



Flooid resilience

Stay strong and keep selling with Flooid

Digital – a decade of change



We live in an unpredictable world where issues can arise for retailers at any moment. From ransomware cyberattacks to targeted information security breaches, to in-store criminal activity and fraud, the threat to businesses is real and increasingly sophisticated.

Recent incidents to reach the headlines have included attacks on multinational corporations, like Co-Op and M&S, as well as United Natural Foods Inc. experiencing an outage that temporarily ceased order fulfilment and fashion brand North Face equally finding thousands of its customer accounts compromised.

With attacks becoming more sophisticated, evolving from phishing scams to complex Al-generated scripts and fraudulent impersonations breaking through even multi-factor authenticated systems, the consequences can be catastrophic. From a loss of income owing to POS failures, to reputational damage, ransomware payouts and even the possibility of fines by regulatory bodies for data breaches, the cost can often run into the hundreds of millions of dollars. During the past five years alone, cyberattacks have cost UK businesses £44 billion in losses, according to a report by Howden. Clearly, cybersecurity can no longer be treated as an IT issue – it is a business-critical priority.

Alongside this digital risk is the threat of instore theft, which has grown rapidly in recent years. With criminals targeting self-checkout kiosks to run through unscanned items or gaming the system with fake barcodes, sophisticated shoplifting methods and manipulated baskets, retailers reported a 93% increase in the average number of shoplifting incidents per year in 2023 versus 2019 and a 90% increase in dollar loss due to shoplifting over the same time period, according to the National Retail Federation.

From loss prevention to cybersecurity and data protection, threats proliferate from all angles. How can retailers stay safe in this troubling landscape while continuing to grow their business? And how can you bounce back without damaging customer loyalty or your reputation if you are targeted?

The answer lies in a deliberate and serious approach to security. It's a stance that can be found through partnering with trusted experts like Flooid, who draw on decades of experience keeping the world's largest retailers safe and secure.

57% of UK retailers have experienced a rise in cyberattacks and breaches and 90% have reported that the frequency of such attacks has either remained steady or increased annually since 2015.



Source: BRC

Speed, consistency and agility:

A strong cyber security posture

In order to face this increasing range of threats, retailers must develop a strong cybersecurity posture – a holistic protocol whereby different facets of protection from access control to vulnerability management, employee training and monitoring are connected and constantly improved.

When it comes to vulnerability, penetration testing and risk-based testing like fault-injection can quickly identify issues between hardware and software as well as possible entry points for bad faith actors, before they are exploited. Deploying data processing across multiple regions and zones can mean that if a data centre is accessed and made vulnerable, it can be contained before the entire network is compromised.

"In 2025, cybersecurity is no longer a bolt-on, it's the backbone of retail trust. Those who act now will not only protect their operations but also strengthen their brand in the eyes of today's digitally-conscious consumers."

Source: Retail Technology Show

Working with a trusted partner like Flooid can ensure that these many aspects of a robust and reliable cyber security posture are not only in place but also maintained. Accredited to the ISO 27001 industry standard, Flooid is both internally and externally audited to ensure security protocols are kept to a gold standard, while our internal management process includes consistent vulnerability scanning that patches errors as they arise, as well as safeguarding against vulnerabilities in our own code thanks to code scanning, peer code reviews and threat modelling.

Flooid's architecture which goes beyond composability means that POS devices can crucially continue to operate autonomously of central services. Rather than cease operations when the network is offline, often incurring huge losses, POS devices can continue to perform sales transactions without wider network connectivity. Flooid-enabled POS systems can operate independently of central services where data is processed across several locations in the cloud or a remote data centre, meaning networks can be contained with lower impact as Disaster Recovery capabilities and Business Continuity Planning failsafes are activated. By eliminating the need for in-store servers, this equally reduces the attack surface maintenance and capital expenditures, as well as power consumption, delivering substantial cost savings over time.



