

Introduction

The challenge for parcel carriers is intensifying: How can they drive operational efficiency without compromising the services they offer to ecommerce retailers and consumers? For a decade parcel carriers have been optimizing their operations to deliver parcels as fast as possible – speed was everything. Our research reveals a critical shift in consumer preferences:

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4/10

Four out of ten consumers now expect home delivery within a scheduled 2–3 hour time slot, rising to 43% in the US and 44% in the UK.

These findings highlight the next phase for parcel carriers; to evolve not just by offering fast delivery, but by offering a variety of delivery solutions that are predictable, flexible, and transparent. The key to achieving this lies in innovation using digital technologies. The challenge is how to balance this necessary investment in superior consumer experience while driving operational efficiency.

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61%

Over 61% are willing to pay more for tracking and visibility if the service meets their needs. Just like an Uber taxi, consumers want to know what to expect.

37%

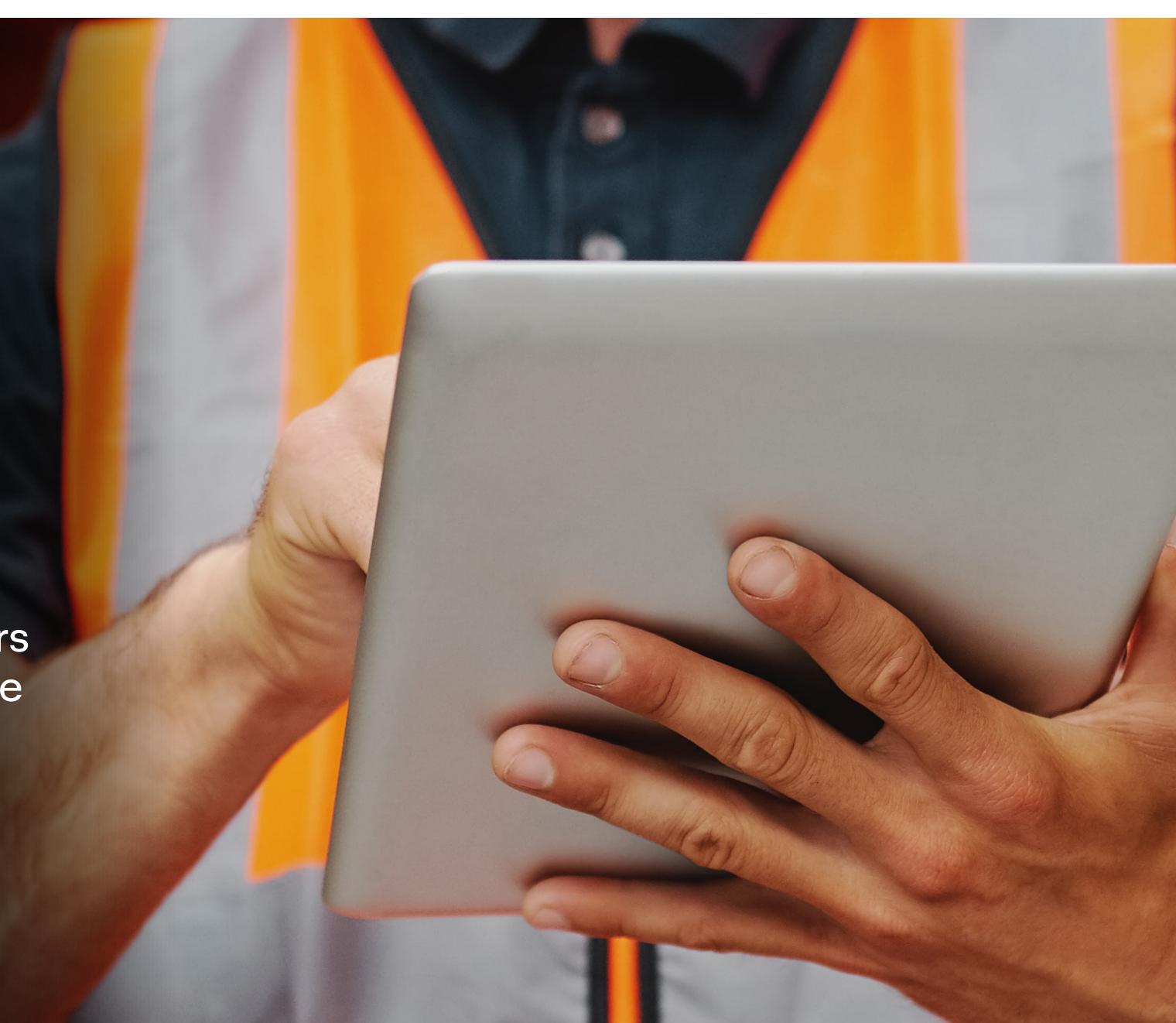
37% cite delivery delays as their top frustration. If the delivery data isn't accurate, it causes frustration and can negatively affect future buying behavior.

For parcel carriers

WINNING strategies

At Avery Dennison, we support parcel carriers that leverage intelligent parcel solutions to optimize their operations and simultaneously enhance the consumer experience. Their choice leverages intelligent identification solutions.

