



# ROI CASE STUDIES

## HIGHLIGHTS

**Goal:** For Fortis to launch a new call centre and ensure that it functions reliably even under the highest loads.

**Solution:** Empirix Hammer On-Call

**Results:** Fortis was able to upgrade its call centre while ensuring the highest levels of reliability. A detailed financial analysis shows that the project yielded a net benefit of €313,920, by ensuring that sales weren't lost because of call centre problems, and by avoiding significant troubleshooting costs.

## CUSTOMER PROFILE

### Fortis

www.fortis.com

Fortis is an international provider of banking and insurance services to personal, business, and institutional customers.

**Headquarters:** Utrecht, Netherlands

**Industry:** Financial Services

**Employees:** More than 85,000

**Revenue:** 120,457 Euros (2007)

## Fortis Ensures Call Centre Reliability and Gains €313,920 in Benefits With Empirix Hammer On-Call

Fortis, ranked among Europe's top financial institutions, is an international provider of banking and insurance services for personal, business, and institutional customers. The company has a market capitalization of €43 billion, and a presence in more than 50 countries.

Fortis planned to upgrade its call centre with the latest version of Cisco and IBM hardware and software. Because the call centre is central to Fortis operations, identifying vulnerabilities and assessing the potential risk in its call centre environment before deployment was a top company priority.

Fortis was looking for a pre-deployment testing solution that would ensure that the call centre would perform at the highest possible level, that its environment would be stable, that there would be no issues with portals or applications, and that the system would function properly even during peak loads.

Fortis chose Empirix Hammer On-Call to test and monitor its IVR, and to monitor the call centre environment. Working remotely, Empirix consultants developed a detailed test plan, including performance and evaluation criteria, and then leveraged Hammer technology to test Fortis's touch-tone and speech recognition applications. Testing pinpointed a number of critical problems in the way the Fortis call centre performed under load. With Hammer On-Call, a Fortis technician was able to identify and fix the capacity and connection problems in ten minutes.

As a result, Fortis was able to upgrade and launch its call centre and ensure the highest levels of reliability. Fortis gained substantial financial benefits from the use of Hammer On-Call and the quick resolution of call centre problems. A detailed financial analysis shows that the engagement yielded a net benefit of €313,920, by ensuring that sales weren't lost because of call centre problems, and by avoiding significant troubleshooting costs.

### Benefits

OBJECTIVE	BENEFITS ACHIEVED
Test the new call centre before deployment	Using Hammer On-Call, a Fortis technician identified a major capacity problem, and fixed it in 10 minutes.
Ensure high levels of call centre reliability	By testing and troubleshooting the call centre before deployment, Fortis was able to fix any potential problems before launch. The call centre has worked without problems after deployment.
Reduce troubleshooting time and costs	Troubleshooting and fixing call centre problems can take from eight to 10 times longer to fix post-deployment. By fixing problems pre-deployment, Fortis was able to avoid an estimated €349,280 in troubleshooting costs.





### The Challenge: Ensure Call Centre Reliability

Fortis, ranked among Europe's top financial institutions, is an international provider of banking and insurance services for personal, business, and institutional customers. The company has a market capitalization of €43 billion, and a presence in more than 50 countries. As the market leader in banking and insurance in the Benelux region—one of Europe's wealthiest—Fortis serves a range of personal, business, and institutional customers with a comprehensive package of financial products and services.

Central to Fortis's success has been the company's strong relationship with its customers. It has a call centre that employs 200 agents divided over two sites, using Aspect's telephony system and IBM voice response units, monitored by Cisco ICM. The call centre handles Fortis's incoming calls, such as financial transactions, and inquiries about mortgages and insurance coverage. Call centre employees also sell new services to customers, and handle inquiries from potential customers.

Fortis planned to upgrade its call centre with the latest version of the Cisco and IBM hardware and software. Because the call centre is central to Fortis operations, identifying vulnerabilities and assessing the potential risk in its call centre environment before deployment was a top company priority.

Fortis was looking for a pre-deployment testing solution that would ensure that the call centre would perform at the highest possible level, that its environment would be stable, that there would be no issues with portals or applications, and that the system would function properly even during peak loads.

