Reinventing Retail by closing the data value gap

How data is changing the very foundation of retail - and how retailers can use it to their advantage.
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Part one: Introduction: what does closing the data value gap mean? 3

Part two: Building a solid data foundation 6

Part three: Defining the business use cases 10

Part four: Reinventing retail 16
In turbulent times, adaptation is key

Retailers have felt recent events harder than most. But even as stores closed, new channels opened. As demands changed, product ranges adapted to meet them. Even before the pandemic, shifts in customer behaviour were transforming the channel mix and fundamentally changing the nature of retail. COVID-19 only served to accelerate these trends.

It’s estimated that the pandemic has accelerated digital adoption among customers by as much as five years.1

Many retailers have accelerated their front-end transformation to survive. But disruption is no longer a one-time gig and succeeding in the future will take more than a digital patch-job. Focus now needs to turn to the back-end: the processes, the infrastructure and the business model itself; as well as across the value chain – from supply, right through to the customer’s doorstep.

This kind of transformation requires not just data, but the ability to use it quickly and effectively to create value. This is what we call ‘closing the data value gap’.
The pandemic has demonstrated how data-driven retailers are better equipped for change. Amazon doubled its net profit to $5.2 billion in 2020, compared to $2.6 billion the previous year as several other high-profile high-street chains crumbled. So what does being a data-driven retailer actually mean?

**Providing meaningful interactions with customers**

The customer you thought you knew is no more. The pandemic has dramatically altered how people live and work; prior segmentations—and the insights they’re built on—need to be redefined with new data as consumers adjust to new personal circumstances.

Data-driven retailers can unlock new data and quickly build new solutions to create more relevant, personalized digital experiences at scale.

**Having end-to-end visibility and control of the supply chain**

When unprecedented events happen, an agile, adaptive supply chain is needed to pivot quickly. To optimize operations across an integrated value chain you need data to be shared between the parties involved—and for it to arrive in a way that’s usable and actionable.

Data-driven retailers are able to connect high-quality and timely data between suppliers, warehouses, stores and partners.

**Providing employees with the tools to be the best brand ambassadors**

New channels and new processes create more varied customer touchpoints. Every employee, from the contact center to sales needs access to real-time information, as well as automation to keep purchasing processes efficient and build customer trust.

Data-driven retailers empower employees with data and tools that help them make customer interactions better.

**Constant reinvention and innovation to create new experiences**

Adaptation isn’t a one-time process. Retailers need to change their mindset away from rigid structures and towards innovative cultures that will help them to create new business models and predict, adapt, and reimagine customer propositions to capture new opportunities.

Data-driven retailers have innovative cultures and provide platforms to constantly optimize and develop processes.
Closing the data value gap

As the party in the value chain that has direct contact with the customer—as well as with supply chain, retailers don’t have a problem gathering enough data. The problem is that this data isn’t being fully utilized. There might be several reasons: data quality may be poor, it may be indecipherable or inaccessible—there might simply be too much of it.

Retailers often lack a unified data platform. Each link in the value chain uses its own sources and systems, and works to its own processes and cadence. Data becomes heavily siloed; sharing it takes time and effort and it may arrive in a way that’s not easily interpreted by the receiving party. In the fast-paced world of the modern consumer, this isn’t good enough. Problems in supply can directly affect the customer, and when the sales cycle is short, data needs to be shared quickly along the chain to identify, address and resolve issues.

It’s also not enough to just adopt the technology. To release value, you need to think about how the business will actually handle and use data—what problems will it solve? And who should be involved in solving them?

We see two key elements to closing the data value gap: one, building a solid data foundation and two, defining the business use cases you are looking to solve.
Part two

Building a solid data foundation
Connecting data across the value chain

Data can be a huge strategic asset. It can help you uncover opportunities for process improvement, or unexpected uplifts in sales. It can help you better predict seasonal trends and pivot strategically. It can help you work more efficiently with logistics, warehousing and delivery partners. It can help you address problems faster to minimize reputational risk.

To do this effectively means changing the data model. Many businesses now have centralized data teams, however these can create unintentional bottlenecks, not just in delivery, but in the expansion of data skills.

