Digital-first retail grows up

6 key themes from NRF 2023

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Introduction: accelerate, consolidate, & innovate

Last year, the NRF's Big Show was all about resilience. Those who had made it through the bruising bootcamp of the pandemic did so by massively accelerating their digital programmes, and needed to consolidate that work into something that could weather any coming storm.

A year on, the retail industry is more mature, calmer, and has gained a clear-eyed confidence about the opportunities that digital embodies for the long term. If the pandemic imperative was to create alternative supply chains and routes to market, and the immediate aftermath was about solidifying that diversity into a cohesive and stable strategy, we're now seeing retailers ready for a growth phase where we can build not just alternatives, but genuine improvements.

This eBook explores the big social and business trends that were topical at NRF this year. They represent a diverse and exciting set of ideas, from the almost sci-fi prospect of metaverse enablement to essential social responsibility of giving employees equitable careers, and from the efficiency gains of true automation to the ethical upshot of deeply-embedded sustainability.

What unites these ideas is that they can cross the threshold from future to present through the power of distributed, connected data. With a multi-cloud strategy that supports edge computing and the burgeoning possibilities of VR, AI and machine learning, retailers can deliver better on long-standing business fundamentals and innovate new ways of creating customer engagement and value.

Let's dive in.
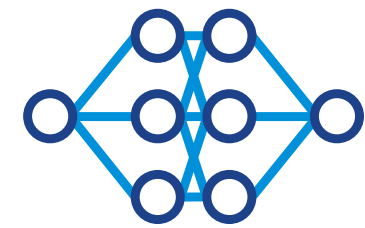
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1: Authentic connections

After decades of diversification and specialization, in which digital and direct-to-consumer offerings have given consumers a more fragmented range of choice in channels and product value propositions, the experiential trend for brands and retailers is now to become more holistic.

As the major online retailers establish physical locations, it's no longer about a choice between in-store, online, or social shopping, but an ability to freely move between channels in a single journey with the same business. As brand communications become more dynamic, it's not just traditional marketing, but also conversation-starting and community-building which wins audiences. As the context of product choice becomes more complex, it's not price alone, but quality, ethics, and innovation which make for competitive differentiation.

Consumers, in short, are coming to expect joined-up offerings from retailers, in which every interaction adds up to a meaningful whole.

> "Machines offer more convenience and speed [...] but really, we shouldn't underestimate the power of emotional connection with a brand.
>
> *Michelle Evans, Euromonitor International*

The ability retailers now must show up everywhere in a similar way, with a similar message, means that shoppers understand them and anticipate their behavior in the way they get to know other people. And, just like with people, that means that inconsistencies will not just be frustrating, but feel inauthentic and trust-breaking.

In this context, disconnects in the retail experience – whether they are between pre- and post-purchase, between digital and physical, between marketing and sales operations, or anything else – will become more apparent and damaging than ever.

While some potential disconnects, such as contradictory claims in different pieces of marketing, can be solved from the top down, others demand a bottom-up approach which ensures that different parts of the business are working from similar information in the first place. Giving buyers, sales assistants, customer services workers, and marketers the ability to make decisions on a shared data basis helps make experiences holistic by default.

To maintain goodwill between brands and consumers, retailers will need a cohesive digital infrastructure which delivers not just speed, but reliability, security, insight, and personalization all the way through the customer relationship.

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2. Consumer relevance

The twin engines of choice and personalization have been driving the retail industry forwards for decades. For every step towards a greater range of products that can meet more nuanced needs, we have also needed innovation in how we connect consumer to those products. New technologies to make shopping a more tailored experience have likewise opened the door to offering more diverse goods aimed at more specific audiences.

The rise of online retail happened hand-in-hand with an algorithmic approach to product recommendation that automatically identifies when products are likely to be grouped together, such books by similar authors or clothes in complementary styles. As effective as that strategy has been, however, it is generally limited by its reliance on online basket and transaction data. Missing many of the behavioral and contextual cues that make up a retail interaction, it delivers neither the emotional connection of powerful advertising nor the nuanced understanding of great in-store assistance.

Now, retailers are looking again at personalization and asking whether a more person-centric approach is possible. From the consumer perspective, online

and in-person shopping are equal and complementary channels, not separate worlds, and their behaviors emerge from a complex web of desires and decisions, as well as contextual factors ranging from the weather and time of day to public holidays and cultural trends.

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> Consolidating data and delivering an experience is really difficult […] We've built an internal platform that aggregates data and lets us see it all in one space.
>
> *Aaron Dunford, Nordstrom*

To synthesize raw data into suggestions and assistance which genuinely resonates with the shopper, in real time, retailers need not just new digital tools but new digital infrastructure. Major businesses are building new internal platforms to function as springboards to this kind of retail innovation, making sure that, whatever the new offering might look like, the data to enable it is at hand both on the ground and in the cloud.