These five strategies help parcel carriers meet their cost reduction goals, and the diverse expectations of eCommerce retailers and consumers.

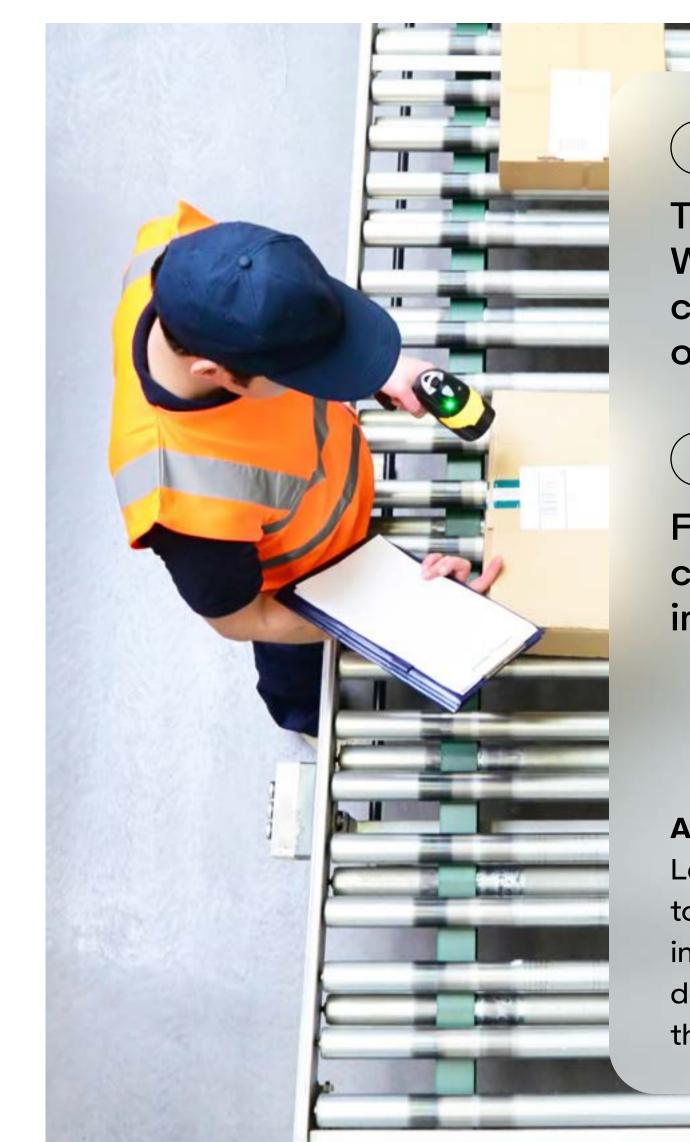


Keep your delivery promise

Identify and predict problems before they escalate.

Today's tracking systems often only highlight problems after they've impacted the service. However, parcel carrier operations utilizing intelligent parcel technology are now predicting potential issues in real time, such as missed scans, misrouted parcels, or slow sorting, so they can be addressed before they affect the parcel recipient.

By capturing data at every point in the parcel's journey, intelligent parcels enable real-time visibility and allow parcel carriers to take proactive action when problems arise.



OPERATIONAL IMPACT

This capability helps reduce WISMO calls, which cost carriers \$5.50 per call on average*

CONSUMER IMPACT

Fewer delays lead to better consumer retention and improved service KPIs.

Advanced insight

Leverage AI and machine learning to analyze real-time data from intelligent parcels, and predict delivery issues before they affect the consumer experience.

OPERATIONAL IMPACT

Increased throughput and reduced labor costs allow facilities to handle higher volumes without major capital investments.

CONSUMER IMPACT

Reduced human error leads to more accurate deliveries and fewer mistakes.

Advanced Insight

Automated sorting and processing systems integrate with RFID technology to ensure smooth and scalable operations.



Automate to reduce manual labor

Reducing time and human error from processes.

With global parcel volumes projected to reach 500 billion annually by 2028*, parcel carriers must both scale their operations and build in the capability to 'burst' for seasonal volume surges, without relying on manual labor. RFID-enabled intelligent labels remove the need for line-of-sight scanning and allow multiple parcels to be scanned at once, reducing time, labor

costs, and human error in the sorting and handling process. Automation is becoming a necessity for many processes in the operation. Intelligent parcels facilitate seamless integration with automated sorting systems, enabling carriers to handle volume surges with confidence.

