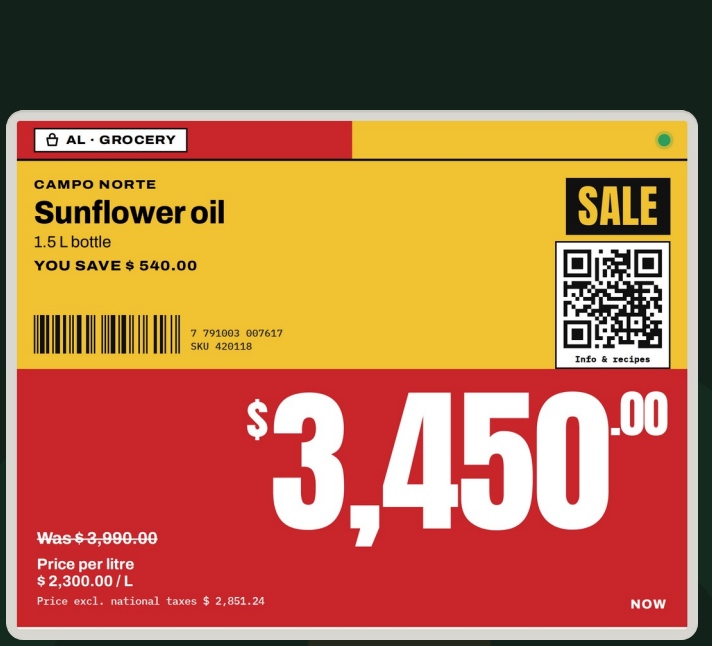
oper | Technology by Zkong

COMMERCIAL PROPOSAL · SUPERMARKETS AND HYPERMARKETS

The shelf that sells

How to turn the shelf into a sales channel with electronic shelf labels, and a validation pilot to measure it in your own chain



OperUno

Official Zkong distributor · September 2026

The operating system of the physical store.

THE IDEA IN ONE LINE

The electronic label is not just for changing prices: it is a channel to sell

With a connected shelf, a commercial decision reaches every store in minutes, runs on its own and gets measured. This proposal turns that capability into concrete actions for supermarkets and hypermarkets in Argentina.

2 days → seconds

Time to apply a price change at Walmart US with electronic shelf labels

Walmart, 2024 [C]

42,750 h/year

Staff hours freed up at Alcampo (Spain), 84 supermarkets

Interempresas, 2026 [T]

−90%

Price-change time at Supermercados Brasil (1 store, 3,000 labels)

SA+ Varejo, 2024 [T]

