



A new era for RFID in retail

Latest research reveals that RFID is enabling omnichannel services and driving value


accenture

RFID continues to resonate among retailers

Radio-frequency identification (RFID) has fast-evolved from a technology used at the fringes of retail, to a global technology that is delivering business results to retailers everywhere. In the eight years that Accenture has studied RFID in retail, we have learned that not only is RFID here to stay—it's growing.

After a year like no other, retailers are using technology to adapt to disruption and are implementing a wide range of technologies to keep up with the pace of change. RFID is high on the list with just 5% of retailers we surveyed *not* considering RFID. In fact, the majority of retailers (80%) said the benefits of RFID cannot be replicated by another technology.

About the research

Accenture's fourth bi-annual Retail RFID Study features survey data from 120 executives from hardlines, softlines and grocery retailers across North America, Europe and Asia-Pacific. The study is supplemented with secondary industry research and qualitative insights from an RFID technology provider.

After nearly a decade of research into RFID, we have seen that softlines retailers lead the way in adoption, but they are also setting the stage for hardlines and grocery retailers who are now exploring the technology. RFID has typically been used for inventory visibility and asset tracking to conduct inventory counts and reduce out-of-stocks, but, in this year's findings, we learned that the most adaptive retailers are discovering many new use cases. Although inventory visibility remains the top use case across all three segments, supply chain visibility, omnichannel offerings such as ship-from-store, buy online and pickup in store (BOPIS) and self-checkout are close behind.

**RFID is clearly here to stay,
and it's exciting to imagine
how retailers will use it next.**

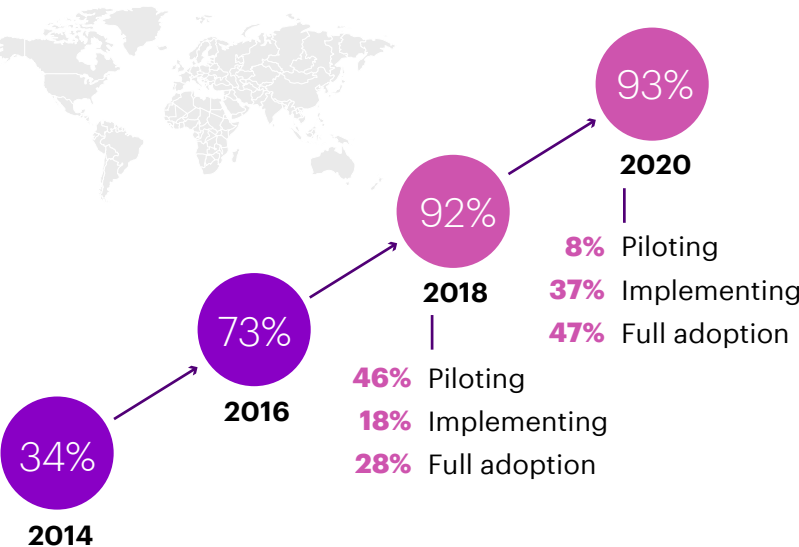


RFID is booming

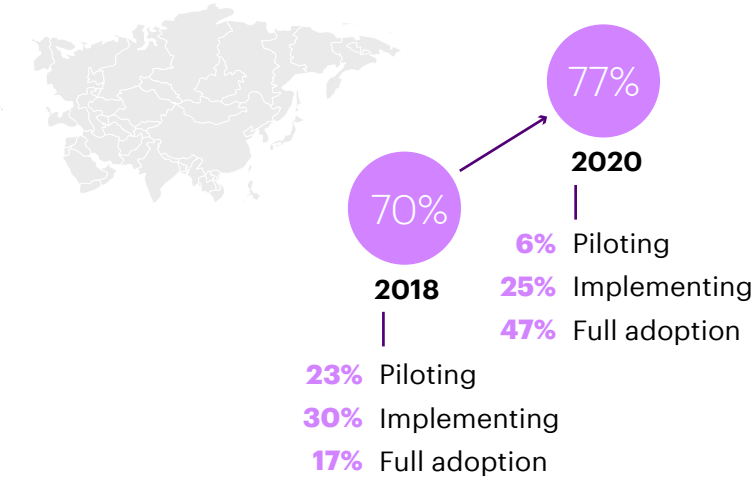
Adoption is yielding ROI and supporting omnichannel capabilities

In overall adoption, North America continues to be the frontrunner with 93% of retailers surveyed using RFID. And when we look at full adoption (compared to just piloting or implementing), all three regions of North America, Europe and Asia-Pacific have seen huge increases since our previous RFID study in 2018.