### Fortis Chooses Empirix Hammer On-Call

Fortis chose Hammer On-Call to test and monitor its IVR, and to monitor the entire call centre environment. Hammer On-Call is a managed load testing service that allowed Fortis to identify scalability problems before its customers did. Hammer On-Call emulated thousands of callers to validate the real-world performance of the company's voice applications and the underlying voice infrastructure.

Hammer On-Call is a load testing service that generates thousands of test calls that duplicate real-world operating conditions in order to find capacity bottlenecks and configuration errors. It helps ensure that voice applications and infrastructure will scale to meet a company's performance goals and customer expectations.

Working remotely, Empirix consultants developed a detailed test plan, including performance and evaluation criteria, and then leveraged Hammer technology to test Fortis's touch-tone and speech recognition applications. Throughout the testing and monitoring engagement, Fortis received immediate feedback on how well the voice applications and infrastructure were performing, with real-time reports and access to all performance testing data, including a log file that tracks bugs and fixes.

“By uncovering problems with call centre capacity before deployment, Hammer On-Call was able to save us significant amounts of money, and help make sure that we offer the highest level of customer service.”

Arjan Zwanenburg  
Manager, Application Services, Retail  
Fortis

“We were extremely pleased with the services team at Empirix, and with Hammer On-Call. As a result of their efforts, we were able to go live and offer our customers the best experience possible. We plan to use Hammer On-Call again when we launch our new call centre in Belgium.”

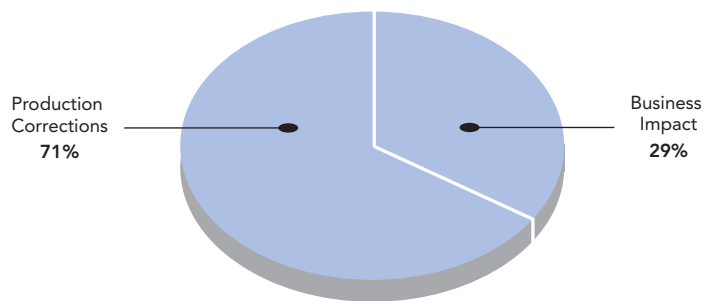
Arjan Zwanenburg  
 Manager, Application Services, Retail  
 Fortis

Testing immediately pinpointed a number of critical problems in the way the Fortis call centre performed under load. On the back-end database, too few inbound ports were open, and the system was configured to handle only four calls per second, causing serious capacity bottlenecks. In addition, if the load was exceeded and the database experienced a connection problem, the IVR would disconnect the caller. With Hammer On-Call, a Fortis technician was able to identify and fix the capacity and connection problems in 10 minutes.

**The Bottom Line for Fortis**

Because Hammer On-Call identified the problems before the call centre went live, Fortis was able to upgrade its call centre while ensuring the highest levels of reliability. Fortis derived many benefits from the use of Hammer On-Call. First, it was able to identify and fix problems quickly. Secondly, it gained substantial financial benefit. A detailed analysis shows that the engagement yielded a net benefit of €313,920, by ensuring that sales weren't lost because of performance problems, and by avoiding significant troubleshooting costs.

Fortis handles approximately 40,000 calls a day for its phone banking solution, and approximately 3,000 calls a day in the call centre itself. If issues had not been found and fixed before the new call centre was launched, many of those callers could have been disconnected, leading to financial problems and potentially legal issues. Customers may not have been able to complete their financial transactions, which could have led to lawsuits. Customer service representatives would not have been able to sell customers new products. Some Fortis customers may have decided to sever their relationships with the bank.



Cumulative 5-Year Net Benefit = €313,920

If Hammer On-Call had not uncovered the problem before deployment, the problems would most likely have gone undiagnosed for weeks, because the dropped calls would have been intermittent and not easily detectable.

“An undiagnosed problem of that type could have impacted hundreds or thousands of calls, and cost the bank significant amounts of revenue if frustrated customers opted to change service providers as a result, or could not complete their financial transactions,” says Arjan Zwanenburg, Manager, Application Services, Retail for Fortis.



- Fortis’s bottom line for the project: A net benefit of €313,920, driven by ensuring that sales weren’t lost because of call centre problems, and by avoiding significant troubleshooting costs.

By uncovering the problem and fixing it before deployment, Fortis saved approximately €100,000 in lost sales, with potentially greater losses due to customer churn and legal costs.