Changing a paper price is a chain of 6 manual tasks

1 — Decide
Purchasing or Marketing sets the price or promotion

→

2 — Print
Someone generates and cuts the tickets for each store

→

3 — Distribute
Tickets travel to every store and every aisle

→

4 — Swap
A shelf stocker walks the aisle and replaces the paper

→

5 — Check
Nobody checks in real time whether it is right

→

6 — Charge
If shelf and checkout don't match: complaint or fine

⏱️ **hours · days**

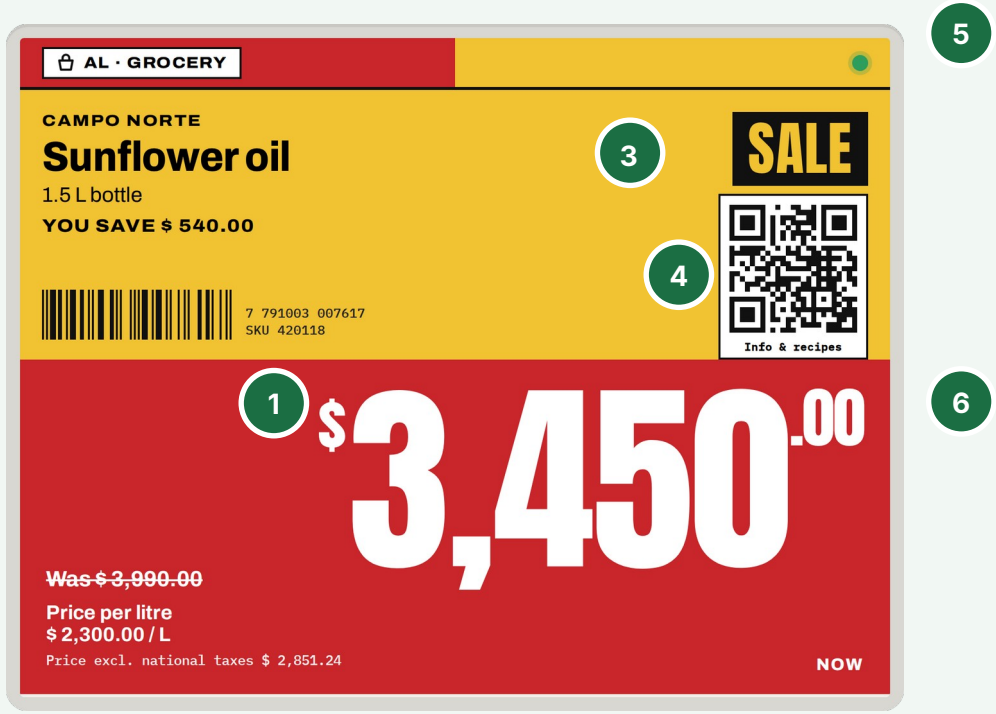
With ESL: decide → the platform publishes → the shelf updates itself → measure

The cost goes beyond paper: it is the delay and the error between the decision and the shelf.

In OperUno's cost model, paper is ~2% of the total cost of manual labelling; the rest is margin lost to errors and staff hours (Dossier OU-DOL-01, estimate).

What an ESL is: a small screen that replaces the paper ticket

ESL (Electronic Shelf Label): an e-ink screen like an e-reader's. It reads in ambient light, uses very little power and updates remotely.



ILLUSTRATIVE

1 Final price
Updated from the platform in seconds

2 Unit price and price excl. taxes
The fields required by Argentine Res. 4/2025

3 Promo colour
Black, white, red or yellow ink to highlight promotions

4 QR / NFC
Shoppers tap their phone to see info, a recipe or a bundle

5 LED
A flashing light that guides staff to that product

6 Battery
Zkong states 5 to 10 years of life

Features documented by Zkong at zkong.com (LED, NFC, QR, colours, battery). Illustrative prices.

OperUno × Zkong: global manufacturer technology, local implementation

Zkong · manufacturer

- Founded in 2006 in Hangzhou (China)
- Reports presence in 60+ countries and 200,000+ stores
- ISO 9001 and ISO 27001 certified
- Published customers: ICA and COOP, Carrefour, Dr. Max, IKEA, CONAD

OPER 1-E-SERIES

Electronic labels from 1.5" to 13.3", with LED and NFC depending on model

OPER 1-T-SERIES

Handheld terminals (PDA) for store staff

AP ZAP

BLE / Wi-Fi access points covering the store

Platform

ZKONG ESL Retail Cloud, in the cloud or on-premise

LCD screens

Sparkle and Legendary series for shelves and signage

OperUno · official distributor

- Site survey and turnkey implementation
- Training for Purchasing, Marketing and Operations
- Import, customs and certification handled in-house
- Local warranty, RMA and technical support

Zkong data: zkong.com (company profile, case studies). Reach figures are as stated by the manufacturer [F].