Multi-cloud and edge computing support data collection and analysis by providing unified access at low latency to information originating from disparate sources. Edge technology puts data functions closer to the technology user, enabling retailers to rapid access to deep data insights, which can be translated into delivering excellent experiences to customers.

When they can collect, store, and analyze data wherever they want to, retail businesses can unleash the potential to invent new ways of meeting the customer wherever they are, and customers can opt for experiences which really cut through the masses of choice now available to them. If retailers get it right, the only surprise for the consumer will not be 'why are you showing me that?', but 'how did you know?'.

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3: Virtual enrichment

Ensuring that a customer's physical and digital retail interactions remain a real point of challenge for many retailers. Online operations have often emerged as significantly siloed business units, and that largely remained the case as retailers fast-forwarded their digital initiatives. Breaching that division and integrating those operations is, to say the least, a complex undertaking, and one which will only grow more urgent and wide-ranging when the metaverse starts to move from an experimental phase to an activation phase in the retail industry.

The metaverse can be used to optimize shopping experiences in both online and brick-and-mortar environments, for instance by creating virtual fitting rooms for digital shoppers to visualize how an item of clothing might look prior to purchase. But joining the dots between a virtual fitting room, a digital payment process, and real-world product fulfilment will require underlying infrastructure which allows data to travel between different contexts reliably, securely, and with a considerable degree of freedom.

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>
> In the end, you're really collaborating to come up with a presentation of your brand that resonates with that community.

Winnie Burke, Roblox

Retailers moving in the opposite direction, in the growing trend of digital-first retailers establishing a physical retail presence, tend to do so in a way which is integrated by default – with all the data-sharing advantages which that entails. While that might put them at some advantage, though, they too will have to carefully consider what a truly useful, resonant metaverse strategy is going to look like.

Those at the forefront of the technology are thinking beyond what virtual spaces can do to echo physical stores, and towards what virtual spaces can uniquely achieve. That means new consumer-facing digital products and experiences, but also new virtual approaches to internal processes which use IoT data and digital twinning to build more efficient, resilient operations.

For now, the metaverse remains an experimental and exploratory potential future for most retailers. Early wins will be available to those that successfully engage their audiences and communities in virtual experiences which create real meaning and value – and the infrastructure which makes those experiences possible will become increasingly necessary for the industry more broadly.

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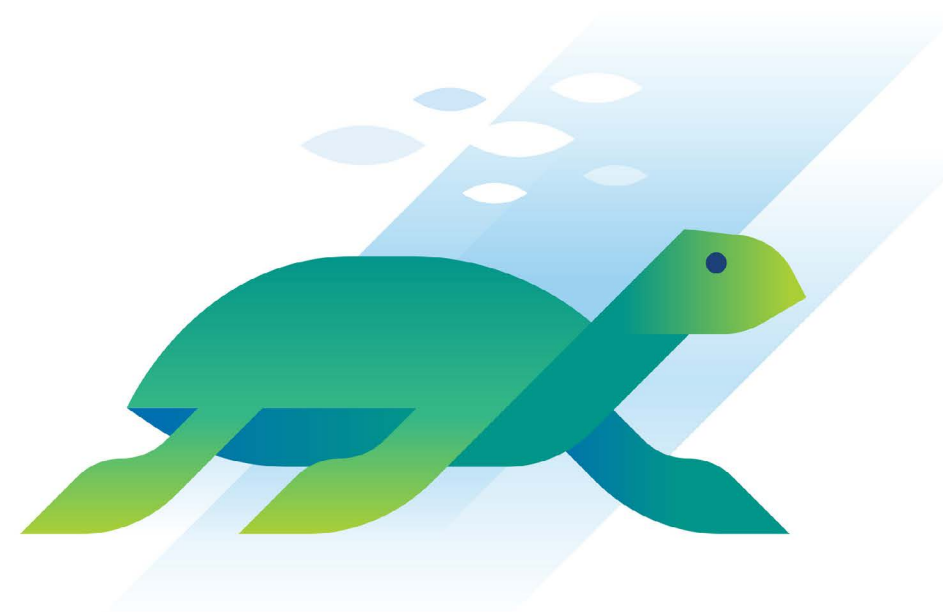
4: True sustainability

The need for more sustainable operations is a given across large parts of the retail sector. In recent years, many challenger brands have risen to prominence by connecting consumers to more environmentally responsible options, while established brands have innovated both by reducing the footprints of their core lines and by creating new environmentally-focused products. From the consumer perspective, meanwhile, research shows time and again that there is significant appetite for favoring, and even paying more for, products which protect the planet. PwC's Holiday Outlook 2022 report, for example, found that 76% of consumers (and 83% of millennials) now actively seek out environmentally and socially responsible retailers to purchase from.