North American RFID adoption



Asia-Pacific RFID adoption



European RFID adoption

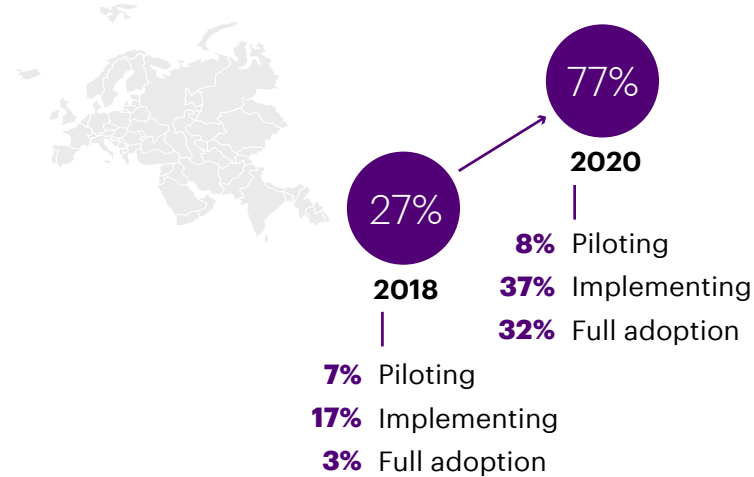


Figure 1. RFID adoption has increased worldwide since 2018, with Europe seeing a ten-fold increase

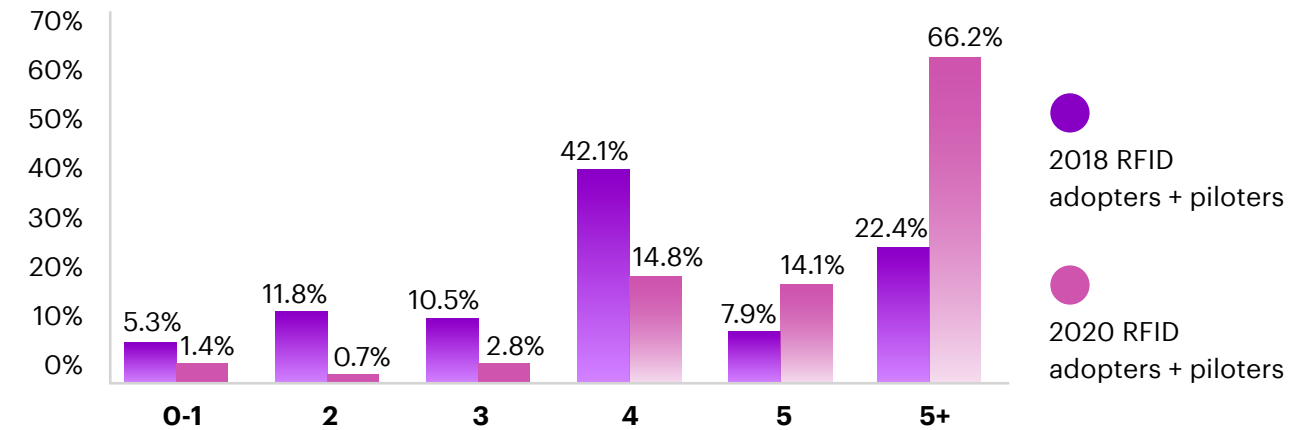
Retailers are seeing the benefits. RFID generates massive amounts of data that fuels insights, it facilitates greater accuracy of inventory and it is a key enabler of omnichannel capabilities. The increase in RFID adoption over the past two years has also overlapped with an increase in return on investment and expanded use cases for the technology.

For instance, during the pandemic, retailers across geographies have used RFID to enhance their omnichannel operations. In the past two years, the number of omnichannel capabilities retailers offer have increased significantly, with 66% of RFID adopters and piloters now offering five or more services (including BOPIS, ship from store, ship to store, reserve in store, mobile app purchasing and deliver to home) compared to just 39% of non-RFID adopters and 22% of adopters and piloters in 2018.