Instead, organizations must work towards a decentralized data model, where data is shared, accessed, used and governed through a ‘data mesh’ that connects all areas of the business, throughout the value chain. This mesh, enabled through a cloud-based ‘enterprise data platform’ forms the foundation of the data-driven retail business—allowing you to act and adapt fast.

The retail value chain
Taking steps towards the new data model

Large scale transformation can be complex, risky and expensive, especially in an environment where margins are small. To get buy-in from the business, it’s important to look at the challenge from a business perspective, not just a technology one.

A good strategy for tackling data transformation is to start small with a specific use case or challenge and build a solution that can be scaled up once value has been proved. Cloud platforms, such as the Microsoft Azure cloud platform offer the perfect stage, requiring no hardware investment and operating on a pay-per-use model. In this case, the data is ‘owned’ not by the central data team, but by the line of business that uses it, focusing on the principles of self-service.

You can start with the data you have, in the systems you already use, and explore what can be addressed by pulling this data into a shared repository—a data lake—cleaning, homogenizing and making it more descriptive in the process. Once in the lake, it can be more easily interpreted into business intelligence tools, such as Microsoft’s Power BI, allowing data to be explored and used independently by any business user.

As use cases increase this data lake can be expanded and more tools can be utilized, such as automation tools, AI tools or even custom application builders.
Introducing cloud-based tools

A key benefit of cloud architecture is that it is highly composable: different applications and capabilities can be easily combined to build unique solutions. Microsoft offers the Power Platform as an innovation toolbox, containing low or no-code applications designed to help businesses independently build their own apps, automate their own processes and apply AI technologies.

These tools are designed to enable cultural change, taking development out of the stronghold of IT and into the hands of the business. This lets you create an army of ‘citizen developers’— everyday employees finding new ways to work better.

What’s more, Microsoft’s commitment to the Open Data Initiative expands this model beyond just Microsoft’s services; it can be integrated with SAP’s tooling (and those of other core systems) to allow its data to be used in other platforms, as well as renew and enrich the data held within it.
Part three

Defining the business use cases
Addressing immediate needs to prove value

Transforming into a data-driven retail company is a long-term project that requires changing your established cultures. It means pushing staff (including leadership) outside of the realms of comfort, breaking down siloes, and creating new ways of working. For that reason, it’s vital to establish quick wins that can prove the value of your data platform quickly. This will involve both diagnosing the problem in the data and taking action to address it.

For example, you might want to improve stock allocation by combining inventory and sales data across different areas or stores. Combining this data manually is a huge undertaking—so a common data platform can help to reduce the time and cost of compiling the data. By using a data visualization tool (such as Power BI) you can also make issues easier to diagnose (over/under allocation in certain areas) and take corrective action, which will provide a further improvement in sales. In later development, you might even bring in an AI program that will automatically alert you to misallocated stock, or help you optimize your inventory if there is a supply issue.

Solving immediate problems to alleviate the workload of staff or optimize existing processes will help you to prove value quickly and create champions at leadership level. You can get the key infrastructure in place, with little investment, and scale it as you invest savings in new, more complex transformation projects.
Building use cases across the value chain

Closing the data value gap is about undertaking data transformation with specific business use-cases in mind. This often starts with simple projects to address inefficiencies or solve existing challenges, but as data use (and data skills) become more advanced it becomes more proactive—allowing you to explore ‘what if?’ scenarios, make predictions or inform live decisions as new developments occur in the market.

The biggest impacts can be achieved by scaling use cases throughout the value chain, sharing successes and applying proven approaches to different areas to unlock value.
Common retail use cases

**Inventory accuracy improvement**
Collect and share inventory data through a real-time system to make sure the right product gets to the right place, at the right time – in the store, through delivery or via click-and-collect. Give employees across your supply chain the tools to request, move and replenish stock at any time.

**Responsible retail**
Integrate supplier, manufacturer and product data to improve traceability in your supply chain (and share information with customers) and use data modeling to reduce waste in line with sustainability goals. Engage with customers on buying habits and healthy alternatives.

