

The Future of POS in Europe

2026 Whitepaper

Newland NPT – Europe

As a long-term participant in the global payments ecosystem, Newland has seen how difficult it has become to have a grounded discussion about the future of POS.

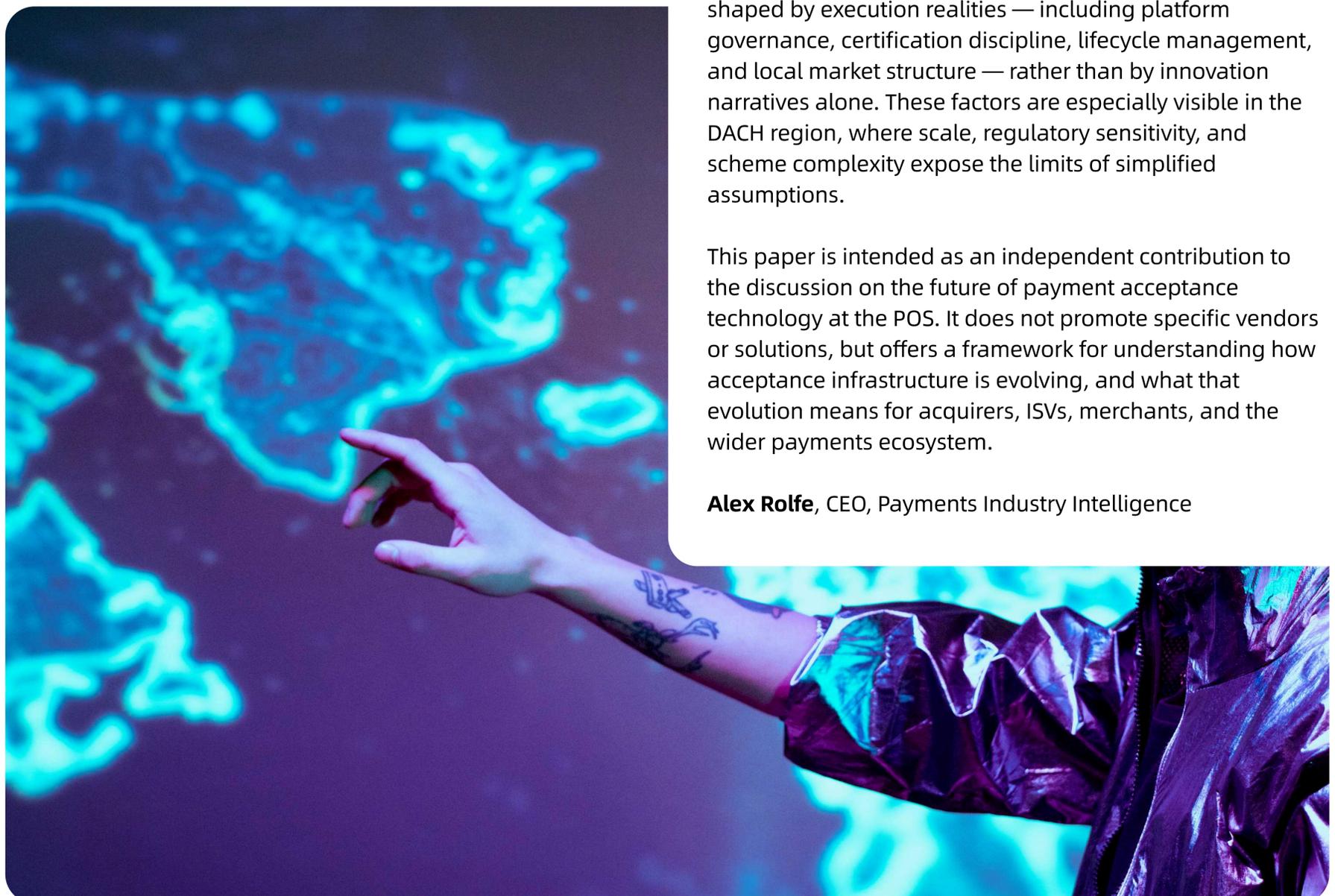
Debates are often framed in binary terms — software versus hardware, mobile versus fixed, innovation versus resilience. In practice, merchants, acquirers, and platforms operate in a far more complex environment, shaped by security requirements, certification regimes, operational risk, and the growing importance of data at the point of interaction.

Payments Industry Intelligence brings a perspective that sits outside any single vendor or product strategy and is well positioned to examine these dynamics objectively.