Fortis has also saved a substantial amount of money in troubleshooting costs. In a live environment, with tens of thousands of calls a day, it would have been exceedingly difficult to discover the cause of the intermittent problem. A diagnosis would likely have involved multiple technical personnel and many hours or days of diagnostic time, and may have even required Fortis to shut down its production system. If Fortis had to track down and fix the problem after deployment, instead of pre-deployment, it would have cost the company an estimated €249,280.

Fortis is building an IVR and call centre for its Belgium operations, and due to the success of Hammer On-Call, will be using the service to test its operations there before deployment.

The following chart provides a detailed analysis.

FIVE-YEAR ANALYSIS			
<b>Project Summary</b>			
ROI		888%	
Payback Period (in months)		1	
Cumulative Net Value		€ 313,920	
<hr/>			
<b>Project Costs</b>	<b>Start Up</b>	<b>Month 1</b>	<b>TOTAL</b>
Hammer On-Call Service	€ 31,160		
Internal Support	€ 4,200		
<b>TOTAL PROJECT COSTS</b>	<b>35,360</b>	<b>€ 0</b>	<b>€ 35,360</b>
<hr/>			
<b>Benefits</b>	<b>Start Up</b>	<b>Year 1</b>	
Business Impact		€ 100,000	
Production Corrections		€ 249,280	
<b>TOTAL BENEFITS</b>	<b>€ 0</b>	<b>€ 349,280</b>	<b>€ 349,280</b>
<hr/>			
<b>Financial Analysis</b>		<b>Month 1</b>	
Net Value		-€ 35,360	€ 349,280
Cumulative Net Value		-€ 35,360	€ 313,920
Net Present Value	€ 285,080		
Payback Period (in months)	1		
ROI	888%		

**Return on Investment (ROI)** is the percentage return expected over a specified period of time. ROI is the total benefit divided by the total costs. This ROI metric is good for assessing the multiplier provided by the benefits relative to the total investment and costs.

**Net Present Value (NPV)** represents the cumulative present value of the expected return of a project over a specified period of time minus the initial costs of the project. This dollar figure provides visibility on the actual value of a project, taking into consideration the time value of money—the ongoing benefit of a project in today’s dollars. NPV tells you the magnitude of the project and if the project generates a profit.

**Payback Period** (or breakeven) is the timeframe it takes for the project to yield a positive cumulative cash flow. Payback period is a key measurement of risk but does not take into account cash flows after the payback period.

**ROI, NPV, and Payback** should be used in conjunction to understand the rate, size, and timing of the return.

**Net Value** (or Net Benefit) is the benefit delivered to the organization for the investment made in the project. Net Value is calculated by taking the total benefit minus the project costs.



**About Fortis**

Fortis is an international provider of banking and insurance services to personal, business, and institutional customers. It delivers a total package of financial products and services through its own high-performance channels and via intermediaries and other partners. Fortis ranks among Europe's top 20 financial institutions, with a market capitalization of EUR 40 billion at year-end 2007. Together with ABN AMRO, the company has a presence in over 50 countries and a dedicated, professional workforce of more than 85,000. All this makes the company a leader in financial services in Europe, a top-three private banker and a top-tier asset manager.

**About Empirix**

Empirix ([www.empirix.com](http://www.empirix.com)) helps organizations adopt complex communications solutions with confidence. It combines the industry's deepest knowledge of telecommunications and self-service applications with award-winning testing and monitoring solutions to ensure its customers realize the promise of their technology investments. Empirix is the only company with expertise that spans the evolution of these advanced technologies across multiple markets—from testing in R&D labs through monitoring the end-user experience. For over a decade, thousands of quality-conscious network equipment manufacturers, service providers, and enterprises worldwide have trusted Empirix to reduce the time and cost of integrating new technologies into existing environments.

**About Case Study Forum**

Case Study Forum is the leader in the writing and production of ROI-focused Case Studies. In addition to a customer success story, each ROI Case Study provides insight into the business impact—the revenue, productivity, and cost savings the customer achieved as a result of the investment made in the solution or service. For more information, please contact Case Study Forum at 508-380-8886, or visit [www.CaseStudyForum.com](http://www.CaseStudyForum.com).

The information contained herein is subject to change without notice. The only warranties for products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Case Study Forum and Empirix shall not be liable for technical or editorial errors or omissions contained herein.

June 2008