



KOALA Self-scanning Shopping App Turns to Code's CortexDecoder Barcode Scanning SDK

Kaufen
Ohne
Aufwand &
Langes
Anstehen

Loosely translated from German, this acronym for [KOALA](#) means “buy without hassle & long queues,” and it’s precisely what this self-scanning smartphone app offers.

“That’s the main focus for us and customers,” explains Christoph Schönfelder, KOALA CEO. “KOALA offers digital shopping while still being at the physical store—the point-of-sale (POS).”

KOALA is part of a pack of self-checkout apps that found favor in the late 2010s because users could skip checkout lines by scanning and paying for items via smartphone. However, the 2020 coronavirus pandemic propelled the apps’ popularity as consumers sought contact- and line-free shopping. Catering to different retailers, most apps offer a mix of POS hardware fixtures (such as payment kiosks) and smartphone-based barcode scanning. And each app offers conveniences like integration into loyalty point programs, fraud detection/prevention, and coupon redemption.

However, Schönfelder notes, KOALA stands out for what it *doesn't* offer.



Figure 1: “Start your shopping” with KOALA. Scan as you go and pay virtually with KOALA. No lines, no lost time.



“For KOALA, right now, we aim to set up with zero hardware,” he explains. “Everything must happen on the smartphone and other devices so that the setup is more economical.”

The other benefit of KOALA’s hardware-free approach?

“It minimizes time to market or the time from the first contact [with a retailer] to the initial prototype,” Schönfelder adds.

KOALA CLIMBS HIGHER

Billed as the first full self-scanning solution, KOALA debuted in late 2019 at independently owned stores and select supermarket franchises.

“Until Germany’s first COVID-19 lockdown, we were pretty successful,” Schönfelder recalls. “We were busy setting up new stores in our region of metro Hamburg.”

Then the 2020 pandemic dramatically altered retail. However, KOALA had just begun climbing beyond the low-hanging fruit of traditional retail (like grocery stores) to serve niche verticals. One of their first post-lockdown forays outside grocery stores was Europe’s endearingly eclectic [Tchibo Coffee stores](#).



Tchibo’s esteemed coffees lure customers, but they stay and shop the Germany-based chain’s merchandise, which changes weekly. Products that KOALA must successfully scan range from coffee in shiny polyethylene terephthalate (PET) bags to stylized barcodes on seasonal décor. Tchibo’s diverse products and weekly turnover showcase both the simplicity of KOALA’s hardware-free platform and its barcode scanning performance. Scanning accuracy is crucial because any firm with a physical checkout is a potential KOALA customer.



“The use case, in the end, is always the same,” Schönfelder rationalizes. “Customers take out products, scan barcodes, and pay via KOALA, where we manage all the different payment providers.”

Given KOALA’s mission to provide hassle-free shopping, particularly in stores with varying merchandise, any barcode scanning software the app uses must be superior.

KOALA CRACKS THE CODE WITH CORTEXDECODER

Early on, KOALA’s development team realized that an open-source or freeware barcode scanning module wouldn’t help the app provide hassle-free shopping. Scalable soft-

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scan licensing was also crucial. KOALA initially worked with a large firm having a well-regarded vision and computing platform; as KOALA's developers worked with their barcode scanning technology, they realized its licensing wouldn't fit their business model.

"Their scanning module is 100% powerful, but at the moment, I don't believe it's ready for scalability within retail," Schönfelder summarizes.

KOALA discovered Code Corporation's [CortexDecoder](#) software development kit (SDK), which claims to scan any barcode type on any surface. So Schönfelder's group evaluated the SDK's barcode scanning capabilities based on:

- Size—Could it read large barcodes on family packs and micro ones on snacks?
- Environment—How would overhead lighting affect scans?
- Optics—Would mirroring effects degrade scan accuracy?
- Integrity—Could it read damaged barcodes on common materials?
- Barcode types—Could CortexDecoder process E Ink electronic barcodes?
- Quantity—Could it scan two barcodes on one box (like those on cosmetics)?

"[With CortexDecoder] the quality is good, the performance is perfect, and the pricing fits," Schönfelder recalls.

CortexDecoder's offline scanning capability was a bonus for KOALA—while the app doesn't need it now, offline scanning could add later. Offline scanning, Schönfelder believes, might benefit areas with weak cellular or Wi-Fi networks, such as transit hubs.

Ultimately, CortexDecoder's consistent performance freed KOALA to focus on its strengths.

"We focus 100% on the mobile payment side, whereas our competitors have use cases out there with a physical self-checkout terminal," he explains. "From our perspective, it [physical checkout] doesn't save any time or effort when it comes to customer experience, so that's why we set up everything around mobile payment."

CUDDLE UP WITH KOALA

KOALA's software-only approach has been gaining appeal among firms catering to time-strapped consumers or offering membership-based services. Rushed shoppers within Europe's airports use KOALA to scan and purchase bargains before takeoff in

[Heinemann's duty-free shops](#). In addition, KOALA is serving coworking spaces; users scan to pay for services like check-in and goods like printer usage. KOALA's software-only model is also winning business in mobile snacking, e.g., smart fridges. Motorists are likely next to benefit from KOALA's hygienic payment for gas and services.



Figure 2: KOALA integrates with loyalty point programs, performs fraud detection/prevention, and offers coupon redemption.

Despite KOALA's diversifying customer base, traditional retailers (like grocers) are enjoying greater profits thanks to the app.

"The average cart size within the KOALA app is 15–20% above the offline checkout. When we go out to the shops and check carts, they're loaded," Schönfelder beams.

Pandemic or not, it's no secret that grocery shoppers want to be in and out of stores as quickly as possible. In fact, Schönfelder's team observed KOALA users taking time-saving behaviors a step further.

"Customers set up their bags in the trolleys so they can pack everything up properly [as they scan] and just walk out," he reports. "At the very end, it's convenience."

And convenience is why businesses will keep cuddling up with KOALA.

"It's the full package," Schönfelder says.

Interested in simplifying your operations with smartphone-based check-in or line-free shopping for your customers? Contact KOALA here info@koalaapp.de or here <https://www.koalaapp.de/>.

Ready to upgrade your app or software with enterprise-grade data capture? Contact Code: <https://codecorp.com/>.

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