This paper recognises POS as critical infrastructure, acknowledges the coexistence of multiple acceptance models, and places appropriate weight on governance, lifecycle management, and real-world deployment constraints.

We welcome analysis that challenges assumptions and sharpens thinking, and hope this paper supports constructive dialogue across the ecosystem.

Alan Moss, Managing Director, Europe



Payments Industry Intelligence

For more than a decade, payment device technology at the point-of-sale has been periodically declared obsolete. Each new wave of innovation — mobile wallets, cloud platforms, SoftPOS, embedded payments — has been accompanied by predictions that dedicated payment acceptance devices at the POS would fade from relevance.

What has actually happened is more nuanced.

Across Europe, payment terminal estates have not disappeared; they have become more central, **more complex, and more strategically important**. The modern "POS terminal" is no longer just a payment acceptance device. It is an operational endpoint through which security, data, risk management, and customer interaction increasingly converge.

This paper examines how the role of payment acceptance device technology is evolving, with a particular focus on Europe and the DACH (Germany, Austria, Switzerland) region. Rather than framing the future as a choice between software and hardware, it introduces a **layered acceptance model**, in which SoftPOS, Mini-POS, and Enterprise POS play distinct and complementary roles within merchant environments from hospitality to retail.

The analysis also highlights why outcomes are increasingly shaped by execution realities — including platform governance, certification discipline, lifecycle management, and local market structure — rather than by innovation narratives alone. These factors are especially visible in the DACH region, where scale, regulatory sensitivity, and scheme complexity expose the limits of simplified assumptions.

This paper is intended as an independent contribution to the discussion on the future of payment acceptance technology at the POS. It does not promote specific vendors or solutions, but offers a framework for understanding how acceptance infrastructure is evolving, and what that evolution means for acquirers, ISVs, merchants, and the wider payments ecosystem.

Alex Rolfe, CEO, Payments Industry Intelligence

The future of POS in Europe is layered, not binary. What is changing is not the relevance of POS, but its architecture.

Software-only acceptance, compact cloud-enabled terminals, and enterprise-grade POS systems are expanding into distinct roles, shaped by risk tolerance, regulatory expectations, and business models.

In DACH markets in particular, execution discipline — certification, governance, and platform alignment — determines which solutions scale. Software-only acceptance, compact cloud-enabled terminals and enterprise-grade POS systems are each expanding into distinct roles, shaped by differing risk tolerances, regulatory expectations and business models. Attempts to frame the market as a simple transition from terminals to software overlook this structural reality.

