

- DXM needed a platform that could unify various sources while also expediting processing with machine learning / AI.
- Autonomous Data Warehouse acted as a smart repository while speeding up process times.
- Oracle Analytics simplified model building, data processing, visualization, and forward projections for two client campaigns.
- DXM saw significant results within six months.

BACKGROUND: A LEADER IN DIGITAL MARKETING

Established in 2001, DX Marketing (DXM) is an award-winning insights company that helps businesses across all industries leverage big data to maximize marketing return on investment. Utilizing cutting-edge cross-platform technology and partnerships with marketing data leaders, DXM helps clients strategize, execute, assess, and adapt their digital marketing campaigns. Ultimately, this delivers measurable results with transparent methodologies into what works and why.

BUSINESS CHALLENGE: OPTIMIZE MULTIPLE SOURCES WHILE STREAMLINING PROCESSES

DXM had worked in the cloud for three years, producing deep-level insights for clients. Despite the wide range of industries—including finance, healthcare, real estate, and automotive—they all had one thing in common: massive volumes of data. That led to DXM spending much of its time on creating correlations across different data sets. In addition, every six weeks saw a spike in resource usage, as DXM received regular US consumer data refreshes via a licensing agreement with Epsilon data. Thus, as the volume of data grew, establishing a sensible path to achieving usable insights became an increasing challenge.

To address the current situation while building a foundation for future upgrades and evolution, DXM needed to revamp its business intelligence solution with the following guidelines:

- Exist in the cloud for faster installation and easier scaling, particularly with national consumer dataset refreshes at regular six-week intervals
- · Connect with many different data sources
- Utilize embedded machine learning (ML) and artificial intelligence (Al) for faster processing and insight generation
- Abide by HIPAA-compliant security protocols to ensure continuity for healthcare industry clients

As DXM examined its options, the company also looked beyond purely supporting hardware needs. With a team of analysts and data scientists, having easy-to-learn interfaces and report generation would save time and effort, allowing the staff to focus on more in-depth tasks.

THE SOLUTION: AUTONOMOUS DATA WAREHOUSE + ORACLE ANALYTICS

After evaluating the possibilities, DXM chose the combination of Oracle Autonomous Data Warehouse and Oracle Analytics. This powerhouse combination provided an end-to-end solution, with Autonomous Data Warehouse offering a smart repository that connected with multiple data sources, and Oracle Analytics delivering Al-driven insights with easy visualization capable of being generated by analysts. Having already worked with various Oracle cloud products for three years, the DXM team expected that familiarity would expedite this new paradigm shift in their data management. However, things went even smoother than expected, particularly getting up to speed with the new Al capabilities. "It was very, very easy," says Ray Owens, CEO of DXM. "In fact, amazingly easy."

DX Marketing



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CEO
DX Marketing

This transformation started with Autonomous Data Warehouse, which was DXM's preferred choice over a classic database because of how it leveraged IT resources. As a self-running platform, it required less technical expertise and effort to configure and run. Autonomous Data Warehouse's embedded ML sped up the data ingestion process, skipping over manual steps for preparation.

As for the actual data pull process, Autonomous Data Warehouse easily connected with other sources and platforms, including other Oracle products already employed by DXM. Thanks to an instance of geospatial data within Autonomous Data Warehouse and other physical mapping data licensed by DXM, data could be manipulated to generate maps and other robust visualizations.

Because all of this took place within Autonomous Data Warehouse, it eliminated security risks that could take place when transferring data sets from environment to environment. "Because we handle a lot of healthcare data, and a lot of transactional data, we don't want stuff moving around," Owens says. "The fact that we can keep it all selfcontained inside Autonomous Data Warehouse—and have all these utilities built-in—is a big plus."

From there, the information went to Oracle Analytics, which unleashed a range of analysis and visualization possibilities. Combined with Oracle Analytics' embedded AI, suddenly the DXM team of analysts and data scientists had much more robust capabilities to produce results faster.

RESULTS: IMPROVEMENTS WITHIN SIX MONTHS

Six months into using Autonomous Data Warehouse and Oracle Analytics, DXM already saw significant results. Two clients were used as pilot projects for this new data paradigm, one in telecom and the other in financial services. Both were chosen due to the complexity of their data—specifically, the potential benefits of processing that complex data through ML algorithms. DXM's analysts created scripts to connect the incoming data with other licensed data (household demographics, physical mapping, etc.) and the creative ads being served.

"The fun comes when the campaigns start to return the data, we go back into Autonomous Data Warehouse and we can connect to it through Oracle Analytics, we can connect the call-outs for the machine learning," says Owens. "We start to just blow the data up." This creates all new ways to interpret the data, consolidating exposure logs and date/time metadata with traditional marketing metrics such as conversions and clicks. Not only does this generate insights, it allows DXM's data scientists to build different models with control groups for individual clients, even including things like inherent bias due to brand awareness.

For the two clients involved, the return-on-investment trend improved significantly. This was based on smarter placement and utilizing AI-driven insights to throttle ads. In particular, media spending was significantly redefined to reduce acquisition costs thanks to predictive models. It also opened accessibility up to non-tech staff, allowing them to manipulate data, generate visualizations, and even create larger datasets. "It's kind of self-driving, it creates its own indexes, it's easy to map things out, it spins up really guickly," Owens says. "The fact that our folks are all SQLbased, it's really easy for them to get in, and actually run their routines."

The hard numbers back this all up: in six months customer acquisition cost decreased by 52%, deliverables sped up by 70%, and revenue grew by 25%. Perhaps more importantly, though, is that Oracle Analytics and Autonomous Data Warehouse have implemented a level of transparency and efficiency that all leads to a trend of improving costof-acquisition. "Now that we've introduced machine learning, it's sped up our analytic time a tremendous amount," says Owens.



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Rav Owens CFO DX Marketing

CONCLUSION: BIGGER, STRONGER, FASTER...AND THAT'S JUST THE START

Six months after integrating Autonomous Data Warehouse and Oracle Analytics, DXM is certain of two things. First, the products have fulfilled their promise. Second, DXM has just touched the tip of the iceberg when it comes to their full capabilities. From a functional perspective, the sheer ability for machine learning to process a dataset with 70,000 purchasing variables combined with demographic variables, product IDs, and all of the ensuing crosscorrelation is above and beyond DSM's previous capabilities. "It's been an invaluable tool for us," says Owens. "We're already, just literally six months in, utilizing some of the key features that we probably wouldn't have picked up on with traditional database routines."

Of course, the future is loaded with potential. DXM plans to make use of this with a number of plans: semiautomation, better connectivity with the company's internal API library, and more. The DXM team sees this as creating both direct and indirect results, providing greater client support with more powerful tools, while also elevating the company's reputation as a digital marketing agency. "When our clients see this kind of thing, and how we're helping to bolster their brands, we couldn't have done that without going down this path of ML several months back," Owens says.

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