MOOS

From Shelf Reality to Store Action

Positioning MOOS as a bounded shelf intelligence and trigger layer in the retail technology ecosystem

1 Problem

Retailers increasingly need better information about what happens at the shelf. Current systems often know what should be available and what was sold, but not always what is happening in real time. Shelf insight only becomes valueble when it is trusted, routed, owned and acted on

2 Research approach

Research question

How can MOOS, as a shelf-sensing component provider, position itself in the retail technology ecosystem around actionable shelf insight?

- 41 store visits
- 8 expert interviews
- Ecosystem-as-strucure
- Co-creation
- validaiton

3 From shelf event to ecosystem scaling



Shelf reality
What is happening at the shelf

Trusted signal
Raw data turned intro a reliable shelf event.

Trigger logic
Rules and content decide wht should happen

Workflow owner
An actor or system owns the workflow

Store action
The workflow is executed in the store

Ecosystem scaling
Insights and workflos scale across stores and partners

***MOOS**'s value depends on the full path from shelf event to store action, not on sensing quality alone.*

4 Main findings

A. Store adoption depends on three thresholds: reliable signal, timely action and low workload

B. The system must fit store routines and not add extra burden

C. Ecosystem value depends on the links between shelf event, ownership, workflow and action

D. Theft and on-shelf availability do not scale in the same way

Three adoption thresholds



6 Design output

Prefered positioning: bounded partner-ready shelf intelligence and trigger layer

MOOS should focus on reliable shelf events, interpretation, and action routing between shelf reality and store action

Roadmap logic

- Proof strength
- Repeatability
- Integration burder
- Partner dependency
- Internal readiness

The roadmap is a strategic decision-support tool, not a fixed rollout plan

5 Contribution

This thesis operationalises ecosystem-as-structure for a component provider in retail technology.
It shows that shelf sensing becomes actionable only when activities, actors, links, routines and ownership structures are aligned

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