HARNESSING DATA CAN DRIVE OMNICHANNEL EFFICIENCY

One retail fulfillment center needs to count pallets of merchandise stacked to the ceiling to meet the surge in online orders that has come during the pandemic. Another needs to keep workers socially distanced. And with more shopping moving online every day, all retailers need real-time updates on consumer habits that seem to be evolving rapidly.

With those and other demands that have arisen in the past year, managing omnichannel commerce has become more challenging than ever. And as the saying goes, if you can't measure it, you can't manage it. That's why data that lets retailers measure — and therefore manage — omnichannel enterprises has become critical.

Omnichannel retailers today face a flood of data, not just in volume but in variety and speed. Analyzing and understanding that data is key to meeting increasing customer expectations online and offline, but doing so fast enough to achieve actionable insights is difficult. And those not keeping up run the risk of making less-than-optimal business decisions.

In addressing that challenge, standard data analytics methods are no longer enough. Not only can they be agonizingly slow, but they also can lead to mistakes. Instead, companies need to use comprehensive business intelligence (BI) systems that can extract every last drop of value from customer data and do so quickly.

It is worth noting that online sales grew 32.4% in 2020 and now account for 14% of all retail sales, according to the Census Bureau. And while the growth rate could moderate, the eCommerce boom is certain to continue.

With that degree of change, retailers must prepare for new buying habits and embrace new technologies.

Today's retailers need robust BI solutions that can analyze data to eliminate out-of-stock situations (while also avoiding overstocks), optimize order fulfillment, enhance customer experience and improve customer support. By analyzing, interpreting and reporting on a retailer's data, BI can drastically improve omnichannel operations from end to end.

One key challenge is knowing exactly what customers want so retailers can tailor offerings and personalize marketing. Predictive analysis makes that possible by letting retailers extrapolate future purchases from previous buying and browsing. It can show what customers buy most often, detect patterns around holidays or events like back to school, pinpoint complementary products and identify new products they will buy.

Knowing what customers want is one challenge, but being prepared to fill those needs is another. Closely tied to predictive analysis are inventory planning and order-management systems. Radial Order Management from eCommerce logistics provider Radial, for example, allows retailers to forecast which products are most successful down to specific regions. It can also direct orders to the best fulfillment location, whether it's an existing distribution center or a temporary pop-up.

Once a sale is made, customer service is key. Millennials are hesitant to make actual calls on their smartphones, and 20% to 30% of consumers whose calls are handled by interactive voice response hang up before reaching an agent. But replacing traditional phone prompts with a solution like Radial's Visual IVR that lets customers interact on a smartphone screen can be far more efficient.
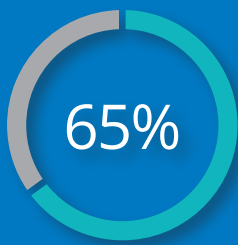
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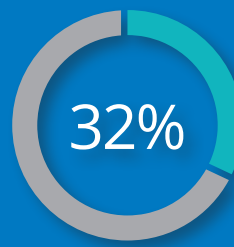
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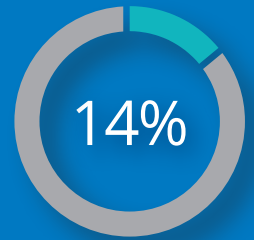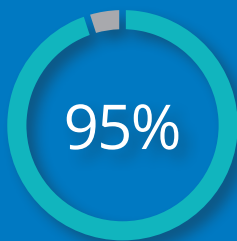
ECOMMERCE NOW ACCOUNTS FOR 14% OF ALL RETAIL SALES

14%

— *US Census Bureau*

65%

AVERAGE RETAIL
INVENTORY
ACCURACY IS 65%

OMNICHANNEL
REQUIRES AT LEAST
95% ACCURACY TO
BE SEAMLESS

95%

— Condusiv Technologies

The need to gather and analyze data is particularly important in inventory, according to IHL Group.

"The race to accurate inventory will determine who prospers and who does not in the next decade because it is retailers who have accurate data that will be in position to best take advantage of artificial intelligence and machine learning technologies," IHL says. "These technologies are only as good as the data they are working with, so whoever has the best data wins."

