

# BOS – Promotion Engine

## HOW PROMOTIONS, CAMPAIGNS & LOYALTY WORK

### (Official)

Rule-driven, Auditable, Customer-controlled

#### 1. Core Doctrine

The BOS Promotion Engine treats promotions as rule sets that modify pricing transparently. Promotions are controlled, auditable, and never allowed to break pricing, accounting, or tax truth.

#### 2. Role Within BOS

The Promotion Engine operates between POS and Pricing across Retail, Restaurant, Online POS, and Remote Cart channels, feeding Accounting, BI, and AI advisory layers.

#### 3. Promotion Object Model

Each promotion is defined by an identifier, rule set, validity window, scope, limits, and lifecycle state. Promotions are never hard-coded to single products.

#### 4. Scope & Targeting

Promotions may target businesses, branches, products, categories, customer segments, or sales channels. Cross-business promotions are not permitted.

#### 5. Rule Framework

The engine supports composable rule types such as percentage discounts, fixed reductions, first-N customers, time windows, volume thresholds, and bundles. Rules may be combined safely.

#### 6. Limits & Safety Controls

All promotions enforce usage limits, budget ceilings, customer caps, and stackability rules. Negative pricing and uncontrolled losses are prevented by design.

#### 7. Loyalty & Customer Control

Loyalty is lightweight and customer-controlled. Customers accumulate points per business and choose which eligible offers to activate via their dashboard before redemption.

#### 8. Redemption Flow

Redemption occurs only after customer consent. POS scans the customer QR code, validates eligible offers, applies approved promotions, and logs the transaction.

#### 9. Promotion, Tax & Accounting

Promotions reduce net price before tax calculation. VAT is applied on the adjusted amount, and discounts are recorded transparently for accounting and audit.

## 10. Inventory & Demand Awareness

Promotions do not create or reserve inventory. Inventory remains controlled by stock rules, while BI may analyze promotion-driven demand patterns.

## 11. AI Advisory Boundaries

AI may recommend promotions, simulate impact, and warn of risks. AI cannot activate, modify, or override promotion rules.

## 12. Audit & Traceability

Every promotion application is logged with user, time, receipt, and rule reference. Invisible or silent discounts are not permitted.

## 13. What Promotion Engine Is Not

The engine is not a coupon marketing platform, does not run ad campaigns, and does not bypass pricing governance.

## 14. Final Doctrine

The BOS Promotion Engine ensures that promotional strategies increase sales without compromising financial truth, tax compliance, or system integrity.