SEGMENT: SUPERMARKETS (APPLIES TO ALL)

01 Shelf = Checkout

AREAS

Operations · Management

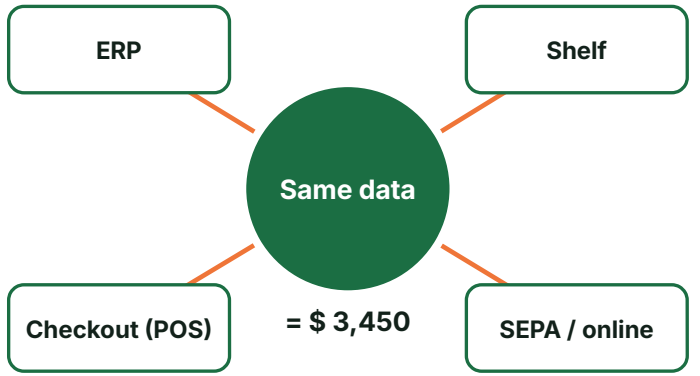
Result: Zero differences between shelf, checkout and SEPA: fewer fines and fewer complaints.

THE SITUATION

A shopper picks up oil marked $3,450; at checkout it rings up at $3,890. She complains, the supervisor is called, a queue builds. Had she been an inspector, the fine would come anyway.

HOW IT SOLVES IT

Shelf, checkout and the price reported to SEPA (Argentina's price-reporting system) come from the same data. The platform takes the price from the ERP/POS and puts it on the label in the Res. 4/2025 format; its log records what was shown and when.



STEP BY STEP

1. **IT** — connects ERP and POS to the platform
2. **Legal** — approves the label template
3. **Platform** — applies it to every SKU
4. **Operations** — checks 50 random SKUs with the PDA
5. **Management** — tracks the match indicator

SAMPLE RULE

No promotion goes live at checkout unless the label has confirmed the change; weekly check of 50 random SKUs per store.

GLOBAL CASE

ARS 1,125,000 fine to a supermarket in Mendoza for a shelf–checkout mismatch; appeal rejected. (MinutoYA, 2026 [T])

KPI · HOW IT IS MEASURED

% shelf–checkout match — PDA sampling of random SKUs

Price complaints per month — customer service log

SEGMENT: SUPERMARKETS

02 Fresh Without Waste

AREAS

Purchasing · Operations · Management

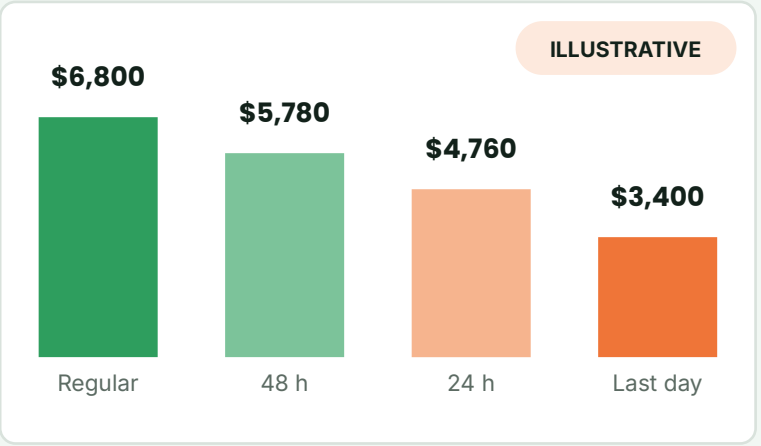
Result: Less product thrown away and margin recovered on perishables.

THE SITUATION

Friday night: 40 chicken trays expire on Sunday. On Saturday someone puts stickers on by hand, late and with no rule; on Sunday half are thrown away.

HOW IT SOLVES IT

The platform applies markdown rules by remaining shelf life: the label price drops by itself at each step and the colour highlights the offer. Expiry comes from the stock system or is entered by staff with the PDA.



STEP BY STEP

1. **Fresh dept.** — sets the markdown ladder by category
2. **IT** — loads the rules into the platform
3. **Stocker** — records batch and expiry with the PDA
4. **Platform** — lowers the price at each step
5. **Operations** — compares waste with the previous month

SAMPLE RULE

Chicken tray: $6,800 → −15% at 48 h → −30% at 24 h → −50% on the last day.