**Customer-centric supply chain**
Analyze customer and purchase data to more accurately forecast demand. Optimize product range, allocation and distribution and increase customer satisfaction by making sure digital and physical stores are never missing the most prized products.

**Employee empowerment**
Make live data self-service to give customer-facing teams the information they need to make interactions efficient. Transform your staff into informed brand ambassadors who can answer any query in a moment. Utilize AI to respond to enquiries immediately, without damaging customer experience.

**Customized customer communication**
Analyze behavioral data to improve customer segmentation and better determine communication preferences. Build engagement on your customer’s terms, using the channels and frequency they prefer and build loyalty and retention by offering tailored rewards based on their shopping habits.
Optimizing the backend – the horizontal approach

As well as customer-facing processes, the use of real-time data can increase efficiency and collaboration across operations – from finance to HR, procurement to sales, and beyond. Even within departments, data sharing can be incredibly siloed.

For example, different areas of Finance may use the same data, but run duplicate reports and models in isolation. In these scenarios, establishing cross departmental control towers (essentially a team of people working around a shared pool of data or dashboard) may help to give you a 360° view across the value chain, allowing you to pin-point—and solve—business-wide issues across all departments.

This approach allows more collaborative and proactive working cross-department, in turn helping to release value from previously siloed data.

Key use case: Modern Finance

Use the established shared data platform to establish financial control towers (cross-functional teams) focused on optimizing a particular aspect of Finance across the business, e.g. liquidity or working capital.

Savings achieved can then be re-invested into other initiatives, such as integrating new data sources, or experimenting with new AI or automation tooling.

Alternatively, use a specific pain point within Finance as a case for building the data platform in the first place by demonstrating how data can be used to reduce spend or grow cash.
Moving from data defence to data offense

Once data has been used to address problems (and release cost that can be re-invested) it can be used to grow the business. This is more crucial for retail than nearly any other industry due to the need to plan for future demand that can be extremely volatile. Once processes are optimized, new business models can be explored to find new ways to grow revenue—through different services, different product ranges, different promotions or different ways of engaging with customers.
Reinventing retail

Part four
What will the future bring?

The future marketplace is expected to be complex and integrated. It will come as no surprise that e-commerce is accelerating – but the future of retail goes beyond a single channel: customers continue to seek out cohesive shopping experiences across physical stores, websites and apps.

Customer expectations will be different too. It will no longer simply be about the speed of delivery. Operational transparency, particularly regarding sustainability, is needed to build and maintain trust—even as processes become more automated.

With that in mind, there are three key trends that will continue to shape the retail industry...

Exceeding expectations:
The growth in new customer channels and the need to create responsive (and proactive) real-time experiences.

Competitors to allies:
Working more closely with suppliers, vendors and partners to build combined value for businesses and customers.

Sustainability and trust:
Reducing negative environmental impacts by improving transparency throughout the supply chain.
Harnessing your platform for the future

With your cloud data platform established, you already have the building blocks in place to start reinventing your business. You have access to the rich data, tools and capacity you need to start creating new business models, new engagement channels and new applications that will help your business to predict, act and adapt.

**Modernize legacy systems**
Free data from expensive hardware by migrating core applications (such as SAP) onto your cloud platform, allowing for greater flexibility and easier development of core systems and services.

**Connect partner and customer data**
Introduce a retail analytics platform that combines data management with proven use cases to enable speed to value, and use data more effectively throughout the value chain.

**Introduce advanced tools**
Use advanced analytics tools, and AI tools such as voice recognition and chatbots to better engage customers and partners, improve sustainability, optimize processes and cut costs.
Leading reinvention in retail

The retail industry is undergoing constant reassessment and reinvention, shaped by external forces and new customer behaviours.

Proactivity is vital. And when applied to data – this means not just reinventing out of a necessity to survive. It means reinventing to shape a better industry, with better outcomes for employees, partners, customers and the environment.

By building an agile data platform that powers long-term growth, retailers can unlock value, achieve resilience, and create a truly adaptive business—one that can predict, respond and reinvent.
The combined capabilities of Accenture, Microsoft and Avanade—based on human-centric innovation, leading data on cloud solutions, industry knowledge, responsible AI and agile delivery—set us apart from everyone else.