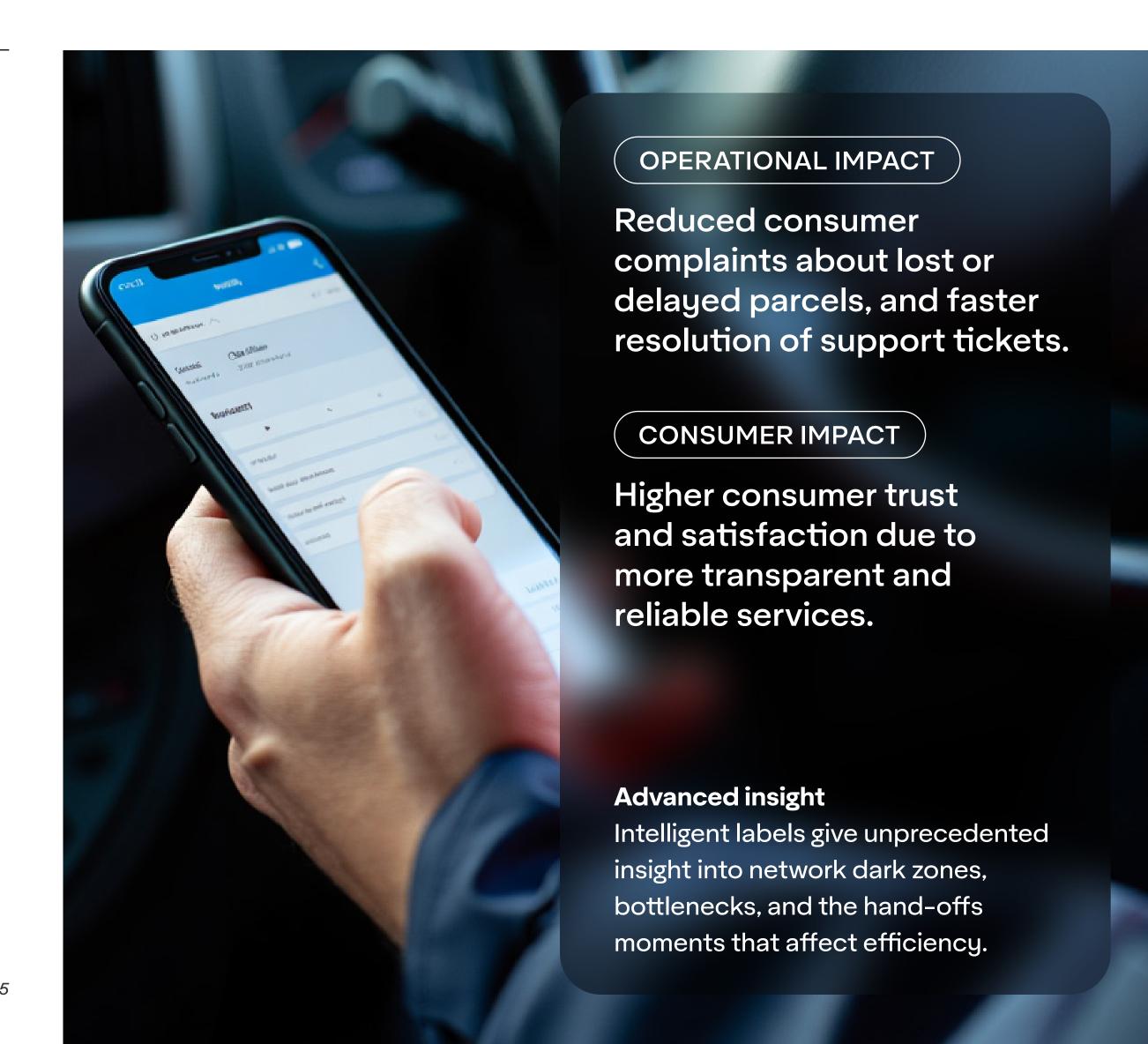


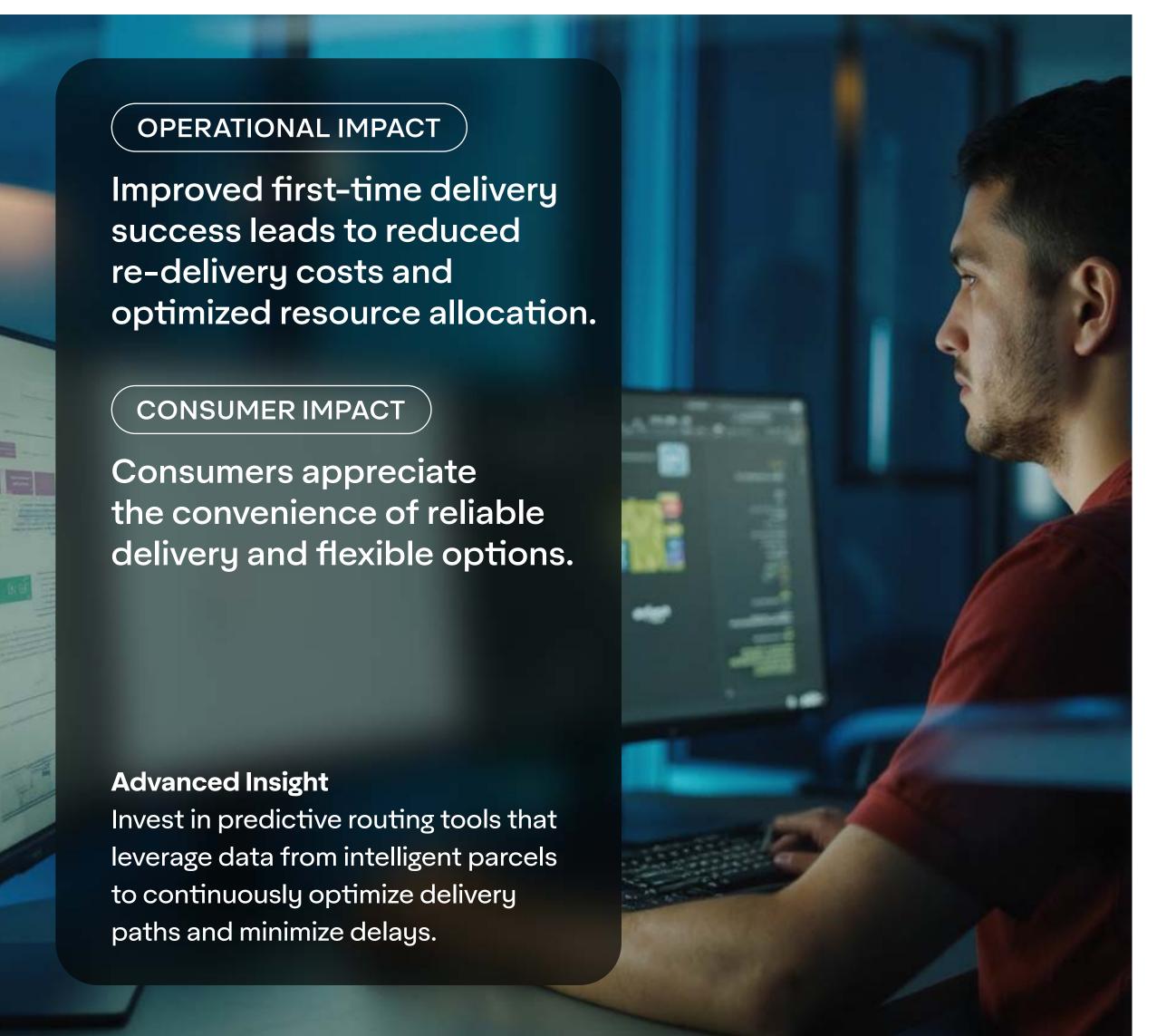
Offer accurate real-time visibility

Essential for the predictability consumers value.

Real-time tracking has become a baseline expectation for consumers. 61% of consumers say they are willing to pay more for enhanced tracking and transparency*. To meet this demand, intelligent parcels provide accurate, live status updates at every checkpoint, offering full transparency into the parcel's journey.

This transparency isn't just for the consumer, it's also invaluable for operational managers for whom many facilities and hubs are data dark zones. With accurate intel carriers are now monitoring and continually optimizing delivery routes and workflows.



