

BOS – Reporting & BI Engine

HOW DATA BECOMES INSIGHT (Official Document)

Truth-first Business Intelligence, Audit-safe, Explainable

1. Core Doctrine

The BOS Reporting & BI Engine exists to explain business reality, not to decorate dashboards. All insights are derived from verifiable events and governed by clear definitions.

2. Role Within BOS

The BI Engine aggregates data from all BOS engines including Accounting, Inventory, Cash Management, Procurement, HR, Promotion, and POS systems.

3. Event-Based Data Model

BI operates on event streams rather than static tables. Every sale, cash movement, stock transfer, attendance scan, and promotion application is treated as an immutable event.

4. Semantic Layer & Metrics

Raw events are translated into business metrics such as revenue, margin, cash position, stock turnover, attendance rate, and promotion impact. Each metric has a documented definition.

5. Dashboard Views

The engine provides role-based dashboards for owners, managers, accountants, auditors, and staff. Sensitive data is protected by permissions.

6. Time, Comparison & Currency Logic

Reports support daily, weekly, monthly, and custom periods. Comparisons across branches and periods respect currency and country context.

7. Alerts & Early Warnings

The BI Engine generates alerts for anomalies such as cash leakage, inventory shrinkage, abnormal discounts, and attendance abuse. Alerts indicate risk, not guilt.

8. AI-Assisted Insights

AI may explain trends, answer business questions, and assist what-if analysis. AI does not alter data or make autonomous decisions.

9. Governance & Versioning

Reports and metrics are versioned. Changes create new definitions while preserving history. This ensures consistency during audits.

10. Export & Sharing

Reports can be exported via PDF, CSV, or API. Access is role-controlled and exports may include watermarks.

11. What the BI Engine Is Not

The engine does not manipulate data, does not perform accounting postings, and does not replace statutory reporting systems.

12. Final Doctrine

The BOS Reporting & BI Engine transforms operational events into trustworthy, explainable insights that support decision-making without compromising data integrity.