"41 % of retailers report having suffered at least one security breach in 2025 and ransomware attacks on UK retailers surged by almost 75 % in Q1 alone."

Source: <u>Retail Bulletin</u>

Through a shared responsibility model, security partners NCC provide Flooid's security operations centre to constantly monitor retail estates and flag and escalate any security issues for review and possible action. Issues can often be contained before they become a threat, meaning transactions can be prioritised and post-processing mechanisms ensure any relevant data is credited to the customer once back online.

Ultimately, partnering with Flooid means that retailers can continue to complete transactions 24/7 without interruptions. While network outages, central server failures or service disruptions might occur, the Flooid POS is built to operate reliably and with innate resilience, even in adverse conditions.





"When something goes wrong in a single store, that's one issue. But in retail, problems rarely stay isolated. For a retailer with thousands of locations, a system-wide failure can mean thousands of store managers calling the help desk at once. In these situations, the only thing that truly matters is restoring service—fast.

"That's why, beyond resilience, Flooid has built robust and efficient recovery mechanisms—both in the cloud and instore. Our systems are designed to bring a POS back to a fully operational state within minutes. Combined with real-time monitoring, Flooid helps identify and isolate issues quickly, preventing them from spreading and avoiding a flood of support calls from frustrated store teams."

Eric Bilange, Group CTO Flooid and Global Software CTO GGS

Insights and resilience:

Data essentials

At the heart of retail operations is data.

Without accurate and efficient data insights and processing, retailers will struggle to track customer journeys and business growth, as well as potentially lose sight of customer loyalty.

From card transactions to loyalty programs and order information, retailers process masses of data every minute, yet if they become vulnerable to a cyberattack, that personal data is crucially at risk.

A data breach can not only disrupt a retailer's operations, it can also incur huge fines from regulatory bodies owing to the leak of personal data, thereby adding to the total cost of an attack. Recently, hotelier Marriott was ordered to pay \$52 million in damages following a data breach that affected the personal information of millions of customers, while British Airways was fined £20 million following a hack that harvested personal customer information.

"Credential theft now accounts for 38% of all compromised data, while payment card theft dropped to 25%, making credential harvesting the leading threat in retail cyberattacks"

Source: Security Magazine

Stopping criminals and hackers from accessing this data is therefore crucial. Three tenets of information security can ensure that a retailer's data is kept safe:



Confidentiality

Flooid employs data confidentiality at source to ensure that only the people who need to see the data can. While processing retailer data, Flooid employs encryption of data at rest and data In transit, as well as keeping the security of physical data processing locations secure.

Integrity

Accuracy is of the utmost importance when it comes to processing data. Flooid collaborates with each retailer to assess their data needs and then minimises the personal data that is processed through GDPR and DPIA assessments.

Availability

Going one step further than simply keeping information secure, accurate and efficient data availability is essential for the smooth running of a business. Flooid harnesses secure data for insights into business operations and profitability. Our Insights and Empower platforms place the retailer in the driving seat, providing easily accessible data in stores and enabling associates to respond with agility to changing customer demand, all while keeping their data safe.

"Threat modelling is embedded into our processes at every level of the architecture, helping us proactively identify vulnerabilities and strengthen our defences. Today, our security strategy is grounded in a Zero Trust model—ensuring that every access request is verified, every time, regardless of origin."

Eric Bilange, Group CTO Flooid and Global Software CTO GGS

In-store AI, infrastructure and fraud prevention

While cybersecurity is an area of critical importance for retailers, fraud detection and instore security is equally crucial when it comes to ensuring your business is fully protected.

Shop thefts have more than doubled in the UK over the past six years and self-checkout kiosks have become a contributor to this retail theft epidemic, with criminals employing tactics such as product switching (choosing a cheaper item to place on the weighing scale than the one taken), barcode switching (multi-scanning a barcode for different, more expensive items) and simply walking away with baskets of items without paying.