GLOBAL CASE

Albert Heijn (Netherlands) applies automatic expiry markdowns with electronic shelf labels. In dynamic expiry-markdown pilots: −32.8% waste. (FoodPrint [T])

KPI · HOW IT IS MEASURED

Waste in $ and % of fresh sales — write-off report, before vs. during

Category margin — ERP

SEGMENT: SUPERMARKETS WITH A LOYALTY PROGRAMME

03 Loyalty Club on the Shelf

AREAS

Marketing · Management

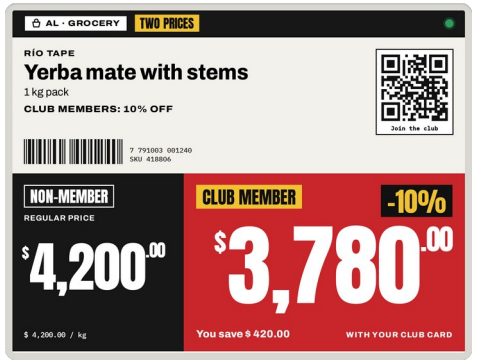
Result: More active members and more repeat purchases.

THE SITUATION

The loyalty programme has thousands of members, but the benefit is invisible on the shelf: shoppers don't know that members pay less.

HOW IT SOLVES IT

The label shows two prices, regular and member, plus a QR code to join. The checkout applies the member price once the shopper is identified. Zkong documents loyalty-programme connection in generic terms: the integration is validated in the pilot.



ILLUSTRATIVE

STEP BY STEP

1. **Marketing** — chooses the SKUs with a member price
2. **IT** — the POS applies the price when the member is identified
3. **Platform** — uses the two-price template
4. **Checkout** — invites shoppers to join via the QR
5. **Marketing** — measures sign-ups and repeat purchase

SAMPLE RULE

Yerba mate 1 kg: $4,200 regular price · $3,780 member price.

GLOBAL CASE

No published measured case; it is measured in the pilot.

KPI · HOW IT IS MEASURED

Member sign-ups per week — CRM

% of sales identified to a member — POS

SEGMENT: SUPERMARKETS

04 Shelf Media

AREAS

Marketing · Purchasing · Management

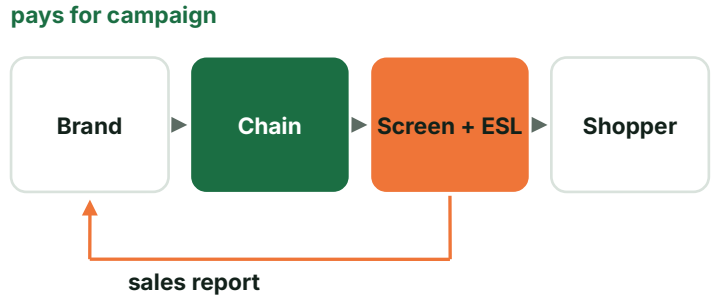
Result: A new revenue stream: brands paying for measurable in-store visibility.

THE SITUATION

Brands invest in digital advertising, but in the physical store space is sold with cardboard signs that nobody measures.

HOW IT SOLVES IT

Shelf LCD screens (Zkong Sparkle and Legendary series) and the label's message area are scheduled by campaign, store and time slot. The chain sells the space and reports to advertisers together with OperUno: Zkong does not document an advertising module.



STEP BY STEP

1. **Sales** — builds the rate card by space and week
2. **Brand** — buys the campaign
3. **Marketing** — loads the content into the platform
4. **Platform** — schedules it by store and time slot
5. **Sales** — delivers a sales report vs. the prior period

SAMPLE RULE

"Drinks aisle" package: 4 weeks, 20 stores, screen plus featured label.