Zara's parent company, Inditex, is closing stores and accelerating its digital transformation. As part of that effort, the business is implementing an RFID system to enable garment tracking and integrated inventory management. The retailer will use the data generated by the RFID system to show the latest fashion creations on any device in real time, track demand instantly, manage stocks efficiently and accurately fine-tune production. Other technologies to enable more precise logistics and improved online-store operations are also being implemented. For example, high-capacity RFID readers are counting inventories in warehouses with high traffic volumes to select the ideal location for sourcing each order for delivery purposes.

Source: [RIS News](#)

% of retailers offering # of omnichannel experiences: Adopters + Piloters



% of retailers offering # of omnichannel experiences: Non-adopters

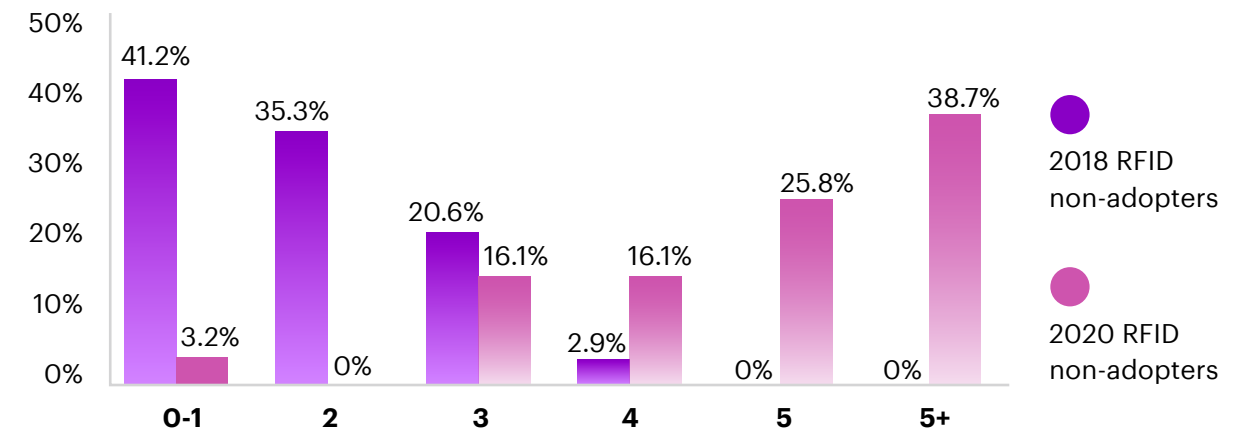


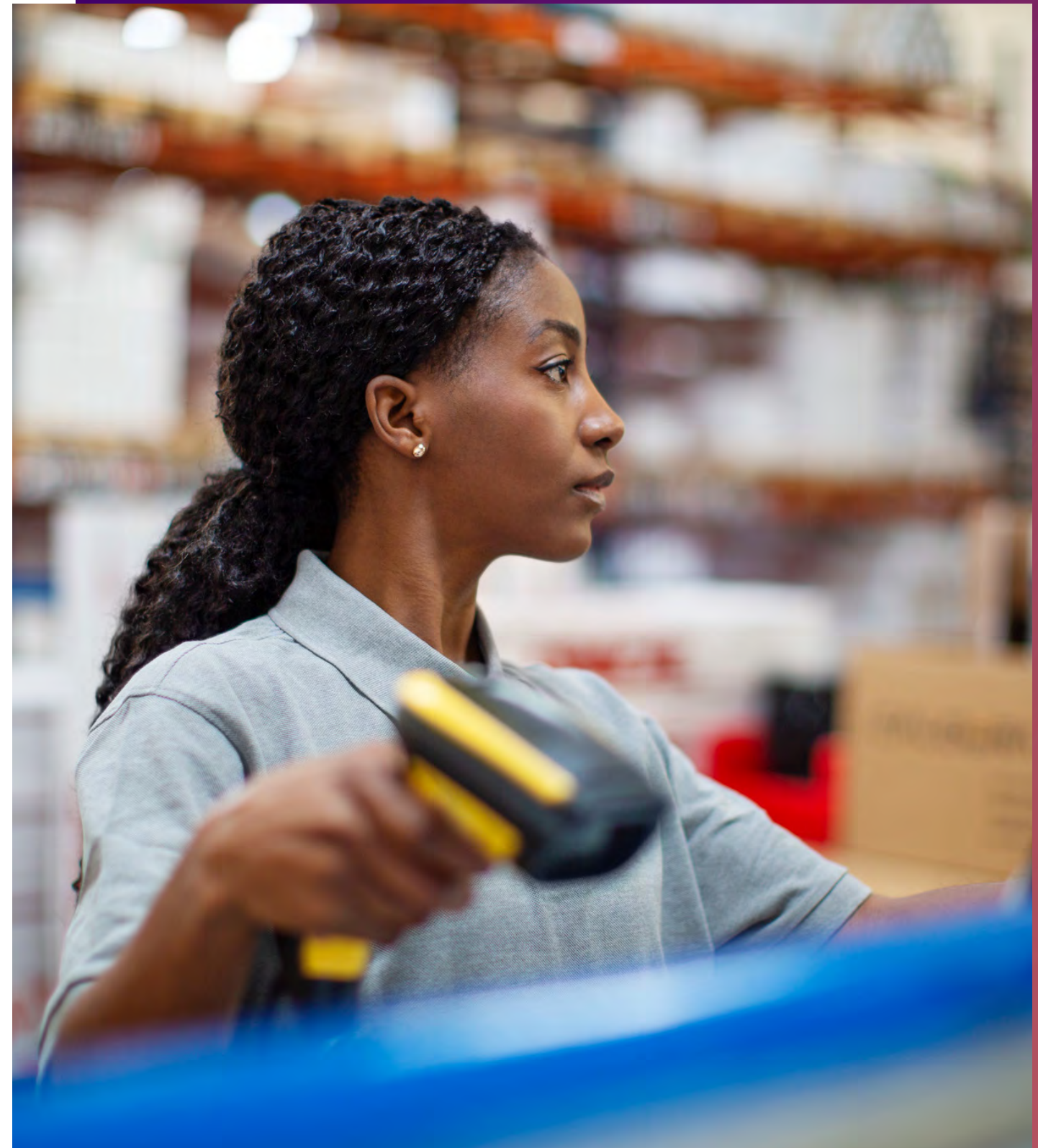
Figure 2. Retail has seen a significant uptick in RFID adopters and piloters offering five or more omnichannel experiences

With RFID offering real-time accuracy of almost 100%, it's no surprise that the technology is being leveraged to improve customer experience for omnichannel services. By knowing where their stock is at any given moment, retailers can guarantee availability across the channels and nodes within their networks, whether in store or online. There is also value to be captured by way of shipping closest to the destination, reducing split shipments and allowing pick up in store to increase basket size.

“We are happy to see Levi's reporting an average increase in sales in the low to mid-single digits and **98%** inventory accuracy in stores where RFID is fully operational. Complete inventory counts with a handheld reader take only 20 minutes and can be taken twice a day. In addition, omnichannel shopping, self-service terminals and much more can be integrated.”

Bill Toney, Vice President, Global RFID Market Development
Apparel, Food & Beauty, Avery Dennison

Source: [RFID & Wireless IoT](#)



As RFID use cases increase, so does ROI

Retailers are doing more with RFID, and they're reaping rewards

Due to higher adoption, expanded use cases and increased omnichannel enablement, the return on investment for the technology continues to rise. Retailers that have fully adopted RFID are reporting more than 10% ROI compared to 9.2% in 2018.

When retailers "layer" the use cases, specifically, those that have enabled five or more omnichannel shopping experiences, they are seeing a 20% higher ROI compared to retailers that have only paired the technology with four or fewer omnichannel shopping experiences.