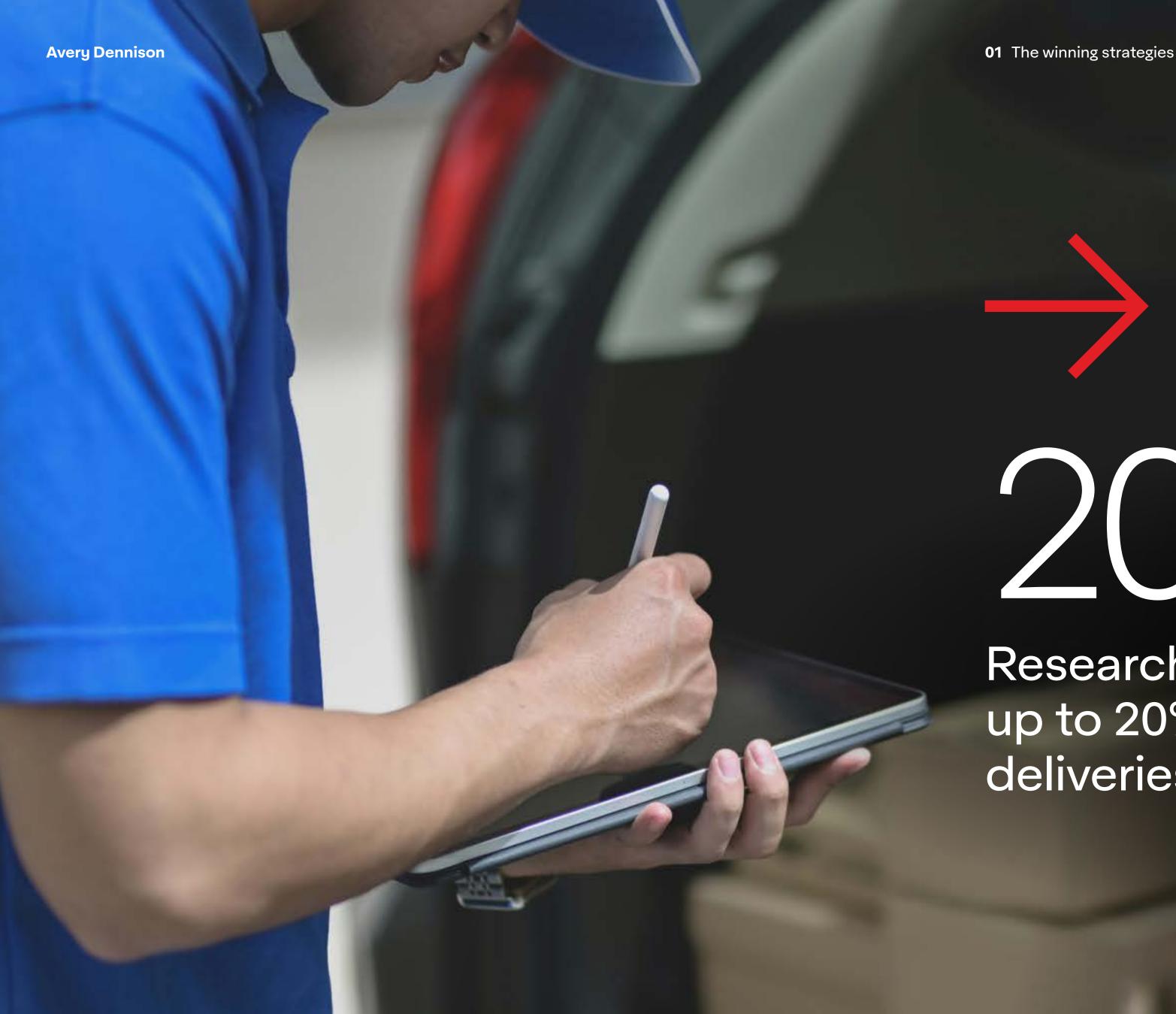


Optimize first-time delivery success

Eradicating additional cost and consumer frustration.

Every missed delivery has an outsize cost, often higher than the value of the parcel. Research indicates that up to 20% of first-attempt deliveries fail.* Carriers are now using intelligent parcels to allow for more accurate Estimated Time of Arrival (ETA), dynamic rerouting, and proactive