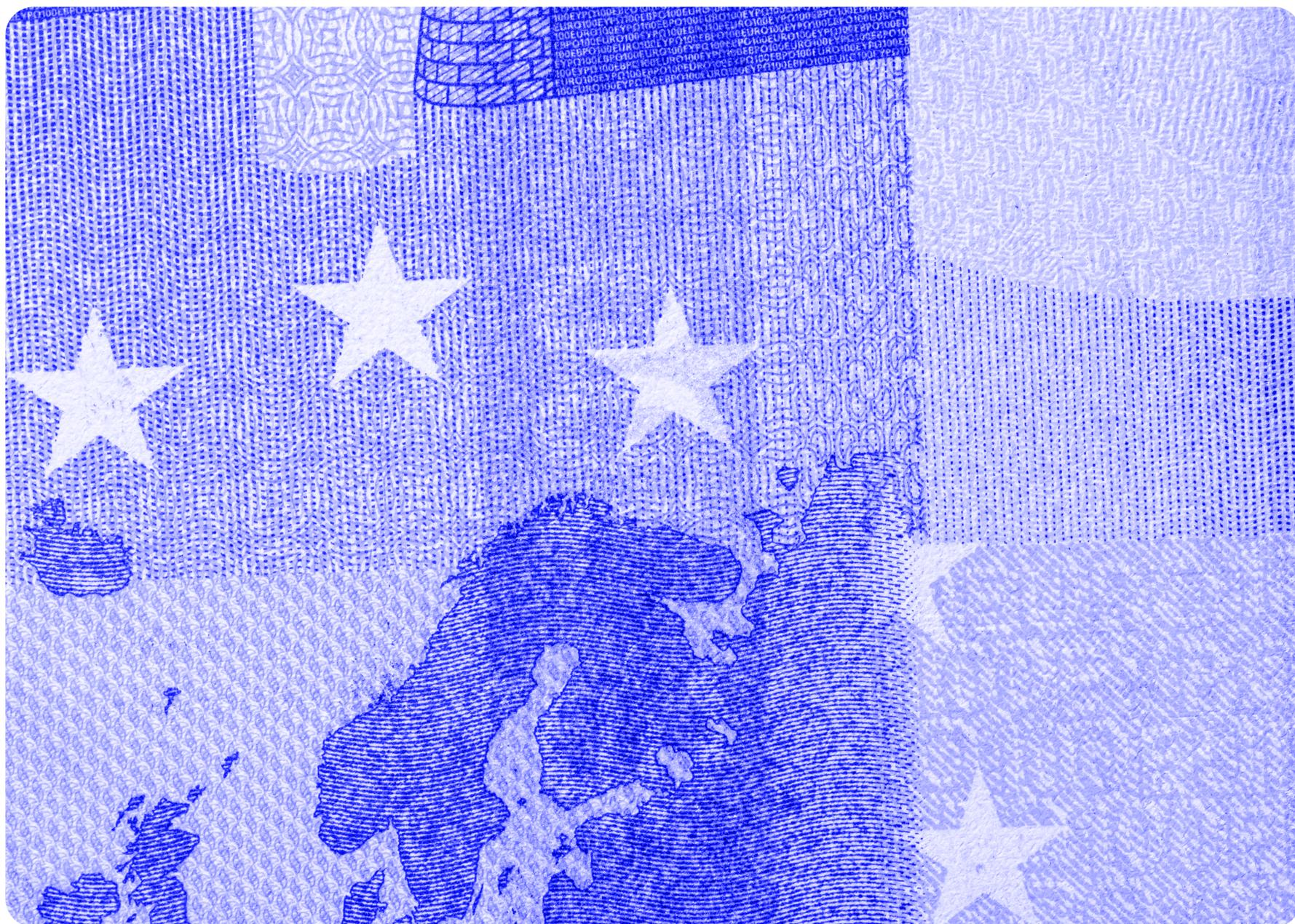
Nowhere is this more apparent than in DACH markets. Here, POS evolution is governed less by technological ambition than by execution discipline. Certification sequencing, platform alignment, security governance and local proof determine which solutions scale. Vision without operational credibility does not travel far.

For acquirers, PSPs and platform owners, POS strategy has therefore shifted. The central challenge is no longer device selection, but infrastructure design: how to build acceptance estates that balance reach, control and resilience over long lifecycles in increasingly complex payment environments.

This white paper is accompanied by three countries reports on the Germany, Austria and Switzerland as collectively defined as DACH throughout.

The aim of this paper, and those country reports, is to highlight that:

- 1** POS is becoming infrastructure, not commodity hardware, as card usage, data intensity and security demands rise.
- 2** The future of POS is layered: SoftPOS expands reach, Mini-POS expands economics, and enterprise POS anchors resilience and intelligence.
- 3** Execution matters more than vision in DACH, where certification, governance and platform access determine scale.
- 4** Winning strategies prioritise architecture over form factor, treating POS as a long-term, governed system rather than a tactical endpoint.



The European POS market is emerging from a prolonged reset after several years of cautious, incremental investment.

That phase is ending. Card usage across Europe has resumed its upward trajectory, with more than half of retail transactions now contactless and consumers increasingly expecting seamless acceptance across formats and locations. At the same time, competitive pressure and cost scrutiny are forcing merchants to ask more of their POS systems: faster insights, greater flexibility, fewer rigid components and better integration with the rest of the business.

As a result, POS is being reframed. No longer just a checkout tool, it is increasingly treated as part of a digital backbone—a system that connects payments, inventory, staffing, fraud controls and customer intelligence. Checkout itself is becoming more fluid, occurring across devices and spaces, and increasingly designed to disappear into the flow of operations rather than interrupt it.

“This shift marks a decisive break with the past. POS is no longer a device decision. It is an infrastructure commitment.”

Why POS Matters More Now — A European View

The Post-Pandemic Reset

The renewed importance of POS is grounded in structural usage trends. Card payments by both volume and value continue to grow across Europe, with contactless usage accelerating sharply since 2022.

In H1 2025, card payments accounted for 57% of total non-cash transactions in the euro area, outstripping other payment types such as credit transfers and direct debits.

In that period, the total number of non-cash payment transactions was 77.7 billion, with a combined value of €116.0 trillion, with cards dominating the volume share of these transactions.

Card acceptance devices continued to proliferate: at the end of H1 2025 there were approximately 24.7 million POS terminals in the euro area, a 24 % year-on-year increase, with 93% capable of contactless payments.

