

Responding to Business Volatility with Data and AI

An Executive Conversation as part of the Retail Leadership Series, in partnership with Databricks.

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Introduction

Businesses are placing renewed attention on the value of responsive analytical capabilities.

National and global Retailers alike are leaning on data analytics to help drive better decision-making and advance customer outcomes, strengthening their businesses against the current volatile economic landscape.

We recently convened a virtual panel to hear how leading national Retailers are approaching data transformation.

Moderated by **Bede Hackney**, Country Manager, Databricks Australia & New Zealand, our conversation unearthed the unique strategies that Retailers are pursuing to enable responsive, data-informed decision making.

A Year Like No Other

Navigating Uncharted Terrain with Databricks

The pandemic restricted the movement of people and forced huge swathes of the economy into retreat.

In response, the nation's Retail community mobilised rapidly, channelling tremendous growth in e-commerce platforms to facilitate safe consumer spending.

Looking ahead, our optimism or pessimism on the continued health of our communities, on the trajectory of consumer confidence, and on the strength of our industry is not misinformed, it's simply not informed.

Volatility inherently corrupts our ability to forecast with any precision. Without historical data to lean on, thought-leaders are taking advantage of new types of dynamic information to shape a contextual perspective.

Sole reliance on internal data is slackening as Retailers widen their gaze to accommodate external data sets and incorporate

unstructured and semi-structured sources of data.

By adopting a more holistic data perspective, one that is informed not just by internal data but by reconciling external sources of data in a unified and intuitive platform, Retailers can enhance their resilience and responsiveness.

Reimagining Retail:

New Data Perspectives from Microsoft

Retailers are confronting their global supply chain dependencies in response to the pandemic, reassessing the weight of individual component costs in the broader scheme of end-to-end value optimisation.

Now, the same environmental data is being directed towards improving employee and customer health and safety protections by removing bottlenecks and managing in-store movement.

But the process of anticipating and mitigating the factors arresting the movement of goods hinges on sharing data with key players in our supply and distribution networks to achieve greater transparency and responsiveness.

Beyond addressing our assumptions on what data is of relevance, we need to consider the varied use cases for data assets we have already collected.

Preceding the pandemic, Retailers had been building their capability to collect data from physical environments with the intent of understanding in-store traffic patterns to optimise product placement layouts and ultimately affect cart size.

Building for Now and the Future with JB Hi-Fi

Hindsight is the weapon of emerging businesses – you don't need to encounter and overcome the trials faced by your established competitors when you have the historical data to circumvent them.

New companies pre-emptively adopt a data-first mindset, diffusing the resource-draining data engineering undertaken by traditional players.

JB Hi-Fi faced a number of significant challenges on the road to building an intuitive and responsive data functionality.

Data had accrued in siloed systems, while different access methods, formats, and authentication controls meant that anyone attempting to report against the data contended with a spider web of connectivity.

The on-premises data warehouse solution was both scale and cost prohibitive, while reporting mechanisms anchored to Excel were flat, non-interactive, and non-dynamic in the content they delivered.

In response, the business created an environment structure modelled on swim lanes of data ingestion, one for each type of collection, with these pipelines parametrised to store definitions about schedules, database tables, and credentials.

From there, all data is transformed into Databricks Delta Format, allowing for asset level transactions and increased retrieval time.

Microsoft Power BI is augmented with precomputation and business logic implementations within an adjacent Databricks Job to rapidly deliver interactive visualisations and business intelligence reporting capabilities.

Together, this environment structure empowers JB Hi-Fi to react rapidly to a changing business landscape.

Looking Ahead

Dynamic, data-informed decision making is essential for businesses when they encounter volatility.

The pandemic has exposed our collective reliance on historical forecasting data, shifting attention towards the value of real-time data to inform rapid responses to changing market forces.

Moving forward, Retailers will benefit from looking beyond their own walls to identify and leverage alternative data sources, incorporating structured, semi-structured and unstructured data to reveal broader insights.

By adopting a culture of rapid experimentation and focussing on improving outcomes rather than generating insights, Retailers will be able to unlock a new resilience that is embedded with responsiveness.

To learn more about how Databricks can help you realise these capabilities and shape the next steps of your data transformation journey, **reach out to a Databricks' technologists by clicking here.**

