

- Riverbed needed a platform to turn customer hardware data into service renewal drivers.
- Oracle Analytics Cloud connected to Riverbed's own Al core.
- Visualization and projection tools identified key variables for service renewal.
- Riverbed used this to power renewal outreach and saw results within one quarter.

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BACKGROUND

Riverbed Technology is an IT industry leader in the area of network and application performance management. Based in San Francisco, the company's flagship technology is the Riverbed Digital Performance Platform, which delivers the ability to track metrics, gain insight, and increase productivity in a world where digital performance drives business success.

Riverbed's hardware monitoring platforms come embedded with specific hardware and software solutions for tracking various metrics. That data delivers the insights customers want on their own digital engagement and performance. On the flip side, that data could be used to tell a story about Riverbed's potential future sales as well – if Riverbed had the proper tools.

BUSINESS CHALLENGE: USE HISTORICAL DATA TO IDENTIFY CUSTOMER RENEWAL DRIVERS

A significant part of Riverbed's revenue comes from service renewal; in fact, Riverbed Senior IT Director Bhishma Jani cites it as being a significant revenue driver for the company. However, despite having all manner of metrics coming from customer hardware, the company lacked the ability to leverage that data for identifying renewal drivers.

This created two problems. First, any sort of behavior patterns or indicators for renewals were purely anecdotal. Second, because renewals lacked a definitive model, no initiatives existed for *improving* that renewal rate. "So, technology-wise, we were not in a happy place even though we had best of ideas," says Jani "But we did not have the right technology for us to put those ideas into motion."

As the Riverbed team dug into analytics and data visualization possibilities, they focused on addressing these problems—not just generating new business through renewals, but gaining visibility into the business. Riverbed sought an enterprise analytics tool, a comprehensive solution that easily connected to data sources from multiple platforms, offered projection and data visualization features, and was easy for staff to learn.

THE SOLUTION: ORACLE ANALYTICS CLOUD

After evaluating a number of enterprise analytics platforms, Riverbed chose Oracle Analytics Cloud, built upon Oracle Cloud Infrastructure. "So, we initiated our next-gen set of tools or platforms and we went through evaluations and we chose Oracle for various reasons," says Jani. This decision stemmed from several different-but-related organizational needs:

- Data scientists wanted tools for accurate assessments and projection, such as determining the best Al algorithm and creating accurate trend lines.
- Riverbed's own internal AI core had to connect easily with the analytics tool.



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Bhishma Jani Senior IT Director Riverbed Technology

- Data operations needed to ensure that all data feeds were maintained and sustainable.
- From a big-picture perspective, Riverbed-as a private company-had to consider resources on a business level. "We didn't want to overburden our business because it was about increasing our bookings, our revenue," says
- Riverbed wanted the ability to address the present and the future. That meant including the potential for eventual integration into different business elements.

To start, Riverbed implemented Oracle Cloud Infrastructure and migrated data sets to it. This set the stage for Oracle Analytics Cloud and its artificial intelligence capabilities while also ensuring data remained available for connecting with Riverbed's data integration tools such as Oracle GoldenGate and Informatica PowerCenter. "We know that we have a good back-end structure in place (with Oracle Cloud Infrastructure)," says Jani. "We can connect to any number of sources: third party, on premises. And then we have our visualization world which is Oracle Analytics Cloud, and all the capabilities that Oracle Analytics Cloud brings to the table."

Oracle Analytics Cloud then processed the data sets for visualization and forward-projection algorithms powered by Al capabilities: tensor-based, random forest, and sidekick, among others. Riverbed's configuration also enabled another element of flexibility: if needed, the Riverbed team could purchase more third-party compute power to work in sync with Oracle's platform.

RESULTS: IMPROVEMENTS WITHIN ONE QUARTER

For the purposes of understanding Riverbed customer renewals, the company's data science team focused on a number of indicators: service contract expiration, number of service cases against a contract, product mix, device telemetry, discount rate, and more. These different metrics wove together for an Al-ready data fabric of sales history. Once pushed to Riverbed's AI engines, it processed and output to visualization, then drilled down further to identify indicators and consistent variables regarding renewals.

"We chose that precise use case of renewal data because we felt it was measurable," says Jani. "It was a significant portion of our business and we had most of the data that was influencing and ready to be modeled for Al."

Analysis delivered quantifiable results to reveal what actually drove renewals. The renewal team put this information to use and saw results within one quarter:

- 8% increase in early renewals
- 16% increase in on-time renewals
- 68% improvement of customer renewal forecast accuracy
- 8% decrease in delayed renewals¹

This spun off two other successful use cases. First, this process identified Riverbed products and equipment currently in use but not covered by service contracts, allowing Riverbed to reach out and reconnect. In most cases, these were happy customers who simply outlasted their old service contract and easily converted into renewals. Second, once renewal indicators were identified, Riverbed could plan resources for manufacturing and fulfillment more accurately.



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¹ Delayed renewals make up 30% of total renewals. In this case, a decrease indicated that that revenue came in on time rather than late.

CONCLUSION: STRONGER RENEWALS AND A DATA-DRIVEN FUTURE

In just one business quarter, Riverbed's use of Oracle Analytics Cloud produced benefits to both process and revenue. From a process perspective, the Riverbed sales team now had hard data to back up previous theories about what drove renewals, drilling it down to identifiable variables for outreach. From a revenue perspective, the results were immediate, with numbers quickly trending in the right direction - and down the road, the team will continue to fine-tune the predictive model.

However, Riverbed doesn't intend to stop there. Beyond that enterprise usage, Riverbed is thinking about a whole ecosystem built around data. "We want to get a little bit deeper into supporting some of our products. (Riverbed gear) is very chatty," says Jani. "There's a lot of data that flows in and out.

So, we are exploring some use case that involves the machine data that gets generated." These possibilities are limitless, though early exploration includes areas of security and orchestration - namely, connecting Oracle Analytics Cloud to performance monitoring so that issues are identified

and even potentially self-corrected before turning into larger problems. The Riverbed team is also considering expanding this technology to operational elements, such as Human Resources.

The best part of this initiative is that Oracle's products provide the foundation to easily scale into all of these areas. "Everybody wants to have an Al sort of initiative. It is happening as we speak," says Jani. "Oracle did give us all of those elements in a compatible way. Which helped us make the decision to go with Oracle."

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