



SMB Software Leader · SaaS / Retail Technology / POS Software - DACH · Kehlbach, Rhineland-Palatinate, Germany (30+ countries) · Ongoing

SMB Software Leader: 30 years of POS legacy extended to Android and cloud, 10,000+ installs and a 9.4/10 user rating.

30+ years

of POS heritage extended to cloud and mobile

CLIENT CONTEXT

The client has been a trusted name in German point-of-sale software since 1993. For three decades, the company built its reputation on a Windows-based POS system known for stability, configurability, and deep integration with the operational realities of restaurants, boutiques, and bakeries across the DACH region.

With products spanning POS terminals, hotel property management, and online ordering platforms, the enterprise serves a broad SMB customer base across 30+ countries through a network of 100+ cash register resellers in Germany alone. The business is founder-led and self-financed, with a team of 11 to 50 people.

THE CHALLENGE

The client's Windows-based POS was a product built for a world that was changing around it. As the market shifted toward mobile, cloud, and real-time operations, a new category of customer emerged, including food truck operators, pop-up retailers, festival vendors, quick-service restaurants, and low-staff environments that needed portable, hardware-flexible POS solutions. These customers had no patience for Windows-only installations, fixed hardware, or disconnected back-office systems.

The business challenge was direct, as the company was ceding new market segments to competitors who had been born mobile-native. Young business owners, who represent the next generation of the enterprise's core market, saw a Windows-based POS as legacy technology, regardless of how capable it actually was.

The technical challenge was equally demanding. Building a cloud-based, hardware-agnostic POS system meant running reliably on low-memory Android devices while maintaining connectivity with a heterogeneous set of peripherals, such as cash drawers, barcode scanners, receipt printers, weighing scales, and serial-port legacy devices. It also meant designing for real-time cloud data handling with graceful offline sync, because connectivity in high-traffic retail and hospitality environments cannot be assumed.

Building this capability in-house posed organizational risks. The company's core strength was its Windows platform and its customer

relationships, and reorienting internal engineering capacity toward a greenfield mobile build risked undermining both. The client needed a technology partner with the capability to build the new platform without pulling focus from the existing business.

THE APPROACH

Gradion partnered with the client to build a parallel mobile-first product line, which was not a replacement for the Windows platform, but an extension of it into new markets and use cases.

The architectural foundation was Android-native. The app was built to run smoothly on low-end consumer-grade Android hardware, addressing the cost sensitivity of the company's SMB customers who could not absorb expensive proprietary terminal investments. The interface was redesigned from the ground up for touch, providing a minimal, intuitive experience optimized for fast transactions in high-pressure environments.

Peripheral connectivity required systematic engineering. Gradion built plug-and-play support for cash drawers, barcode scanners, receipt printers, and serial devices, covering IP, Bluetooth, USB, and legacy serial port protocols. Weighing scale integration extended the platform into food retail contexts where weight-based pricing is essential.

The backend was designed for cloud-native operation using PHP, MySQL, and MongoDB, which was a stack chosen for operational flexibility and the enterprise's existing infrastructure context. Real-time data handling was paired with a robust offline sync architecture, ensuring that a loss of connectivity during a peak trading period did not stop the terminal.

Self-service kiosk flows were built into the architecture from the outset, opening the door to quick-service restaurant configurations and reducing staff dependency in high-volume environments.

On the infrastructure side, Gradion deployed AWS cloud services tailored to the company's evolving roadmap. Ongoing collaboration covered bug fixes, feature iterations, German regulatory compliance, such as the Technische Sicherheitseinrichtung (TSE), and performance tuning as the Android user base grew.

RESULTS

10,000+
Android installs

9.4/10
OMR rating

10,000+ Android installs: Demonstrating rapid adoption across the company's target SMB segments.

9.4/10 OMR rating: A strong user satisfaction signal for ease of onboarding and day-to-day reliability.

Expanded market reach: New segments, such as food trucks, pop-ups, and QSRs, and geographic expansion into Austria were enabled by the mobile/cloud transition.

Diversified product portfolio: The enterprise now offers legacy Windows POS, cloud-based POS, mobile Android POS, and self-service kiosk modes from a single company.

Mobile + offline capability: Android POS with offline sync empowers businesses in low-connectivity environments where fixed installations are impractical.

Zero forced migration: Windows POS and Android POS are running in parallel, which means no existing customer was displaced.

Future-ready infrastructure: AWS cloud architecture enables continuous feature development without overwhelming the internal team.

TSE compliance: German fiscal security requirements were met, protecting the client's position in the regulated domestic market.

SERVICES DELIVERED

- Product modernization
- Mobile-native Android UI/UX design
- System architecture upgrade
- Peripheral hardware integration
- Cloud infrastructure deployment
- Self-service kiosk development
- TSE compliance implementation
- Strategic technology partnership

TECHNOLOGY STACK

- Android (native mobile POS)
- PHP, MySQL, MongoDB (backend)
- AWS (cloud infrastructure)
- Bluetooth / USB / IP / Serial peripheral integrations
- Offline sync architecture

Ready to discuss a similar challenge?

Gradion works with software companies, fintechs, and industrial operators across DACH, Southeast Asia, and Africa. ISO 27001 certified. 23 years of delivery in regulated and high-growth environments.

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