Omnichannel use cases enabled by RFID

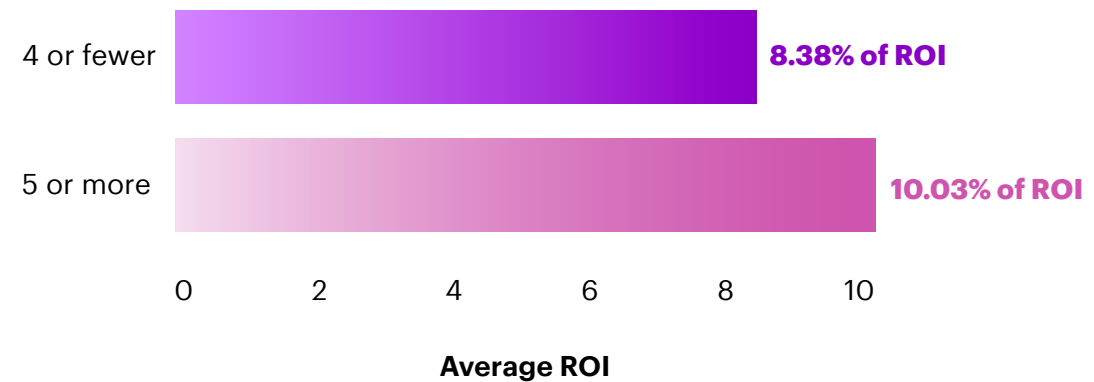


Figure 3. Greater ROI comes when retailers pursue more omnichannel use cases



Our research also shows a link between the level of RFID maturity and level of ROI.

In North America and Asia-Pacific, where RFID has, in some cases, a higher level of maturity and technology adoption (full implementation over piloting), retailers are exhibiting a 17-22% higher ROI compared to Europe.

We also found that retailers that have engaged with suppliers on source tagging are seeing a higher ROI (16% higher) than those that have not. Full adopters of RFID have all moved to source tagging, and overall, 45% of retailers say they are engaging with their suppliers on source tagging. Due to the magnitude of moving to full implementation, source tagging is a must to help rationalize labor for this task.

What's next for RFID?

Year over year, our research shows that increasing numbers of retailers recognize the value of the technology and are implementing it. They are experiencing greater returns than ever before because they are exploring a wider variety of use cases.

Softlines retailers intend to use RFID for:

24% Collaboration with blockchain

22% Supply chain and analytics

22% Self-checkout

22% Improving customer engagement with smart technology

Hardlines retailers intend to use RFID for:

33% Collaboration with blockchain

28% Supporting omni-channel fulfilment

24% Improving customer engagement with smart technology

19% Reducing stockouts

Grocers intend to use RFID for:

45% Reducing stockouts

36% Improving customer engagement with smart technology

33% Collaboration with blockchain

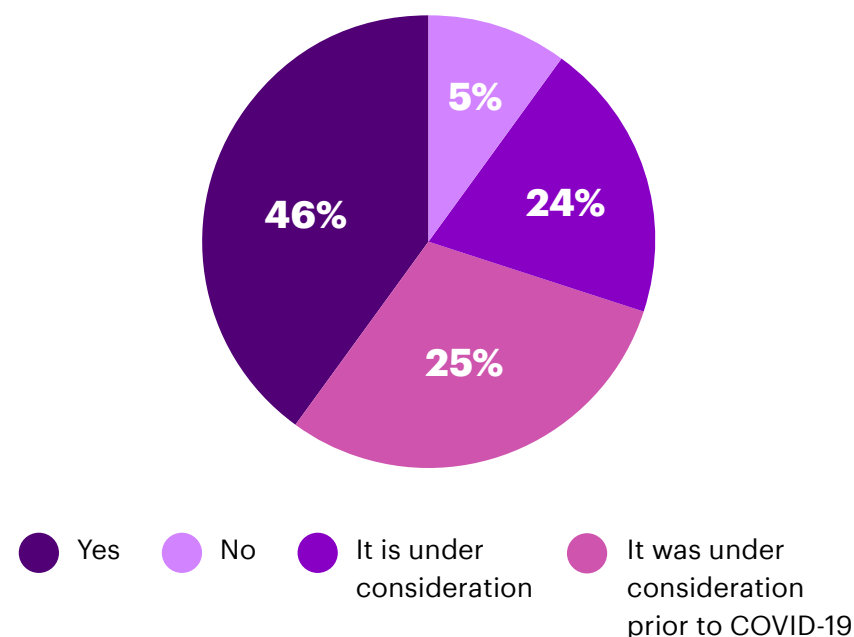
24% Inventory tracking and visibility

Adaptive retailers are accelerating adoption of RFID and other technologies

The pandemic influenced an uptick in adoption

COVID-19 has had a direct impact on RFID adoption, with 46% of respondents indicating that they have focused on RFID in recent months and an additional 24% indicating it is currently under consideration. RFID interest is emerging across segments, for instance, 56% of grocery is now focusing on RFID as a result of the pandemic. This renewed attention has been a boon as 87% of respondents said focusing on RFID enabled them to deliver better omnichannel experiences during the pandemic.