Even traditionally cash-heavy markets such as Germany are experiencing sustained increases in card acceptance and usage, albeit from a lower base.

In parallel, POS acceptance continues to expand. Terminal density is rising across most European markets as merchants respond to consumer expectations and regulatory nudges.

By mid-2024 there were about 20.8 million POS terminals in Europe— up more than 10 % year-on-year. Of these, 86 % accept contactless payments, underscoring broad adoption of modern POS capabilities.

This combination—rising usage and widening acceptance—has reinforced POS as the physical anchor of digital payments.

POS as an IoT and AI Edge Node

Modern POS systems increasingly function as edge computing platforms.

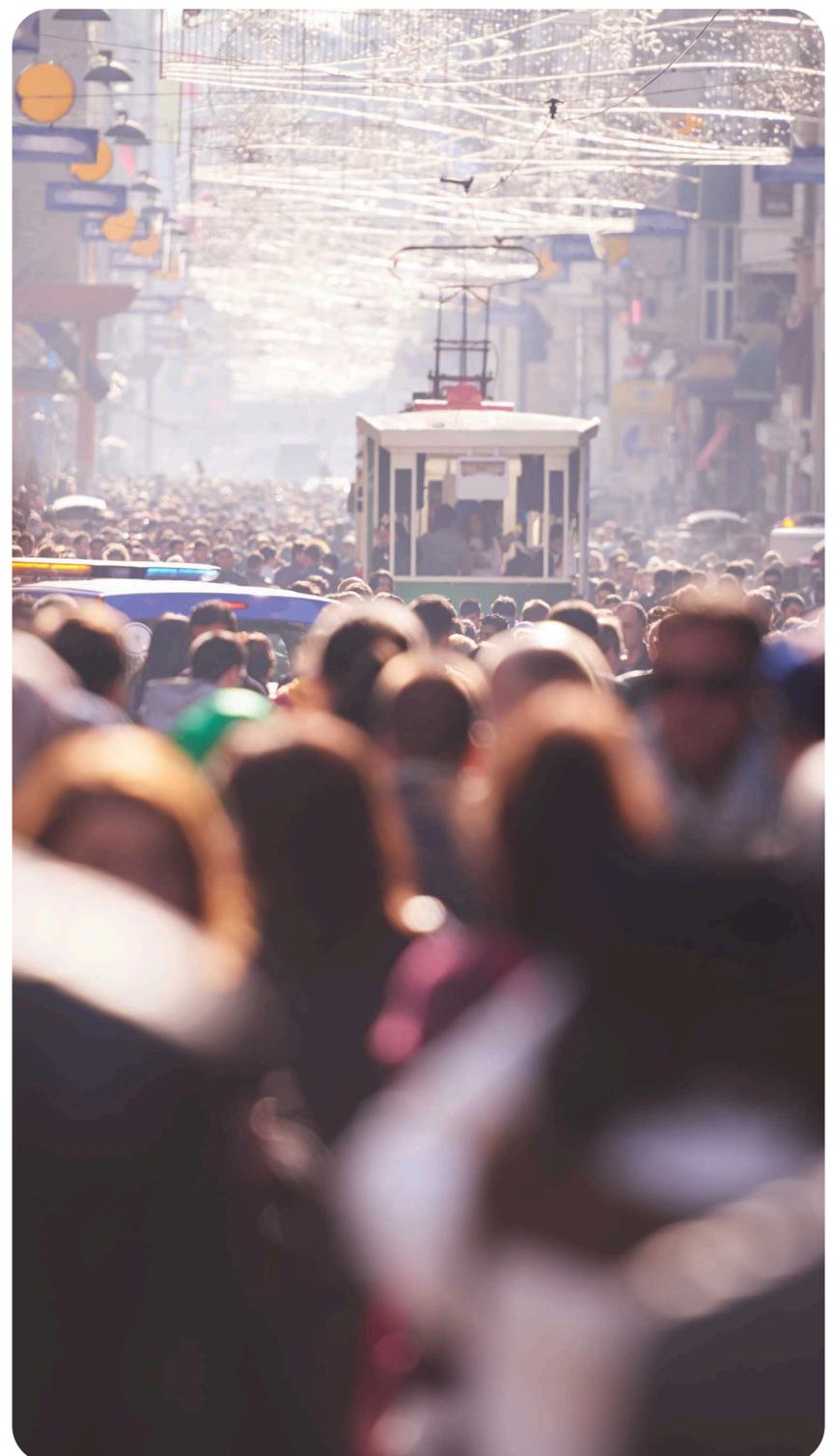
In this role, POS becomes one of the most complex and sensitive IoT endpoints in the retail environment. It sits at the intersection of payments, personal data, business intelligence and operational control. Compromise does not simply enable fraud—it can halt operations entirely.

