Fusion Alliance

CASE STUDY: HOW INDEPENDENT TESTING PROVIDES AN EDGE

Top Pharma Researcher Reaps the Benefits of Independent Software Testing

Overview

A Starting Point

It's easy to dismiss the idea of independent testing. Many businesses bogged down in the complexity of sizable projects may feel that adding another layer is going to add costs, work and headaches. However, those who invest in outside testing soon learn that quite the opposite is true, as was the case with the market leader described in this case study.

Not only does independent testing reduce risks and costs, improve quality and speed of delivery, and provide insights that are difficult for insiders to see, but the outcomes it generates differentiate the quality of work of your business versus a competitor's.

This Client's Story

Clinical trials are an integral step to discovering new medications, devices and treatment plans for chronic illnesses and diseases. In order to maintain the integrity of the data, by law clinical trials must be completed by an outside party without vested interest in the results. These outside parties are called contract research organizations.

One of the world's largest contract research organizations was working to improve its laboratory information system (LIMS) by implementing a new application from a third-party provider. Because of the global scalability and scope of the application implementation, this contract research organization began looking for an independent party to assess and test.

The client turned to Fusion Alliance for its familiarity and capabilities with testing these systems to ensure that the third-party implementation was completed effectively and efficiently.

Objectives

- *Implement a third-party laboratory information management application*
- *Improve the clinical trial process*
- *Utilize independent testing to increase accountability and process efficiency*

Approach

- *Assess third-party application*
- *Test each phase of the application implementation*
- *Work with client and third-party vendor to eliminate excess hardware and costs*

Business Impact

- *Detected application errors and fixed prior to completion*
- *Decreased the required number of servers, resulting in a savings of $250,000 in hardware costs*
- *Improved application and increased usability*

Keys to Success

- *Access to client and third-party systems to complete assessment and testing*
- *Extensive knowledge of current testing and application development practices*

Market Reality

Clinical trials mean everything to pharmaceutical companies. By

outsourcing clinical trials to contract research organizations, the trials and results remain unbiased and allow the pharmaceutical companies to receive accurate, timely information to move forward with drug creation and approval. However, large pharmaceutical companies have extensive resources, and contract research organizations must stay current with technology and these resources to continue to meet the demands of these companies.

Business Opportunity

The contract research organization (hereafter called the client) knew an updated laboratory information system would continue to set it apart in the contract research industry. The LIMS system manages all of the inventory coming in, clinical trial results, FDA requirements, etc. By implementing a third-party application, the clinical trial process would become even more streamlined.

After contracting a third-party vendor for the application, the client wanted Fusion Alliance to complete a product assessment and testing of how the third-party implemented the system. Conducting an independent assessment and testing would ensure there was no bias during the implementation process and would allow to client to mitigate weaknesses and manage issues along the way.

The Solution

Fusion completed an initial assessment of the product to ensure all the properties were laid out correctly and that the application could perform under stress. Fusion then simulated the program on the client's network. Initially, the implementing party recommended that the client only have four users per server for optimal usage.

However, Fusion's review identified that the servers could actually hold ten users at an optimal capacity, **saving the client over $250,000 in hardware alone**. Fusion also determined that there was a network issue causing the network to only run at 95%, which would slow down everything in the application. By identifying this early on, the client was able to be proactive and increase its network bandwidth.

The second phase of the project was software testing. Fusion completed over 40,000 hours of functional testing that included verifying the data mapping between LIMS and all the upstream and downstream applications and more than 630 interface requirements. **By the completion of the testing phase, more than 4,500 defects had been logged.**

Relevant Takeaways

Though it is rare in this industry, bringing in an independent organization to complete testing helped this company mitigate substantial risk in the implementation of the application and saved over $250,000 in hardware alone.

Often companies hire the implementing organization to complete the testing on their own application, which inherently creates a conflict of interest. Often these companies cannot identify or choose not to identify issues because they own the application itself.

Using an independent organization to complete testing allows the client to get a fresh perspective on the software, hardware, and implementation process. Doing so enables areas of improvement to be identified early on, which can snowball into significant cost savings throughout the process.

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