



“**iLAB** has been a massive contributing factor of getting to the bottom of our **performance related problems.**”



## WHEN **PRODUCTIVITY** MATTERS

PREVIOUS PERFORMANCE BASELINE

**1,039**

**TRANSACTIONS  
PER PERIOD**

AFTER PERFORMANCE TESTING

**4,079**

**TRANSACTIONS  
PER PERIOD**

## iLAB UNDERSTANDS **PERFORMANCE TESTING**

When your organization is implementing a new solution, or replacing existing technology it is equally as important that the solution performs the necessary functions and has the ability to execute these functions under the toughest of circumstances.

Failure to understand the demands placed on your software and account for varying peaks of use can cause your solution to come crashing down, halting your critical business functions and hurting productivity or revenue generation.

In order to properly implement new technology, you must first have a firm understanding of what core business objectives this technology needs to address and how you wish your organization to utilize it during normal business operation.

Once we help you better understand your goals, we must establish baseline metrics and performance goals for your systems. Our performance testing solutions utilize these key metrics to understand whether your software solution is meeting the real world demands your business will place upon it.

Performance testing is critical for examining the typical 20 percent of any given software solution that will be used 80 percent of the time. Once this area is identified, our testing process can help identify and eliminate bottlenecks that can limit productivity.

Are you exposing your business or customers to technology that frustrates and limits your potential? When it comes to performance, working once is not enough. Your solution must work at all times.

# CLIENT CASE STUDY

## THE OPPORTUNITY

Some organizations are forced to implement new technology, not because they require a significant amount of new functions and features, but because an existing legacy system no longer has the support they need. Such was the case for one iLAB client in the automotive parts industry.

An existing software solution was allowing them to manage daily operations to a satisfactory level, but there was growing concern that the development company was no longer in business to support the solution if a significant issue arose. When so much of the organization's functions depended on the effective use of this software, it left ownership in fear of a business altering crash.

As a result, the client sought to bring in and implement a new software solution and partnered with iLAB to ensure the technology would work under the pressure of every day, heavy use by the workforce.

Additionally, the client wanted to make sure they had a long term partner for testing and internal resources that could help manage the system and leave them less exposed to the risks they faced before.

## THE RISK

While the features of a new and innovative solution were attractive, the biggest concern for the client was avoiding the loss of productivity by implementing the new software. Since the previous system had performed adequately, it was essential that this software move be considered a step forward.

This undertaking created a significant amount of risk if the new software solution was not optimized effectively. Would the cost of implementing the new solution create a massive spike in overhead? Would the time spent processing transactions drop below the current standard? Without proper understanding of key performance metrics and consulting from iLAB, those risks could have become very real nightmares.

## THE iLAB SOLUTION

The first step to this engagement was guiding the client into the proper implementation of the solution. This meant analyzing server configurations to understand which deployment would be the most efficient for performance, but also economical for the organization's profitability. While a more elaborate, regional server network seemed like it would deliver a much higher level of performance, it was found that a single server setup actually matched the performance metrics and did so at a fraction of the cost.

While profitability was preserved by an implementation plan that would require less manpower and finances to maintain the system, the focus was shifted to understanding potential losses in revenue generating productivity from the solution itself.

In order to understand how the performance of the software would impact the daily operations of the client, iLAB identified the major processes that were being utilized the most by their employees. It was found that initially, the core features their team needed the most were creating processing times up to 5 minutes for a single transaction. This led to a complete inability to effectively service customers and an overall reluctance from the users to actually use the system.

The iLAB team used this research to identify the areas of their solution database that were being queried the most frequently and develop optimization strategies around them. This created a faster process for each element of the transaction and significantly dropped the total time for each transaction.

Because this system was being used by several different locations, identifying common queries to the database was also significant to reducing the potential for system lock outs created by users attempting to access the same information simultaneously. By simply reducing the time a process needs to reference a specific data set from several seconds to fractions of a second, the likelihood of user overlap was nearly eliminated.

Once complete looking into single transactions, the focus was shifted to understanding how this solution would perform over the load of a typical day. To do this, we simulated 8 weeks worth of standard work in a matter of hours. What we found, due to our optimization, were significant productivity gains.

The previous performance baseline for this solution would produce 1,039 transactions in just under 4 hours. After our testing and optimization, we saw nearly a 400% increase in productivity to 4,079. These results were extremely significant to an organization concerned over maintaining levels of production.

As the project drew to a close, iLAB worked to provide the critical training and education to internal staff so that they could continuously monitor the solution and make sure it was meeting the performance baselines that we had established. Still today, iLAB remains a valuable consultant and a critical part of the continued productivity successes for our client.