A recent study showed the impact, across the UK, failures in payment systems are estimated to put £1.6 billion in annual sales at risk. In France, the figure rises to €1.9 billion.

This reality explains why POS security, governance and resilience have moved from compliance concerns to board-level issues.

Risk and Resilience as Primary Drivers

The most damaging incidents affecting merchants and acquirers today are not isolated fraud events, but systemic disruptions: outages, malware propagation and data exposure. POS estates are therefore increasingly treated as continuity assets—infrastructure that must be engineered for reliability, not just functionality.



The Future POS Architecture: Layered, Not Binary



Much industry commentary frames the future of POS as a contest between software-only acceptance and traditional terminals. This framing is misleading.

In practice, European POS estates are evolving toward layered acceptance architectures. SoftPOS expands reach and lowers barriers to entry. Mini-POS reconciles cloud economics with merchant-grade security. Enterprise POS anchors high-risk, high-volume environments where uptime and governance are non-negotiable.

This layered model reflects economic and regulatory reality. Different use cases demand different trade-offs between flexibility, control and risk. The future of POS lies not in replacement, but in composition.

SoftPOS: Expanding Reach — With Structural Limits

SoftPOS has played a meaningful role in expanding acceptance, particularly among micro-merchants, mobile sellers and temporary retail formats. By turning consumer devices into payment acceptance points, it reduces upfront costs and accelerates onboarding.

Yet its limitations are structural. Built on consumer hardware and operating systems, SoftPOS inherits broad attack surfaces, inconsistent patching, and high device churn, limiting its suitability for regulated or high-trust environments.

In DACH markets, this distinction is well understood. SoftPOS is valued for flexibility and access, but rarely trusted for core checkout operations. It expands reach—but it does not replace merchant-grade POS where trust and governance matter.

Mini-POS: Expanding Economics Without Sacrificing Control

Mini-POS has emerged as a structural response to this gap. It is not a compromise between “real terminals” and SoftPOS, but a category designed to combine cloud economics with hardware-anchored security.

By retaining secure roots of trust, controlled operating environments and auditable certification paths, Mini-POS devices offer predictable fleet behaviour while enabling centralised lifecycle management and rapid deployment. They are particularly well suited to mobility-led use cases, assisted selling and multi-location SMB environments.

In DACH markets, Mini-POS is increasingly viewed as the safest modernisation path: a way to adopt cloud-native models without abandoning governance or privacy expectations. Its appeal lies as much in what it preserves as in what it enables.

Enterprise POS: Expanding Intelligence and Resilience

Enterprise POS systems are often mischaracterised as legacy infrastructure. In reality, they remain the anchor layer of modern POS estates.

As POS becomes more intelligent and data-driven, the need for trusted, resilient endpoints increases rather than diminishes. Enterprise POS provides high-integrity data, supports offline and degraded-mode operation, and integrates deeply with acquirer, scheme and enterprise systems. It enables the intelligence layered above it.

SoftPOS expands reach. Mini-POS expands economics. Enterprise POS expands resilience...and let's not forget how important consumer trust is, especially in the German market.

Android POS: Choosing a Platform, Not a Device

Android has become the dominant operating environment for modern POS, but it brings responsibility as well as flexibility. Android POS is not a feature choice; it is a platform commitment that requires disciplined patching, OS governance and lifecycle ownership.

In markets such as DACH, where certification and compliance expectations are high, superficial Android implementations quickly become liabilities. Flexibility without strong guard rails and governance can quickly turn to fragility.

AI, Biometrics and the POS Intelligence Surface

POS data increasingly feeds AI systems for fraud detection, demand forecasting and personalised experiences. These capabilities depend on data integrity and device trust, reinforcing the importance of secure POS foundations.

Biometrics illustrate the limits of technological readiness. While promising for premium and high-security use cases, biometric payments face cultural and regulatory resistance in privacy-sensitive markets such as Germany. Adoption will depend on explicit value exchange and voluntary participation. Trust, as we have all learned in the payments industry, must be earned.

From Devices to Strategic Infrastructure

Emerging in Europe, is a structural reordering of how payment acceptance is designed, governed and operated.

The evidence— and most clearly in DACH — points to a layered POS model becoming the dominant architecture.

