Water and beverages / WB-03

Code errors in distribution

Reduce goods returned and time lost because of code errors at dispatch, on delivery runs and at retail outlets.

The goods left the plant. They came back with a code error.

Manufacturers report slower deliveries and returned shipments. The cause is often not at the plant but at the point where the code chain breaks between plant, warehouse, vehicle and shop.

Conceptual architecture. No operating results are shown.

01 Dispatch	Pallet-level scanning · Vehicle load · Dispatch document
02 Delivery run	Route · Driver app · Status by outlet
03 Outlet	Delivery confirmation · Unread code record · Return
04 Accounting	ESF · Return linking · Stock

At a glance

8–9 / 10 — Shipments returned to the plant because of scanning and display errors, according to one manufacturer. [1]

5–7 — Outlets a driver reaches per day, previously 10–15, according to the same manufacturer. [1]

2 / 20 — Distributors actually ready for marking, according to the same manufacturer. [1]

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01 Evidence and context

Who it is for

Distribution Director	Delivery runs, returns and number of outlets.
Warehouse Manager	Scanning at dispatch and receiving returns.
Logistics	Routes, drivers and vehicle loads.
Chief Accountant	Matching returned goods with the ESF (electronic invoice).

Facts and global practice

Juice and beverage manufacturer

8–9 out of 10 shipments are returned to the plant because of scanning and display errors. [1]

Same manufacturer

A driver visits 5–7 outlets per day instead of 10–15; one driver serves 20 shops instead of 40. [1]

Same manufacturer

Only 2 out of 20 distributors are actually ready. [1]

Carbonated soft drink and water manufacturer

Distributors are not ready; driver time per outlet has increased several-fold, sometimes tens of times; rail shipments have been suspended. [1]

UzBev Association

The country has approximately 85,000 retail outlets; about 90% of sales go through markets and small shops. [1]

UzBev Association

No scanner standard has been developed for retail; there is no mechanism for returning unreadable codes. [1]

The figures reflect individual manufacturers' own experience and are not industry averages. The source does not state why rail shipments were suspended.

02 Where the losses occur

No scanning at dispatch

If pallets or cases are loaded by count rather than by code, what is on the vehicle may differ from the documents.

Delivery run results are not visible

Which outlet rejected goods, and why, is not known until the run is finished.

Codes cannot be read at the outlet

If a small shop has no scanner or the code cannot be read, the goods are returned or left without documents.

Returned goods drop out of the chain

If returned case and unit codes are not re-linked, they become new errors in the warehouse.

How the loss is calculated

Returned delivery runs	Returned shipments (per month) × cost per delivery run
Lost outlet visits	(planned – actual outlets visited per day) × average sales per outlet visit
Additional transport	Additional vehicles × daily cost per vehicle
Rework	Returned cases (per month) × re-sorting time per case (hours) × hourly labour rate

Illustrative calculations; establish the baseline, units and rates during the site assessment. Avoid counting the same loss twice.

03 Solution architecture

One code flow from plant to outlet

Every handover is confirmed by scanning, and the result is visible without waiting for the delivery run to finish.

01 Dispatch

Pallet-level scanning · Vehicle load · Dispatch document

02 Delivery run

Route · Driver app · Status by outlet

03 Outlet

Delivery confirmation · Unread code record · Return

04 Accounting

ESF · Return linking · Stock

Modules

Warehouse and handheld terminals (WMS)	Dispatch by pallet and case, receiving returns	Commercially available
Transport and delivery runs (TMS)	Route, vehicle load, delivery run status	Commercially available
Driver or sales agent app	Recording delivery and unread codes at the outlet	Engineering capability
Re-linking returns	Re-placing returned cases and units by code	Engineering capability
Asl Belgisi and 1C integration	Dispatched and returned codes in documents	Commercially available

Each module has a readiness status. Third-party results are not a forecast for your site.

04 Implementation and measurement

01 Distribution audit

Several delivery runs are observed, and returns are recorded by cause.

Output: map of break points.

02 Scanning at dispatch

Dispatch by pallet and case is introduced in the warehouse.

Output: the vehicle contents are known exactly.

03 Delivery run and outlet

The driver app is piloted on one route.

Output: delivery run results are visible during the day.

04 Scale-up

Remaining routes and distributors are connected.

Output: monthly indicators.

What is measured

Returned shipments	Returned / total, by cause	WMS, TMS
Outlets per day	Outlets delivered per driver	Driver app
Unread codes	Number of codes unread at outlets	Driver app
Dispatch time	Time to load one vehicle	WMS
Return linking	Difference between returned and re-placed codes	WMS, Asl Belgisi

What is needed to start

- Person responsible for distribution
- List of routes and delivery runs
- A driver for a pilot on one route
- Test access to the warehouse system and 1C

05 Readiness checklist and next step

01 Are pallets and cases scanned at dispatch?	Yes / No / Unknown
02 Does the list of codes on the vehicle match the dispatch document?	Yes / No / Unknown
03 Are returned shipments recorded with their cause?	Yes / No / Unknown
04 Are delivery run results visible before the run is finished?	Yes / No / Unknown
05 Is the number of outlets each driver reaches per day measured?	Yes / No / Unknown
06 Are unread codes recorded at the outlet?	Yes / No / Unknown
07 Are codes of returned goods re-linked?	Yes / No / Unknown
08 Has distributor readiness been assessed?	Yes / No / Unknown
09 Are dispatched and returned codes correctly reflected in the ESF?	Yes / No / Unknown
10 Is there a person responsible for distribution?	Yes / No / Unknown

What we do not promise

• Firm timelines and prices without an audit

• Government decisions and deadlines

• Changes to line software without the equipment supplier's permission

• Unmeasured results or savings

• Supplying equipment on the distributor and shop side

Distribution audit

We trace the code flow from plant to outlet and identify where returns and lost time occur.

• Map of break points

• Analysis of returns by cause

• Step-by-step plan

Scope, price and schedule are agreed after reviewing the site and its data.

06 Sources and scope

[1] Statements by manufacturers and UzBev. gazeta.uz, 15.04.2026.

gazeta.uz

Prepared from the cited sources. Vendor statements and reported sector figures are attributed, not independently verified here. No performance, certification or regulatory outcome is guaranteed. Check the current official rules before making decisions.

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