alerts, ensuring higher success rates for first-time delivery attempts.

By leveraging real-time data from intelligent parcels, carriers can provide accurate delivery windows and adjust routes on the fly, optimizing critical last-mile operations.

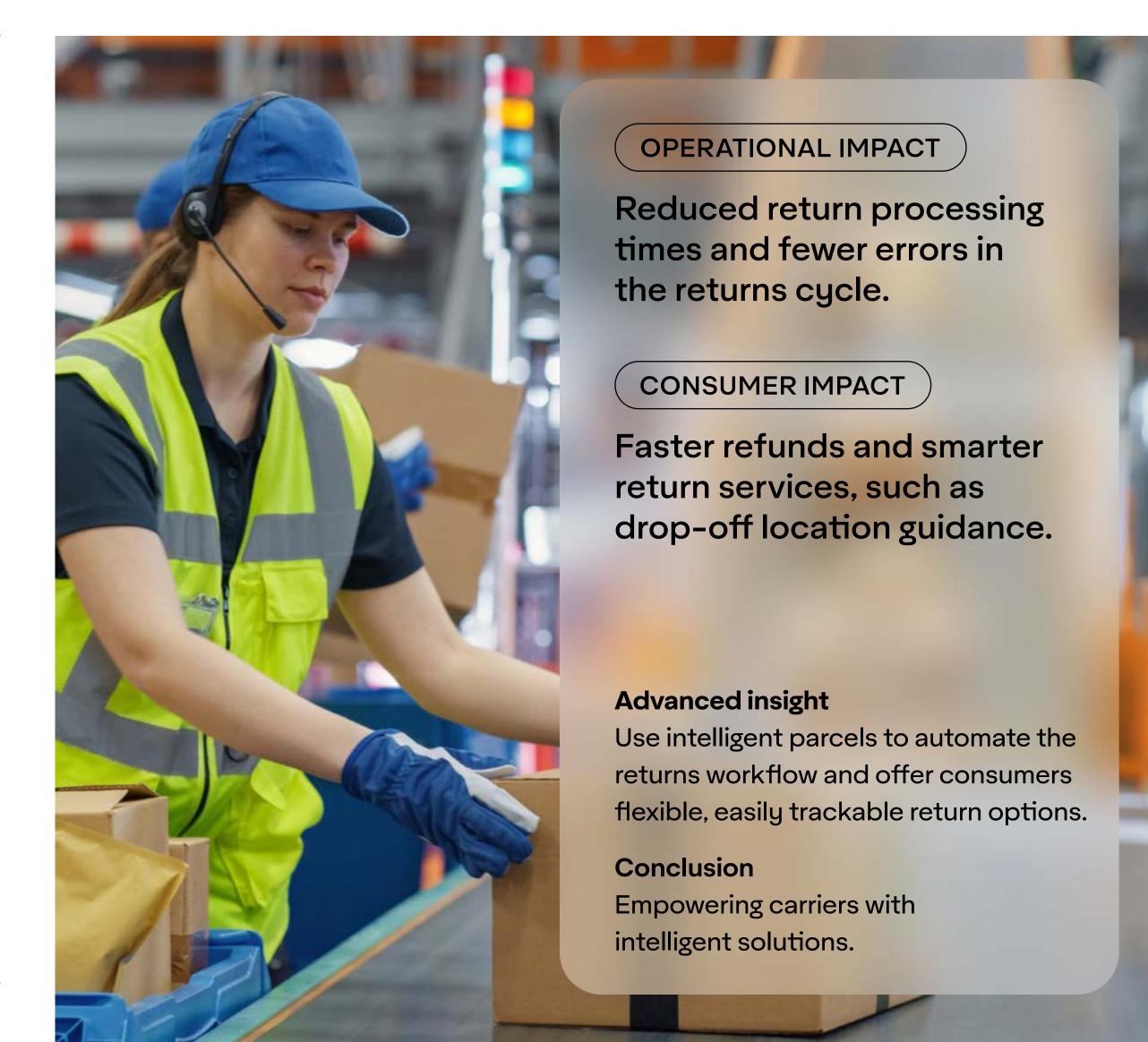


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Prepare for smarter, simpler returns

Replicate the efficiency of the delivery.