SoftPOS is expanding the edge of acceptance, lowering barriers for micro-merchants and mobile use cases. Mini-POS is absorbing the fastest-growing merchant-grade use cases, reconciling cloud economics with security and certification discipline. Enterprise POS continues to anchor environments where resilience, governance and data integrity are non-negotiable. These layers are not competing futures; they are complementary roles within a single acceptance estate.

What determines success is not which layer a provider champions, but how well those layers are integrated and governed over time. As POS becomes more connected, more data-rich and more security-critical, the real differentiator shifts from form factor to execution capability. Operating discipline — patch cadence, certification sequencing, platform alignment, lifecycle management — becomes the hard currency of scale.

This is why DACH matters as a bellwether. In markets where privacy sensitivity, regulatory scrutiny and platform gatekeeping are high, vision without execution does not scale.

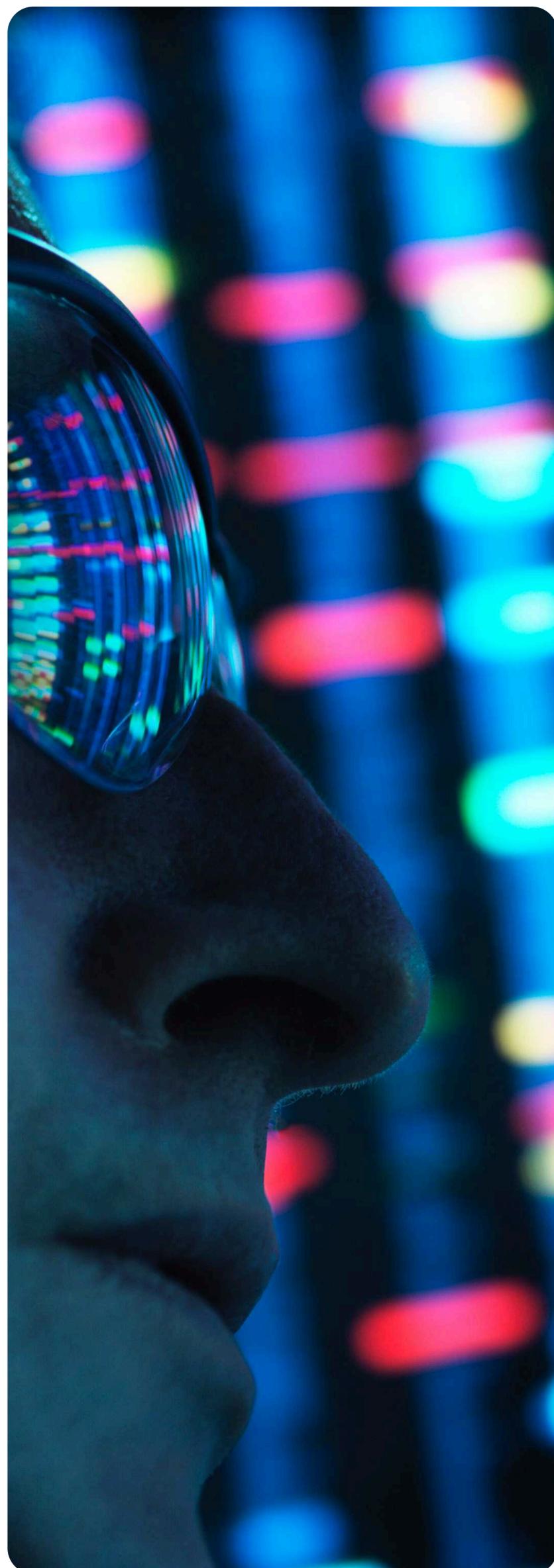
Solutions that look compelling in isolation fail if they cannot be certified, maintained and operated predictably across acquirer and ISV ecosystems. Conversely, approaches that prioritise governance, proof and long-term ownership gain disproportionate trust.

For acquirers, PSPs and platform owners, the implications are practical and immediate. POS strategy can no longer be reduced to device selection or short-term cost optimisation.

It requires architectural thinking: deciding where each acceptance layer belongs, how risk is managed across them, and how data and intelligence flow without compromising security or resilience. It also requires a willingness to invest ahead of revenue — in certification, platform capability and local execution — rather than relying on global scale or feature checklists.

POS is not disappearing from European commerce. It is becoming infrastructure: software-defined, data-intensive and operationally critical.

The organisations that succeed will be those that treat it accordingly — not as a commodity endpoint, but as a governed system designed to endure.



Thanks for reading