



Case Study

Global Internet Payment Company

Enabling Consumers to Confidently Buy & Sell Online

Ensuring High Volume Cash Transactions & Accurate Accounting

A global Internet payment company that enables more than 160 million consumers in 203 countries to safely send and receive funds needed to upgrade its payment architecture so that it could successfully execute more than 1 billion read operations per day.

Within its vast network of online auction and ecommerce retailers, both buyers and sellers demand system reliability and immediate accurate accounting of each and every financial transaction.

The company's technology architecture needed to maintain up time and throughput speeds during peak transaction processing periods. It also needed to establish a cost-effective and scalable platform on which follow-on product releases could be distributed simultaneously on a worldwide basis.

“On Cyber Monday, the biggest online shopping day of the year, we processed 1 billion reads and 1.9 million cash transactions, 95% within 120 milliseconds or less, thanks to Ness digital engineering.”

Challenges

The organization's aging online payment system was unable to keep up with consumers' real-time response expectations due to scalability and database architecture issues, which necessitated costly over-investment in servers as a workaround. Because of database connection constraints, transaction throughput was limited during peak processing times, affecting revenue realized.

The Internet payment company wanted to provide a reliable and satisfying consumer experience that would incent continued use. Its next-generation platform also had to operate as a high performance, continuously available payment-processing infrastructure that could bring together separate technology systems, serve as a dependable base for future product enhancements, and eliminate costly and time-consuming maintenance.

The organization sought a technology architecture that it could leverage for future product enhancements, but that would eliminate costly and time-consuming maintenance. Accurate real-time accounting of revenue transactions, or buyer debits and seller credits, was a must.

Ness Digital Engineering architected a next-generation payment processing platform and continues to maintain and enhance it to address market and customer needs.

Solution

Ness Software Engineering Services architected and developed a next-generation payment processing platform that:

- Increased data throughput by creating parallel processes writing to a central database
- Eliminated buyer/seller discrepancies with accurate accounting of transactions
- Avoided lockouts due to simultaneous accounting processes on the same data
- Reduced dependencies between payment components with a modular approach
- Improved production and quality assurance processes, speeding future releases

- Ensured compliance and adaptability to necessary regulations

On an ongoing basis, Ness and the payment processing company continue to maintain and enhance the platform to address market and customer needs.

Results

This next-generation payment processing platform has delivered above and beyond the customer's requirements:

- Achieved 100% fault tolerant 24x7 availability with backup cache available
- Exceeded consumer response rate expectations during peak volume transactions periods
- Established a platform able to accommodate future releases worldwide

How We Ensure Successful Outcomes for Our Clients: Ness Connected

Our transformational digital engineering framework seamlessly integrates User Experience Design, Software Product Engineering, and Big Data Analytics to bring compelling Digital Products & Services to market. The framework helps companies define and develop the right Digital Products & Services faster to significantly accelerate time to market, improve customer engagement and reduce business risk.