Returns are an inevitable part of eCommerce. They are also a challenge for both consumers, parcel carriers, and retailers. 7 out of 10 consumers want fast refunds, not just a return label*. Carriers are now using intelligent parcels to enable automation in the returns process, providing a seamless and efficient experience that accelerates the returns cycle.



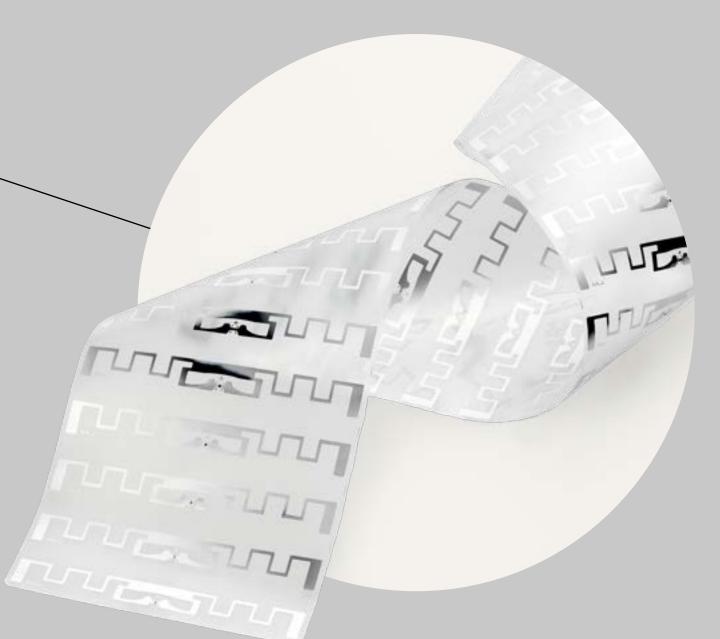


intelligent carrier network

02

What is an intelligent parcel?





An intelligent parcel uses an intelligent label embedded with RFID ambient technology to carry and broadcast real-time data throughout its journey.

By making parcels intelligent, carriers can optimize without compromise:

Better consumer experiences (real-time tracking, predictability, easier returns)

Improve operational efficiency (automation, accurate data, reducing errors)

Intelligent network maturity radar

How are parcel carriers utilizing intelligent parcel technology? This maturity radar outlines the stages of RFID adoption and how extending the footprint along the supply chain and connecting systems unlocks operational benefits.



Initial RFID adoption

Description

The basic introduction of RFID technology, primarily for tracking parcels in the last mile.

Key benefits

- Reducing errors in handling and manual scanning
- Visibility on parcels' movement through final sortation centers to recipient

Impact on operations

 Accurate visibility for parcel tracking, identifying bottlenecks and reducing manual scanning



First to last mile

Description

Integrating RFID from first to last mile, including routing and vehicles.

Key benefits

- Optimize entire network
- Faster throughput
- Accurate chain of custody

Impact on operations

- Reducing manual labor and increasing efficiency
- Accurate data for shippers and recipients



Optimized and informed operation

Description

02 The intelligent carrier network

Integration of RFID with predictive analytics and AI, improving decision-making.