Condusiv Technologies says average retail inventory accuracy is 65%, but that omnichannel requires at least 95% accuracy to be seamless. To achieve that, omnichannel retailers need to coordinate data not just from inventory but also from the supply chain, customer relationship management, payments and marketing.

Real-time visibility into inventory is essential to ensure enough stock is on hand and distributed where it is needed, whether in stores or fulfillment centers. Bad inventory decisions, including overbuying, account for half of unplanned price markdowns, but solutions like Radial Omnichannel Technology can improve margins 30% on items nearing markdowns and help move inactive items.

Analyzing data begins with collecting data, and BI systems easily track consumers' browsing, record purchases, document payments, follow fulfillment turnaround and quantify anything else that flows through a computer. But retailers are also investing in hardware that gathers data in the physical world, from RFID chips to ID badges and drones.

When Radial needed to track social distancing and implement contact tracing at its 21 state-of-the-art fulfillment centers, it turned to electronic bracelets from Instant-Trace that instantly transmit data to web dashboards. But Radial — which helps retailers with omnichannel solutions, fulfillment and transportation, payments and fraud, and customer care – found the bracelets provided much more information than simply whether workers were six feet apart.

"There were lessons learned," Radial CEO Ilias Simpson [told The Wall Street Journal](#). "Why are people having to take so many steps? Or why are people having to go back and forth so many times? It led to us figuring out where people had waste in their day and restricting our environment or adapting our processes to eliminate the amount of movement people had to do."

In another unexpected insight gleaned from the pandemic, analysis of online ordering has revealed billions of dollars in out-of-stocks that would never have been noticed with customers shopping in person. If a shopper can't find a certain shade of lipstick in her brand while in a store, for example, she might choose a similar shade from another brand. But if the same shopper ordering online for delivery or curbside pickup doesn't specify an alternative, the sale can be lost.

With vast footprints and high ceilings, fulfillment centers traditionally do physical inventories with workers climbing ladders, using handheld scanners or even pencil and paper. But that's slow, particularly today when there's no time to shut down for inventory.

The answer lies in drones. Using high-definition cameras, autonomous drones from companies like [FlytBase](#) take off, fly and land by themselves while reading barcodes and transmitting data in real time. Drones can do the job 10 times faster and at far less cost while improving safety and avoiding daylong shutdowns or overtime for inventory workers. Cloud-connected drones and API-based integration can offer better efficiency, increased ROI and higher reliability than manual counts.

Of course, not all data is about inventory. Retailers expect artificial reality — including innovations such as virtual fitting rooms in-store or virtual try-on online — to play an increasing role. Contactless shopping — where customers pay for purchases by scanning barcodes on their smartphones – and electronic shelf labels are here. Beacons offer customers virtual coupons on their phones while giving retailers valuable insights about in-store browsing patterns. And all these technologies are data intensive.

According to IDC, 175 zettabytes (175 trillion gigabytes) of data will be generated worldwide by 2025, up from 33 zettabytes in 2018. Not all is coming from retailers. But with that much new data being gathered, retailers need the digital infrastructure to handle it. Technology such as software-defined WAN and 5G cellular can expand bandwidth, while edge computing can ease the need for bandwidth. All are being widely adopted.

Most corporations today consider data a critical enterprise asset, and many formally set a value on data assets. Spending on big data and AI has become almost universal, and many companies have added a chief data officer to the C-suite.

But knowing retailers need data doesn't always mean following through on the action it indicates. Only a minority of companies can say they are truly data driven, and cultural challenges are widely cited as the biggest impediment.

Radial's Simpson says such barriers need to be overcome: "Successful retailers make decisions based on data. ... Embracing new omnichannel technology streamlines the shopping experience and sets retailers up for long-term success." ∎

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— **ILIAS SIMPSON,**
CEO, Radial

ABOUT RADIAL INC.

Radial Inc, a bpost group company, is the leader in eCommerce fulfillment, integrating commerce so brands can profitably exceed customer expectations. Radial's technical, powerful omnichannel solutions connect supply and demand through intelligent order management, efficient fulfillment and transportation options, intelligent fraud detection, payments, and tax systems, and personalized customer care services.

Learn how we work with you at www.radial.com.