RFID in response to COVID-19



46% of respondents indicated that they have focused on RFID in response to COVID-19, while **24%** and **25%** indicated that it was under consideration currently or prior to COVID-19, respectively.

Figure 4. Retailers are focusing on RFID as a result of the pandemic

This awareness is important as we see little chance of the digital shift reverting. Our recent research indicates that in the next six months more than two-thirds (67%) of global consumers tell us they are likely/highly likely to use home delivery (with 49% of these opting for curbside pick-up/click & collect and 42% of these for store locker pick up).¹

In addition to RFID, the pandemic has caused retailers to prioritize technologies such as fast delivery, internet of things, blockchain and sensors/cameras. And the good news for RFID is that a majority of respondents (82%) somewhat or strongly agree that RFID is essential for implementing emerging technologies. They also feel it works as a companion—with 83% of respondents strongly or somewhat agreeing that RFID could complement emerging technologies.

Nike's investment in RFID has helped to fuel its digital transformation and enable scale. RFID is enhancing ship-from-store capabilities in North America's Nike brand on-line stores and the company plans to roll out RFID across its supply chain and stores. RFID is expected to reduce inventory holding costs and transportation costs, both in direct and in wholesale. It is also helping to create a fully connected marketplace.

Source: [RIS News](#)



Retailers have yet to unlock the full potential of RFID

Opportunity remains for retailers to scale RFID and fully activate the benefits

In today's world marked by change, retailers must move fast to adapt quickly to every new situation and be ready for the next wave of disruption. Having the right technologies in place will help retailers to pivot and respond quickly, and build competitive advantage. Our research indicates that not all retailers are seizing this opportunity. We are seeing several issues among those retailers who piloted RFID, but decided against broader implementation. Year after year in our research, retailers report that their greatest struggles and roadblocks are quantifying the value of RFID, identifying the right suppliers and partners, and having the ability to train employees.

Furthermore, retailers testing RFID aren't realizing benefits at speed due to lengthy pilots. For 25% of retailers we surveyed, pilots are taking longer than a year. It is an important time to consider taking an agile approach in which the organization can fail fast, test and learn, and adjust accordingly. As with most new technologies, adoption is not simple as it requires changes to store processes and there is much for associates to learn, but most retailers believe the benefits far outweigh the challenges.

Retailers can overcome roadblocks to RFID implementation by:

- 01 Quantifying the value of RFID investment and initiatives.** Retailers must develop detailed business cases. There is plenty of data to quantify the potential returns of rapid piloting and testing.
- 02 Identifying right suppliers/partners.** To scale RFID, retailers may consider partnering with the broader ecosystem of technology partners, suppliers and advisors that can support rapid advancement.
- 03 Communicating with and training employees.** RFID requires changes to store operations and this effort must not be underestimated. Having a solid change strategy is critical to gain buy-in and support to implementing RFID.

For RFID to be effective, it must be supported throughout a retailer's organization—from sourcing to stores and all team members. Leadership can set the stage for adoption by sharing success stories with their people and explaining the path to value through RFID.

Seize the future of RFID

Opportunities remain to continue to unlock value from RFID and deliver on promises made to customers. Retailers also can strive to find ways to extend the use of RFID within their own enterprises—whether using it in additional functional areas or within new processes. RFID has proven its worth.

Now it's time to scale the benefits for your business.



References

¹Accenture Covid-19 Consumer Pulse Research November 26, 2021 to December 10, 2021

All other data is from the Retail RFID Study 2020

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About the research

In December 2020, Accenture Research conducted the Retail RFID Study 2020 an online survey of 120 retail executives from nine countries (Australia, Canada, China, France, Germany, Japan, Spain, United Kingdom and United States), with a minimum of 40 respondents from three continents (Asia, Europe and North America).

The survey population included 63% C-suite and 37% other senior executives working for softlines, hardlines and grocery retailers with annual revenues in excess of \$500m. Fifty-two percent of respondents worked for organizations with annual revenues in excess of \$1bn, 24% for organizations with annual revenues in excess of \$5bn and 14% for organizations with annual revenues in excess of \$20bn.

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