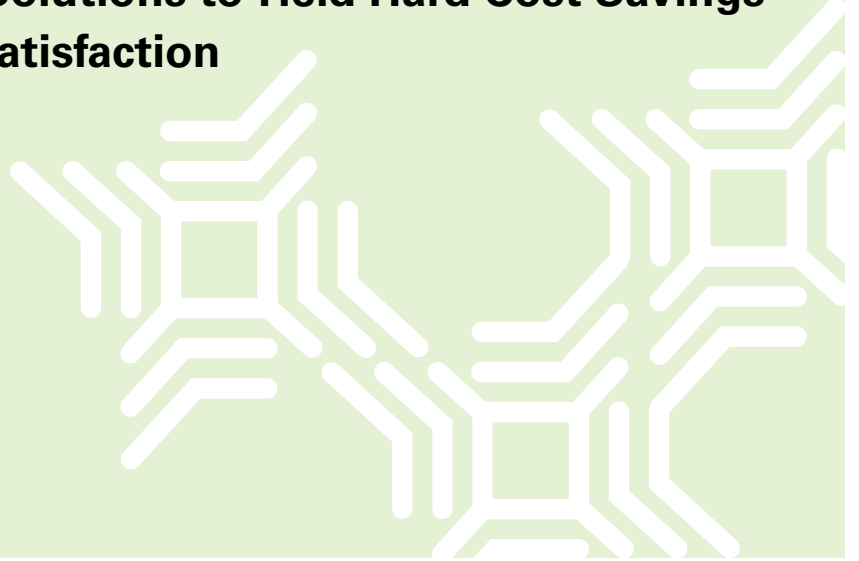


Whitepaper

# **The ROI of Testing and Monitoring: Using Empirix Enterprise Solutions to Yield Hard Cost Savings While Raising Customer Satisfaction**



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## **Customer Experience with a Business' Communication Environment Determines Success**

Your customers' satisfaction and loyalty depend on the quality of their experience. When customers communicate with a business, they do so using a business' communication network. Therefore, communication environments play a central, critical role in defining that all important quality of experience.

When there are breakdowns in a business' communication environment, there is an immediate effect on customers. Unfortunately, most of these issues do not get resolved quickly enough to avoid both the heavy burden of lost customers and the operational expense of scrambling to resolve these problems. This makes it more important than ever for a business to proactively address "customer experience" issues and risks inherent in these complex environments – a challenge that is made more difficult by the finger pointing that occurs when problems arise.

## **Empirix Solutions Significantly Reduce Communication Environment Risks**

Communication environments today are highly complex. They are assembled from a blend of disparate technologies – older as well as new versions – and a number of different vendor solutions. As a result, it is

very challenging, time consuming, and expensive to keep networks running smoothly.

Due to this complexity, there is a high likelihood that businesses will experience communication environment issues on a regular basis. Below is a sample list of the typical risks that negatively impact customer experience and increase operational costs:

- Poor voice quality
- Improper call routing
- Dropped calls
- Improper data and/or slow data arrival
- Reduced application performance
- Call abandon rates that are higher than goal
- Project delays
- Undiscovered issues
- Containment overage
- Necessary rollbacks
- Idle people/agents
- Customer impact and churn

These risks are a major source of expense, frustration, and business service delays. In addition, they create critical customer satisfaction problems.

Empirix directly addresses the communication environment risks listed above by dramatically shortening the

Mean Time to Diagnosis (MTTD), and hence repair (MTTR), of problems and issues for both new projects and ongoing operations. Empirix works with hundreds of businesses, including many of the world's leading brands, to eliminate costly customer experience problems.

Empirix accomplishes these highly valuable and impactful results by leveraging its extensive experience and employing a set of unique, end-to-end automation tools and services focused on the actual, total customer experience. The result: a business' customer experience is improved every time.

## **Risk Reductions from Empirix Testing and Monitoring Solutions Lead to Compelling Cost Savings**

The risk reductions achieved with Empirix Enterprise Testing and Monitoring solutions directly improve the most challenging component of a business' annual technology operation expenditures: the unpredictable (yet ever-present) costs related to automation failures.

Empirix customers realize hard cost savings from deploying Empirix Testing and/or Monitoring solutions to address common communication network risks.