Key benefits

- Predict and resolve issues across the operation
- Network optimization

Impact on operations

 Maximizing automation and data driven decision making



Competitive advantage

Description

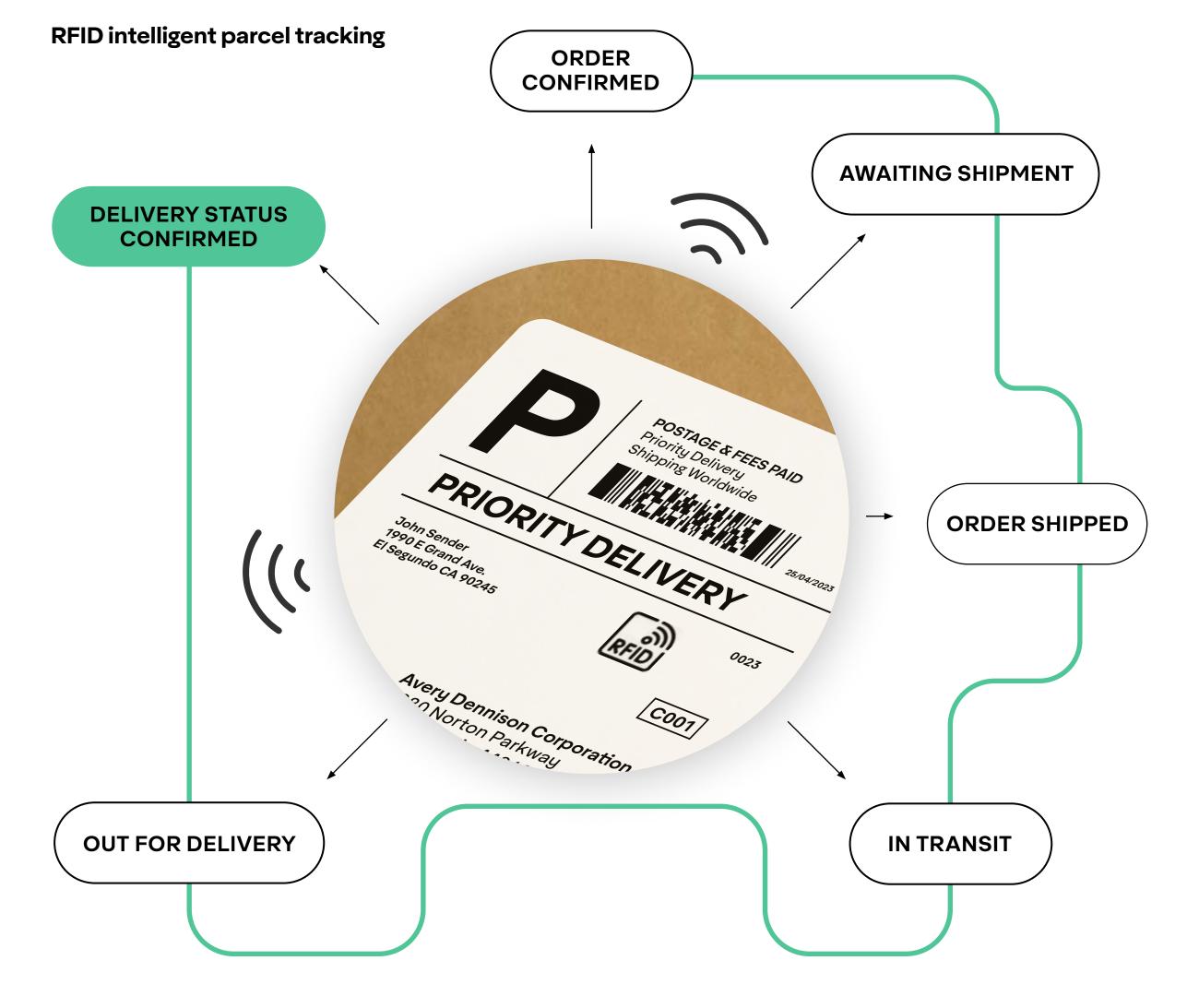
Use RFID infrastructure as a platform for innovation.

Key benefits

- Mass customization of services for shippers and recipients
- Self healing operation, fixing inefficiency proactively

Impact on operations

 Seamless end-to-end operations, improving scalability and shipper and consumer satisfaction



