

# Securing data and trust with new credit data solution

Credit Benchmark scales growth with secure data-transfer and hosting service



## Credit Benchmark

**creditbenchmark.com**

- Consensus credit data and analytics company
- Fast-growing, working with large global financial institutions
- Offers broad, deep view of creditworthiness for individual firms
- Subscription service for slices of analysis for specific sectors

## Challenges

- Business model based on robust, rapidly extensible technology
- Bank-Grade Security at a minimum
- Regulatory compliance, data sovereignty
- Needed a trusted industry leading, regulated partner

## Solutions

- Secure, scalable hosting environment
- Cutting edge technology with consulting services to create architecture
- 24/7 monitoring, maintenance and support

## Results

- Created the most comprehensive credit risk network globally
- Managing over 750k contributions received monthly
- Launched subscription service to meet increasing demands within finance sector

“ We were doing something technologically that had never been done before. Lumen were a key component to helping us achieve our objectives.”

— Jason Rose,  
Head of application development  
and infrastructure  
Credit Benchmark

 Credit Benchmark®

## Challenge

### Plan the business and the technology roadmap together from the start

Credit Benchmark, a fast-growing consensus credit data and analytics company, works with large, global financial institutions to collect, anonymize and aggregate their internal credit evaluations. Institutional partners get a broader, deeper view of credit worthiness for individual firms, industries and even regions of the world. With dozens of partners now participating, Credit Benchmark created a subscription service whereby interested—but non-contributing—firms can have access to slices of the final analysis.

The core challenge from the start was to find a technology partner who could help build a proof of concept, help launch the company, and then scale infrastructure as more contributors signed on. Credit Benchmark's technology strategy was completely intertwined with its original business model concept. The company's founders knew they were setting out to build a unique business that could change the way the finance industry operates.

Credit data in the financial industry had not been produced in this aggregated way previously. Institutional partners did their own research and turned to outside credit rating agencies for additional opinions. Credit rating agencies could offer independent analysis, but not a consensus opinion from a group of institutions. Credit Benchmark had to show the true value of the consensus and ensure the data was well managed and completely secure. It was proprietary and highly sensitive in its evaluations of risk.

"We're asking partners to give us data that had never gone outside their four walls before," said Jason Rose, head of application development and infrastructure at Credit Benchmark. "We view the consensus rating as being more valuable because those contributing actually have skin in the game."

Before Credit Benchmark the lack of credit risk transparency meant financial institutions made big bets with only a limited perspective of the risk. They could suffer losses due to underestimating risks, or miss out on considerable upside from overestimating risk.

"It's important for the Institutional partners to make sure their ratings are as accurate and up to date as possible," Rose said. "We allow them to apply new analytics to their data, enabling them to see where they are in the consensus."

The value of the end-product was clear to financial institutions, but Credit Benchmark would need to earn their trust to be successful. The data had to be completely secure, and the integrity of the analytics and consensus evaluation that was Credit Benchmark's added value had to be protected from any outside manipulation or a leak that could move markets.

**“It was imperative contributors were confident in the technology partners we chose and our approach to securely managing their content.”**

— Jason Rose,  
Head of application development  
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The ideal partner needed great technology, but that was just the beginning. The partner needed to be part of the solution that could be sold to the financial institutions for their peace of mind. That required global reach and a global reputation. It required data security and compliance standards such as ISO27001 as well as SOC1 and SOC2 certifications that could be readily understood by their IT staff. For Rose, he was developing the proprietary analytics applications with a small IT staff that was not yet geared toward monitoring, maintaining and managing infrastructure. The partner needed an engaged 24/7 account team.

Credit Benchmark turned to Lumen after a detailed search.

## Solution

### Secure hosting environment at center of encrypted data architecture

Credit Benchmark started out with five Institutional partners that contributed to its service, allowing them to assemble a small data center and establish the core infrastructure for the analytics applications' operation. Lumen consultants helped build out secure data transfer methods so that data could be encrypted both at rest and in transit. The system was architected to ensure there was no public interface to the systems. They were available only on a point-to-point internal basis. To align with Information Security standards and minimize risk, only Credit Benchmark's own internal Content Team were permitted to access

this super secure environment. This was only possible using dedicated devices in Secure Data Rooms with 24/7 surveillance and cutting edge access control in place.

“We were doing something technologically that had never been done before and had to solve those challenges under the watchful eyes of our contributing partners. Lumen were a key component to helping us achieve our objectives.”

More institutional partners began signing up. As Credit Benchmark demonstrated its commitment to producing insights securely, these institutions began sharing more and different types of data, increasing the demands on the limited initial infrastructure.

“It wasn’t just the number of Institutional partners that grew, but the depth of data they were sharing,” Rose said. “The data sets were getting larger. Over time, we knew we would struggle with upgrade cycles as we reached capacity.”

With their business model and core applications proven, Credit Benchmark now needed a more scalable, highly secure managed environment. In collaboration with Lumen experts, a highly secured, virtualized environment was built and in house analytics applications migrated. Both parts of the infrastructure ran in parallel for a time, making the cutover in planned steps.

Today, the core processing applications largely run out of the Lumen-hosted and managed environment with the original data center operating as a development site for Rose and team. Lumen works with Credit Benchmark to demonstrate the security of the environment to prospective clients.

## Results and Future Plans

### More contributors, more data, more innovation

Today, Credit Benchmark works with more than 40 of the world’s largest risk practitioners, to create the most comprehensive credit risk network globally, with more signing on. Each partner has strict Information Security standards which upon joining the service and on an annual basis, Credit Benchmark are required to demonstrate they are compliant with and following the industry best practices when it comes to people, process and technology. Because the infrastructure can scale with the data and drive the analytics on large data sets, Credit Benchmark was able to establish a subscription business alongside its work with large contributors. These subscribers—such as asset management firms and insurance companies—essentially buy access to consensus analytics output. They don’t contribute data, but they get the benefit of Credit Benchmark’s ability to mine the consensus data for insights. The subscription service is able to operate separately from the underlying data collection and analysis to maintain security of the partner data.

“The architectural decisions taken meant the necessary components were in place to support the launch and growth of the subscriber business,” Rose said.

Credit Benchmark’s technology has also been used in the Bank of England’s COVID-19 response (the CCFF initiative). For companies that do not have a public rating from one of the major credit rating agencies, the Bank makes an assessment based on a range of information, including the internal rating estimates from any such company’s commercial bank counterparties. In response to a request from Her Majesty’s Treasury, Credit Benchmark provides regular credit assessment files to the Bank, that consolidates anonymized corporate credit estimates from a number of the largest UK banks.

As Credit Benchmark’s business scales, its highly secure, virtualized environment will scale with it.