impact on customer loyalty and market share.

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**Key Features**

- Advanced machine data
- Search and index
- Root cause analytics
- Log and event analytics
- Predictive analytics
- Anomaly alerting

Learn more at [www.microfocus.com/opsBridgeAnalytics](http://www.microfocus.com/opsBridgeAnalytics)

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**Figure 1.** Number of internal errors

The top left pane of this dashboard view (Falha Sistema) indicates the total number of internal errors within the IVR that caused calls to be directed to a human agent. The top right pane indicates common errors of the IVR system when it tries to access IT services in the SOA service bus.

**Figure 2.** Top error codes

In this view, the system dynamically shows the top error codes that have occurred. Error code "03" in the System Failures (Falha Sistema) pane reflects the main indicator with which TIM Brazil was concerned.

**Figure 3.** Total number of calls

This dashboard view presents Failures "03" (our main indicator) and total number of calls per IVR server. Reducing Failures directly reduced the volume of agent-handled calls, putting the KPI into a downward trend.

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“Using Micro Focus Operations Bridge Analytics, we were able to reduce unnecessary agent calls by 40%, with significant savings in call handling costs.”

PEDRO BOMENTE
IT Manager
TIM Brazil