The top 11 hard cost savings achieved with Empirix solutions are:

<b>ANNUAL HARD COST SAVINGS GENERATED BY EMPIRIX SOLUTIONS</b>	<b>EMPIRIX ENTERPRISE TESTING</b>	<b>EMPIRIX ENTERPRISE MONITORING</b>
<b>Reduction in</b> Poor Voice Quality	X	X
<b>Reduction in</b> Misdirected Calls	X	X
<b>Reduction in</b> Repeat Calls (Callbacks)	X	X
<b>Reduction in</b> "Lost" Agent Time	X	X
<b>Reduction in</b> Containment Overages (Self-Service)	X	X
<b>Reduction in</b> Customer Churn Attributable to Better Call Quality	X	X
<b>Reduction in</b> Project Completion Delays by Finding Issues	X	
<b>Finding Issues</b> in Pre-Production Rather Than Post Production	X	
<b>Savings From</b> Automated Testing Versus Manual Testing	X	
<b>Reduction in</b> Performance-Impacting Incidents (Annually)		X
<b>Reduction in</b> Mean Time to Diagnosis (and Hence Repair)		X

**Descriptions for these 11 hard cost savings:**

1. Reduction in Poor Voice Quality – Cost savings from eliminating call extensions that occur because of poor voice quality.
2. Reduction in Misdirected Calls – Cost savings from eliminating incorrect and unnecessary call transfers.
3. Reduction in Repeat Calls (Callbacks) – Cost savings from eliminating repeated calls that occur because of poor voice quality.

4. Reduction in "Lost" Agent Time – Cost savings from eliminating idle time that occurs because of lags created by the communication technologies.
5. Reduction in Containment (Self-Service) Overages – Cost savings from increasing the percentage of calls completed via self-service to the containment percentage goal.
6. Reduction in Customer Churn Attributable to Better Call Quality – Revenue increase due to a reduction in customer losses that are perceived to be attributable to

poor voice quality.

7. Reduction in Project Completion Delays by Finding Issues – For new communication technology projects, companies can eliminate delays that occur because of problems that can only be resolved quickly with Empirix Testing solutions.
8. Finding Issues in Pre-Production Rather Than in Post-Production – For new communication technology projects, Empirix Testing solutions can clearly identify and eliminate problems.
9. Savings From Automated Testing Versus Manual Testing – In addition to automated testing being much more productive, manual testing is no longer necessary.
10. Reduction in Performance-Impacting Incidents (Annually) – Empirix Monitoring solutions provide cost savings in man-hours from the elimination of performance-impacting incidents.
11. Reduction in Mean Time to Diagnosis (and Hence Repair) – Empirix Monitoring solutions provide cost savings in man-hours from the decrease in the average amount of time that it takes to identify the root cause of a problem.

These 11 hard cost savings are incorporated into an ROI calculator for Empirix Enterprise Testing and

Monitoring Solutions. Cost savings are calculated in the ROI calculator using a business' actual pre- and post-Empirix operational data. Many, if not all, of the metrics are collected regularly as part of normal operating procedure. This calculator has been reviewed by leading industry analysts.

### **Typical ROI Achieved When Using Empirix Enterprise Testing and Monitoring Solutions**

For a given customer, the ROI generated by Empirix Enterprise Testing and Monitoring solutions tends to be high because of the types of critical problems addressed and issues uncovered. Problems in hybrid communication environments typically result in symptoms that are often complex to untangle – but Empirix provides the means to straighten these issues out quickly, before customers are impacted.

Empirix has developed the unique expertise and automation technologies to efficiently diagnose issues and their root causes. This enables a business to resolve issues in a fraction of the time, and with less effort and expense, than it would take without Empirix. As a result, first-year and annual ROIs for Empirix Testing solutions typically are 200% or higher, and ROIs for Empirix Monitoring solutions typically start at 400%.

For example, one financial services

corporation has used Empirix Testing and Monitoring solutions to address:

- Voice quality issues for unified communications and the contact center
- IVR containment issues for the contact center, which has 25,000 agents

This customer realized first-year savings alone of almost \$3 million, from a total Empirix expenditure of \$900,000.

A major transportation company with a 2,000-agent contact center implemented Empirix Monitoring solutions to address problems with both IVR containment and call routing. The company's significant issues were reduced from 3-5 per week to less than 2 per month in the first year. This yielded savings in the first year of \$4 million, from a \$700,000 Empirix Monitoring solution expenditure.