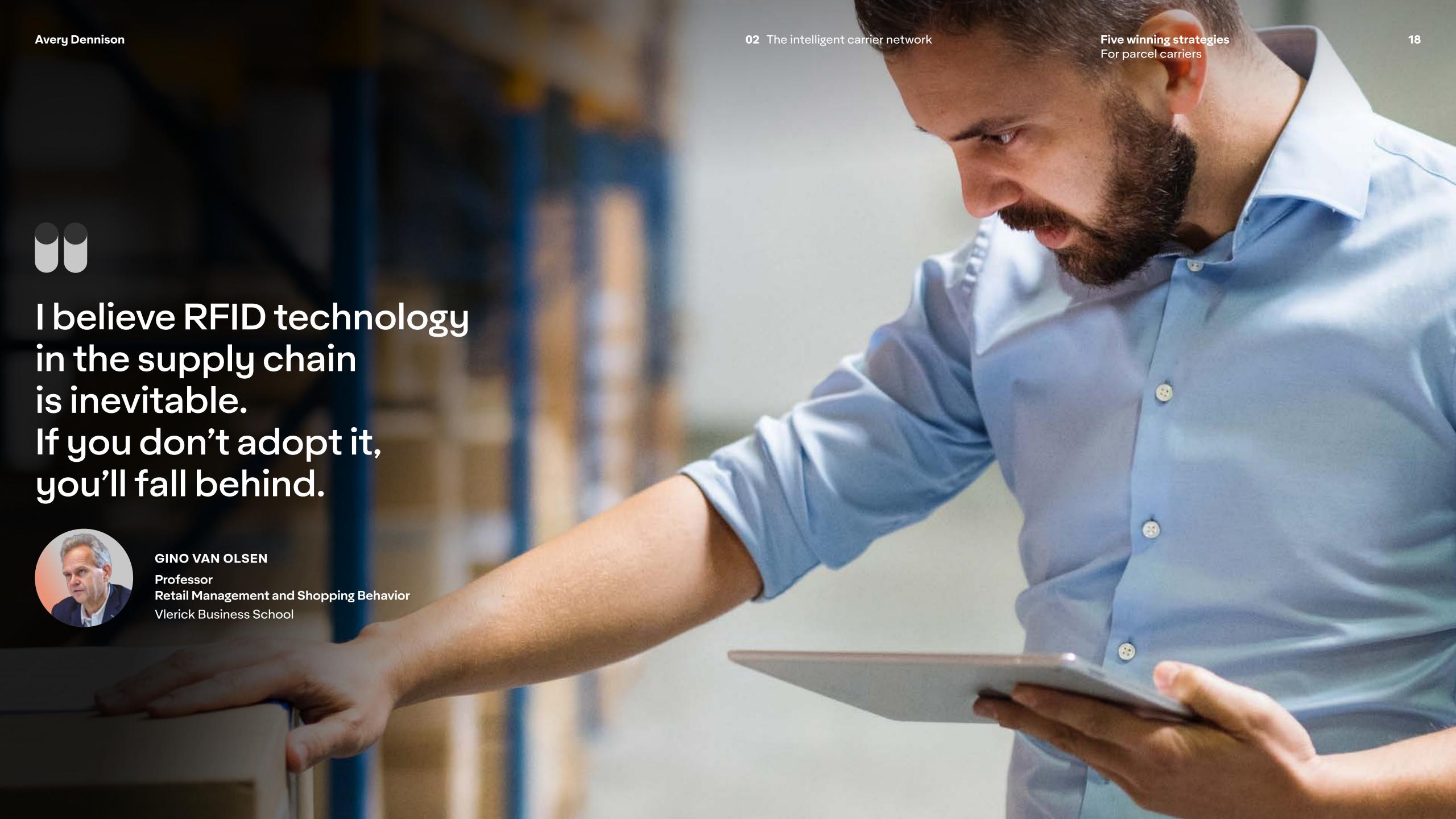


Although standardization is a mantra of operational efficiency, parcel carriers cannot afford a one-size-fits-all model.

The demands from eCommerce retailers and online shoppers are complex, and meeting those demands requires flexibility in service propositions.

To remain competitive, parcel carriers must adopt technologies that enable multiple propositions at scale, and RFID is a critical enabler that makes it possible.

At the core of this transformation is the intelligent parcel, which uses labels embedded with RFID technology to provide continuous information along the parcel journey. This ambient technology for parcel carriers is not just an improvement to existing systems; it is the catalyst for unlocking operational efficiencies and creating a service model that is agile and scalable to varying consumer expectations.



Why is RFID so vital?





Full visibility

RFID based solutions provide end-to-end item-level visibility across the supply chain, improving tracking accuracy and minimizing human error.



Operational efficiency

The technology integrates seamlessly with automated sorting systems and warehouse management, eliminating the need for manual labor and improving processing speed.



Data-driven optimization

RFID acts like a sensor on every parcel, feeding accurate and granular operational data to management, which is the basis of actionable decision-making. Leading global carriers are already using this data to proactively optimize processes before they impact consumers.

ROI PROJECTION

On average first projects between 9-18 months

RETURN INVESTMENT ROI PAYBACK 9-18 MONTH INVESTOR CAPITAL COMMITMENTS **GRADUALLY DEPLOYED MONTHS**

Fast-track return on investment

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RFID implementation has a fast ROI, depending on the scale and complexity.

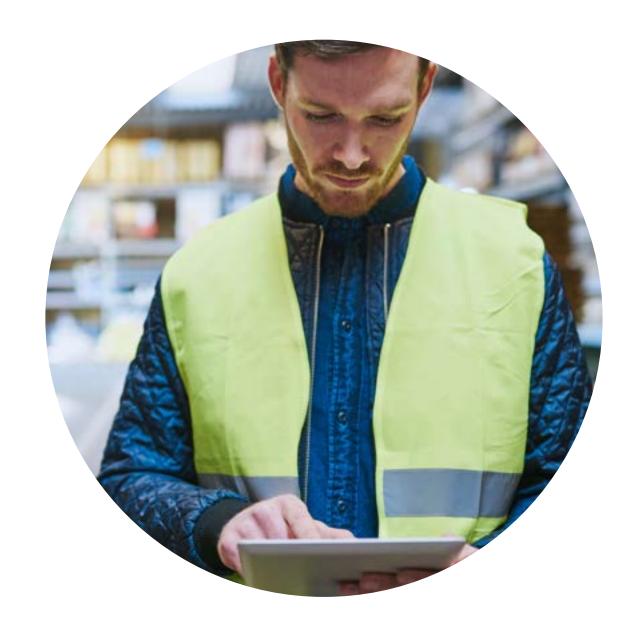
Monthly value contribution

Just RFID label cost

Initial hardware invest

Unlike many digital transformation projects, which can take years to deliver tangible value, intelligent parcel solutions powered by RFID technology provide fast ROI. In months, not years. Testing RFID technology with a fast, location-based pilot is the most effective way to validate its impact on efficiency, cost reduction, and service improvements.

The labor cost savings are already an immense contributor to ROI, but you'll be surprised by the additional efficiencies gained from eliminating load errors, removal of quality checks, and enabling optimal planning.





Connect with industry leaders and RFID experts to learn about best practices and the tangible benefits RFID can bring to your operations. Understand how leading global carriers are integrating RFID technology across their supply chains.

CONTACT US





Discover what consumers really expect from delivery today. This is essential reading for parcel carrier leaders transforming operations to meet the new standard of delivery performance.

DOWNLOAD NOW

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