> "Most consumers would rather buy something that does something good.
>
> *Kal Penn, actor*

The truth of sustainability, however, is not always so certain. While the direction of consumer preference is clear, understanding the emissions situation for the thousands of product types that people interact with is enormously complex and difficult – and so it's no surprise when, amid a sea of green claims, consumers become more skeptical and less engaged.

That's why it's becoming clear that the most powerful sustainability stories are data stories. When audiences are skeptical of environmental claims, it is data that wins belief and trust, and data is the entry point to continual improvement for brands that set themselves ambitious sustainability targets.

Of course, part of the reason why the impact of goods is opaque to consumers is that their impact is often just as opaque to businesses. From the footprints of supply chain and logistics processes to the embedded emissions of consumer goods, to the operational power usage of stores and offices, there is a huge amount of information to track and understand if a retailer wants to claim a truly holistic understanding of its environmental consequences.

As they transform their data infrastructure to deliver automation, innovation, and more joined up customer experiences, though, retailers also have the opportunity to see more deeply into the emissions flowing through and from their businesses. Joined-up sustainability, just as much as joined-up purchasing journeys, will become a key market differentiator. In order to connect those dots, retailers must again look to the data analysis capabilities inherent to edge and multi-cloud; these capabilities are not only useful for optimizing customer experiences. They can also be leveraged to create a clearer picture of a retailer's environmental impact and make it easier to identify areas where ESG strategies can be more robustly supported in action.
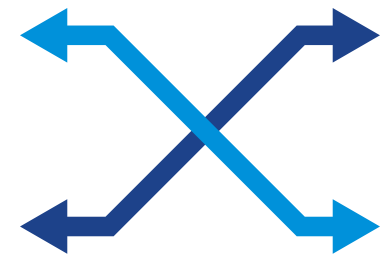
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5: Seamless automation

Automation has the potential to play an important role in almost every element of retail. We know this because, for almost every element of retail, there are already powerful examples of automation at play.

It's there in customer services operations, where increasingly capable chatbots are fielding routine requests and enabling human operators to spend more time on more complex problems. It's there in fleet logistics operations, where smart route planning tools are making fulfilment more efficient and resilient. It's there in marketing programs, where automated emails encourage shoppers to retrieve abandoned baskets and tempt them back for future purchases with tailored products and offers.

However, it's when automation goes beyond powering discrete activities within the business and starts to join up across broader customer journeys that it can start to create a little bit of magic.

Automating a warehouse's pick-and-pack operations might cut a day from the average fulfilment time; being able to respond to a customer services enquiry

by automatically picking-and-packing from both stores and warehouses based on stock and proximity, in near real time, could cut it to hours. Automatically pre-filling an online grocery basket based on previous orders might reduce purchasing friction; doing so with knowledge of the customer's in-person shopping habits and currently available product offers could shift that retailer into being the customer's default preference.

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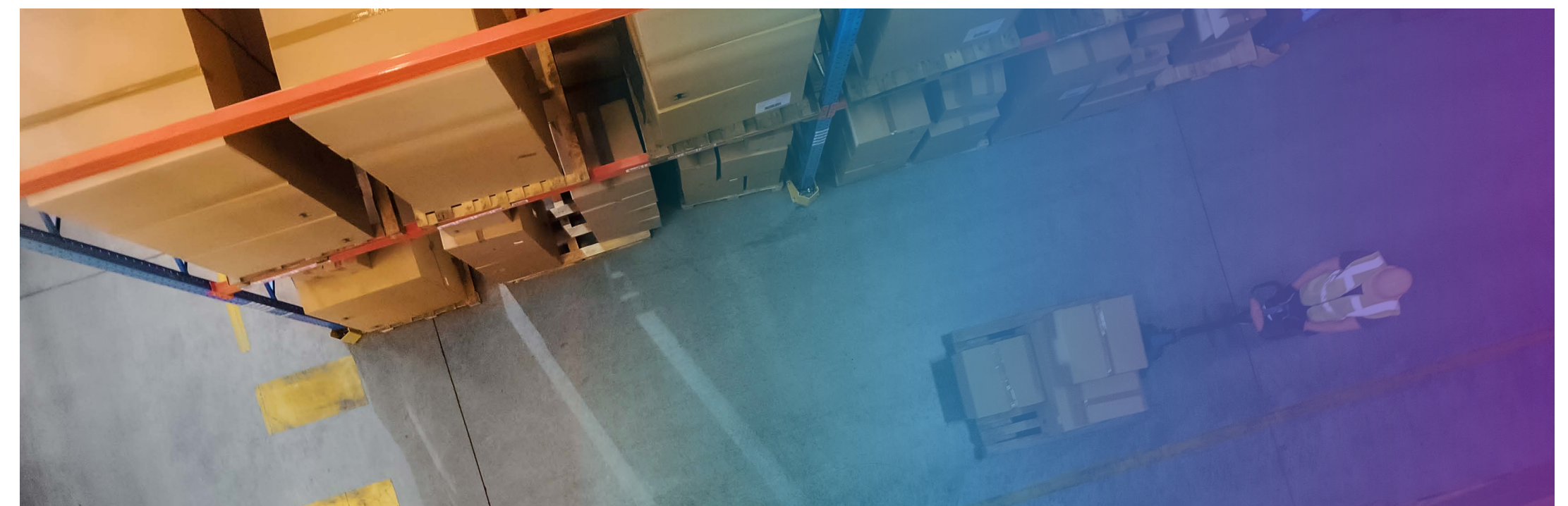
If you realize you're using technology, it's not good enough.