An insurance company with a 1,500-seat contact center was having problems with both its database and IVR containment. Empirix Monitoring was implemented for the IVR platform and CTI, which generated first-year savings of \$1.5 million from a first-year monitoring cost of \$200,000.

These results are typical, and the ROI Calculator for Empirix Enterprise Testing and Monitoring solutions makes it easy to understand – even before an investment is made – the very real, sig-

nificant ROI that can result from using Empirix solutions.

### **How to Use the ROI Calculator for Empirix Enterprise Testing and Monitoring Solutions**

The ROI for a particular business and situation can be easily determined using the ROI Calculator for Empirix Enterprise Testing and Monitoring solutions. The ROI Calculator is available for use upon request. This proven Empirix ROI Calculator has been realistically designed to enable an organization to project the first-year (annual for monitoring) return on investment earned by using Empirix Enterprise Testing and Monitoring solutions – actual or projected.

Empirix is able to offer this ROI calculator because of the company's proven ability to diagnose and resolve communication environment issues that directly impact a business' end-to-end customer experience. The significant advantage of this ROI calculator is that it provides users with the freedom to choose how to best apply the calculator to their own situations, while still being very easy and straightforward to employ.

Users can input their own metrics so that calculations and results accurately and thoroughly reflect their specific communication environment. Up to 38 metrics can be provided by a user.

Alternatively, users can choose to input a few selected parameters, and then rely on available industry-tested default values. The default values have been developed by examining a large number of actual communication environments and then selecting typical metrics based on a reasonable, conservative scenario. As few as 10 metrics can be provided by a user. The ROI calculator results easily can be shown to be valid given the quality of the default metrics.

In addition, Empirix has available a number of completed ROI calculator scenarios that have been built by and with Empirix customers. These versions illustrate Empirix customers' successful approach to improving end-to-end customer experience, while also materially reducing operating costs related to unpredictable communication automation failures.

### **How to Gain Access to the Empirix ROI Calculator**

If you would like to apply the Empirix ROI Calculator to your communication environment, please contact either your Empirix Account Manager or Andre Serpa at 781-266-3535. We would be happy to come to your office and help fill in the information that represents your situation so we can identify the potential impact of Empirix Testing and Monitoring solutions on your results and success.

### **About Empirix Solutions**

Empirix ***masters the complexity*** inherent in today's sophisticated, hybrid

communication environments. Empirix solutions enable improved business performance by predicting the customer's communications experience, end-to-end.

Empirix Testing solutions ***preempt*** significant problems by delivering expert, end-to-end validation of expected real-world performance. Empirix offers the most comprehensive, flexible, and scalable pre-deployment testing solutions for understanding how complex IP-based solutions will behave in the real world. We create scenarios that closely mimic actual customer actions (making phone calls, navigating web pages, watching videos) and drive that traffic through the network under full and oversubscribed conditions. Integrated voice, video, and data testing offers insight into quality of application as customers experience it.

Empirix Monitoring solutions ***perform*** end-to-end monitoring to provide a complete understanding of network and application performance as experienced by customers. Empirix is the only company to offer comprehensive visibility into the complex array of factors impacting customer experience, interoperability, and network performance. We are uniquely capable of providing end-to-end assurance of voice, video, and data services in a single solution.

Empirix Analytics solutions ***predict*** new opportunities and valuable understanding because they transform

multiple customer, network, and operational data streams into valuable insights that reveal key trends and illuminate micro causes. By providing actionable intelligence at every level, we empower companies to uncover new revenue streams, develop more competitive business models, strategically enhance customer experience, and carefully control costs.

### **About Empirix**

Empirix is the recognized leader in end-to-end network performance visibility. We help service providers, mobile operators, contact centers, and businesses master the complexities of transforming and managing networks to enhance customer experience and create profits. The company is uniquely able to provide a complete understanding of how customers experience voice, video, and data applications in a single solution optimized for troubleshooting and in-depth service analysis. Through testing, monitoring, analytics, and intelligence, Empirix helps companies around the world realize the full value of their technology investments.

For a complete list of offices worldwide, or to find an authorized distributor in your area, please visit: [www.empirix.com/contactus](http://www.empirix.com/contactus).

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