GLOBAL CASE

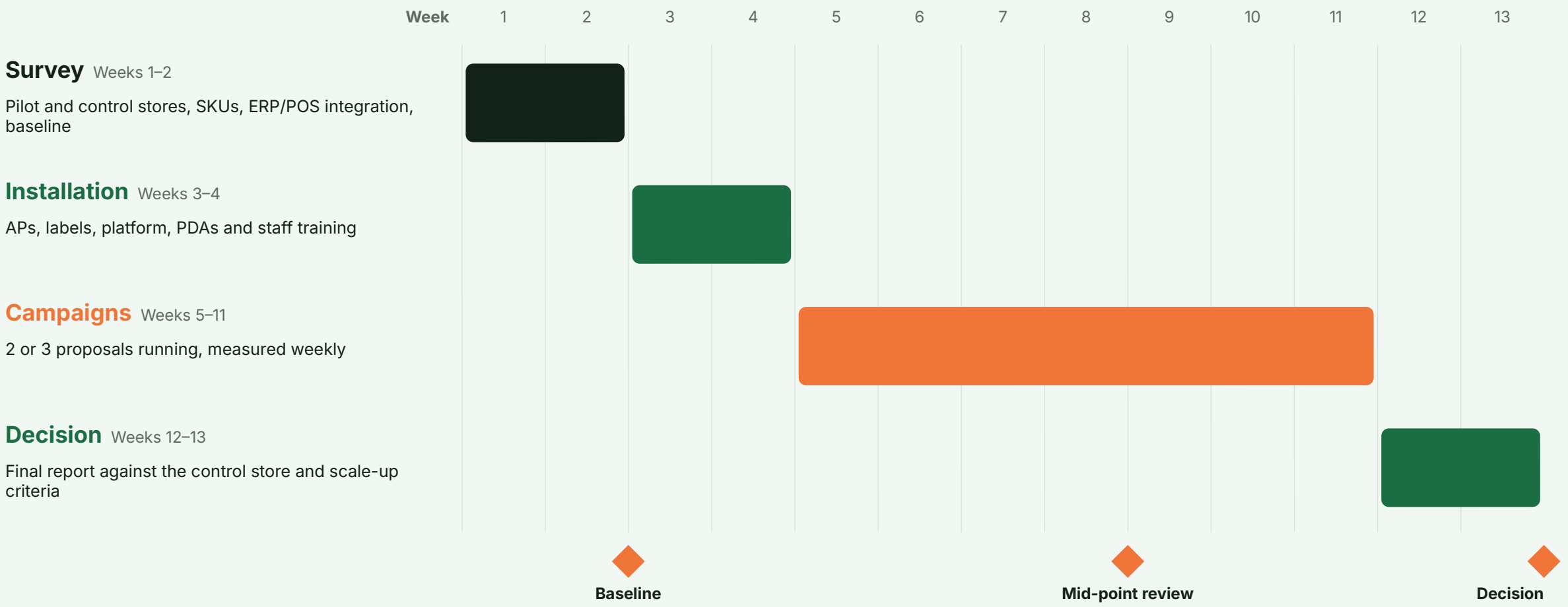
Global retail media spend: US$196.7 bn in 2026 (WARC); in Latin America it will double between 2025 and 2029 (eMarketer). (Estamos en Línea, Sep-2026 [T])

KPI · HOW IT IS MEASURED

Media revenue per store — billing to brands

Campaign product sales vs. control — POS

90-day validation pilot: measure before you invest



60 days is possible in small stores or with simple integration; 90 days is the reference plan.

WHAT EACH AREA GAINS

One infrastructure, four sets of benefits

Marketing

- Promotions that start and end on the dot
- Campaigns by time slot, zone or member
- Space that can be sold to brands
- Every action measured

Purchasing

- New price lists on the shelf the same day
- Rule-based markdowns for fresh and slow-moving stock
- Zone pricing without losing margin
- Co-funded campaigns with proof of execution

Operations

- No more re-pricing shifts
- LED-guided replenishment and picking
- Fewer complaints at checkout
- PDA checks in minutes

Management

- Compliance with Res. 4/2025
- Single KPI dashboard
- Investment decided with your own data
- Foundation for retail media and AI pricing

Everyone uses the same platform; each area tracks its own results on the dashboard.

Let's make the shelf “sell”

A validation pilot in your own chain, with Zkong technology and OperUno implementation.



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The operating system of the physical store.