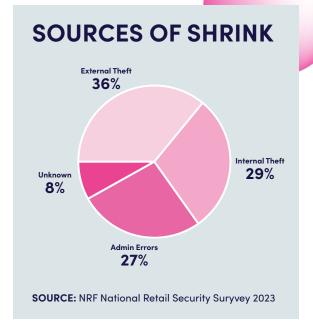
Shoplifting accounts for 65 % of total shrink, with employee theft and administrative errors accounting for the rest.

Source: NRF

While technological innovations such as RFID tags are being implemented to more accurately trace the journey of items throughout the store, making it far harder for criminals to walk out without paying, these are just one element in a raft of security measures needed to comprehensively safeguard not only against external theft but also inventory management, internal theft and administrative errors.

Retail is one of the top 5 industries targeted by cyber criminals

Source: KnowBe4



To support this agile range of responses, Flooid have developed a robust suite of tools and infrastructure that equips store associates with real-time insights into potential fraudulent activity. Flooid's open architecture allows customers to seamlessly integrate advanced Al-based systems, such as computer vision, motion sensors and behaviour recognition technologies that can combine with RFID tags to produce a detailed journey for items in-store and flag immediately once suspicious activity is occurring. This flexibility ultimately enables retailers to build a layered, intelligent fraud prevention strategy tailored to their specific needs.

"All stores are not created equal. You need to rate your stores for risk: there are tougher places to trade in and there are easier places... harden the target."

Source: Mark Ibbotson, McKinsey

Scalability and customer-centricity: Future-proofed retail



Retailers might be operating in an unpredictable world but customer demand is ever-present. To safeguard seamless transaction flows and engaging customer experiences, it's essential that retailers find a trusted partner who can scale at speed and put their clients first – all while keeping them safe.

At Flooid, security is integral to our operations and we are committed to ensuring that our customers can complete transactions despite adverse conditions. Our POS runs even during outages and we have made significant investments in our platform to support real-time, upto-the-minute changes across store estates. Through implementing the execution of customer automation on the base configuration of our product, we can run automation based on customer configurations every night and get early feedback on issues that might develop before they become a reality. This enables Flooid to identify potential defects sooner and fix them at source, before customer teams are even aware of the issue.

Flooid have also elevated the performance of our data processing infrastructure to world-class levels, making it capable of handling up to 10,000 transactions per second. This level of responsiveness empowers our customers to act with confidence. They can continuously adjust pricing and promotions based on local conditions, competitive pressures, or emerging trends, all while feeling safe in the knowledge that this data is encrypted and secure from threats.

No matter the challenges your business might face in the future, Flooid employs decades of experience working with the world's leading retailers to ensure that operations are protected and that growth is always available. Security is never an afterthought — it is an essential capability.

If you are interested in learning how Flooid's solutions can help make your retail locations safer, smarter and scalable and please speak to a member of our team.



About Flooid

Flooid, a GLORY company, is a market-leading unified commerce platform provider that enables retail and hospitality brands to sell to customers flexibly and consistently, wherever they are and however they choose to shop. Our scalable cloud-native composable solution and services portfolio includes assisted and self-service experiences, an open API services platform and operational business analytics as well as cloud, platform and endpoint managed services that enable retailers to select the right mix of overall services and technology partners to facilitate the selling journey that's right for every customer. One composable, unified commerce platform. Unlimited possibilities.

flooid.com

About Glory

As a global leader in cash technology solutions, we provide the financial, retail, QSR, cash centre and gaming industries with confidence that their cash is protected and always working to help build a stronger business.

Our cash automation technologies and process engineering services help businesses in more than 100 countries optimise the handling, movement, and management of cash. While we span the globe, we personally engage with each customer to address their unique challenges and goals — enhancing staff efficiency, reducing operating costs and enabling a more rewarding customer experience.

Employing over 11,000 professionals worldwide with dedicated R&D and manufacturing facilities across the world, Glory is built on a rich customer-focused, technology-driven heritage spanning almost a hundred years.

glory-global.com