Rodney McMullen, Kroger

The key perspective shift in all of this is that, while putting new technology on show might delight customers the first few times they use it, the actual value that the technology can create for the customer experience is an evergreen benefit. That means that systems must be carefully designed to let the technology to become invisible when things are working well and to fail gracefully if problems do occur, allowing attention to be kept on the outcome, not the process.

The destination for retailers now is seamless automation. It all starts with putting data in the right place, in the right format, with the right tools to leverage it.
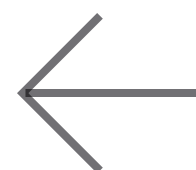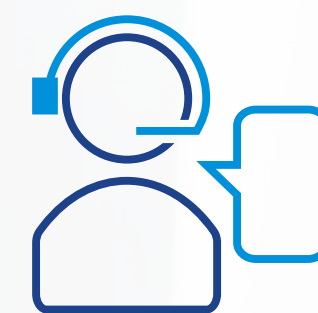
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6: Equitable outcomes

Staff have always been at the heart of effective retail. Indeed, when businesses innovate in areas like self-checkouts and digital assistants, one-to-one human interaction is often the quality benchmark which the technology is aspiring to meet. For retailers, people are the most versatile, indispensable factor for effective logistics, customer services, sales and even brand identity. Amidst an ongoing skills shortage, there is an urgent need to retain knowledgeable, experienced, talented staff – and that means that improving the employee experience is now a key imperative.

One way of doing this is to see technology as an essential complement, not a mere alternative, to the workforce. While chatbots, for example, can fulfil simple customer needs, they can also support workers by handing problems off to them in a clear, informative way that empowers them to do right by the shopper. When handheld devices on the shop floor offer more holistic insight into things like stock levels and colleagues' locations, they both ease workflows and free up valuable time to spend interacting with customers. To be truly complementary, these technologies need insight into everything that matters to the worker.

> ## It can be something as simple as updated handheld devices that you order with, versus keypunch
>
> *Steven Williams, PepsiCo*

This workforce-prioritizing approach to technology can even extend beyond areas of customer interaction: if digital tools, for instance, are there to enable and support human work, the efficiency savings which can come with cloud-based operations might be seen as creating headroom for more equitable employee compensation.

Because the other key factor raising the profile of employee experience is the fact that, in an ever more open information marketplace, employer behavior is being spotlighted like never before. Employees favor businesses which treat them with respect and put them at the heart of ongoing improvement, and consumers are becoming more aware of and willing to make choices based on retail employees' working conditions.

Just as connected data enables technology to improve colleagues' experience at work, it can help track and improve important quality of life factors for all who work in retail. Data, in short, is changing what it means to be an employer of choice in the retail sector.

Conclusion: retail's future diversity is a certainty

NRF 2023 delivered no shortage of new avenues, opportunities, and innovations. The challenge for retailers now is not in seeing what the future holds, but in understanding how they fit into it.

What united the many inspirational moments of Retail's Big Show this year was a growth in digital investment which is not just modernizing, but uniting retail operations. From forays into the metaverse, to making physical logistics safer and smarter, to empowering staff on the shop floor, brands are building new ways of showing up with a united sense of purpose everywhere they operate. And, underneath it all, that is being made possible with holistic IT infrastructure that puts data and compute exactly where it's needed. Edge computing, by virtue of its ability to place functions closer to the technology user, do just that: bringing actionable data insights to retailers exactly where and when they need it.

What makes today's digital prospect so exciting is the fact that businesses have, through a transformative drive towards resilience and agility, already spent recent years gathering the ingredients for their own unique digital strategies. As they start to bring those ingredients together into integrated approaches, the future is bright for meaningful, differentiated, innovative ways of showing up in the retail space.

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