HARVEST × MULESOFT

WHITEPAPER · 2026

WHITEPAPER · INTEGRATION IN RETAIL

Omnichannel doesn’t fail on channels. It fails on what sits beneath.

One customer. One inventory. One truth. Why omnichannel lives or dies on the integration foundation beneath it, and how to lay that foundation without rebuilding everything.

EDITION

HARVEST × MULESOFT

READING TIME

16 MINUTES

FIX. SCALE. WIN.

IN THIS WHITEPAPER

Six chapters. One clear conclusion.

A guide through what really blocks omnichannel in retail, and how to lay an integration foundation that grows with your organisation instead of buckling under it.

01 · THE PROBLEM EVERYONE FEELS

Five channels. Five realities.

The customer sees one brand. Behind the scenes, five systems contradict each other. That is what structurally breaks omnichannel.

01 · OMNICHANNEL IN PRACTICE

The customer has one store. Your backend has five.

Your website shows a product in stock. The store says it isn't. The app pushes a loyalty offer for an item that has already been ordered. Customer service can't see the order, because it lives in a different system than the profile.

Each channel works fine on its own. The problem sits in between. **Webshop, POS, OMS, WMS, ERP, CRM, marketing cloud, loyalty engine and service desk** each hold their own version of the customer, the inventory and the order.

To the customer, that's not an integration challenge. It's simply a poor experience. And poor experiences cost you conversion, retention and margin all at once.

The fix seems logical. Connect the systems one by one. First inventory to webshop. Then webshop to CRM. Then CRM to marketing. Fast, cheap, targeted.

Two years later you no longer have an architecture. You have a web of dependencies that no one fully understands. Every new campaign, every new channel and every new store starts with the question: *will this break something that already runs?*

- A single price change in the ERP hits three channels at different moments.
- A new fulfilment partner takes weeks, not days.
- Inventory visibility is never quite right and no one knows exactly why.

> **„The first connection costs you a sprint. The tenth costs you a quarter. The twentieth costs you a season."**
>
> FROM PRACTICE · RETAIL INTEGRATION

THE SCALE OF THE PROBLEM

Three numbers every retail leader recognises.

95%

of IT leaders see integration as the biggest blocker

Almost all organisations run into integration as the biggest barrier to AI and omnichannel value creation.

SOURCE · MULESOFT CONNECTIVITY BENCHMARK 2026

88%

on the path to an agentic enterprise

The vast majority of organisations are moving towards autonomous AI agents in their workflows. Without an integration foundation, that stalls.

SOURCE · MULESOFT CONNECTIVITY BENCHMARK 2026

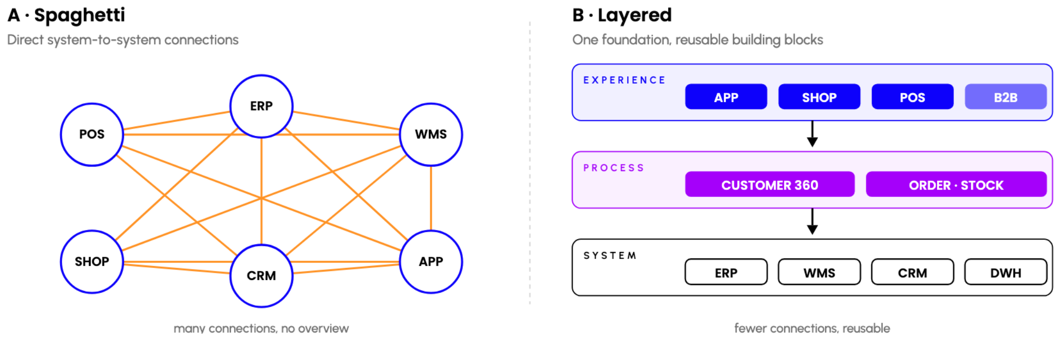
40%

of revenue comes from APIs

APIs are no longer an IT detail. They are becoming 40% of revenue, double the share since 2018.

SOURCE · MULESOFT CONNECTIVITY BENCHMARK 2026

DIAGRAM · DIRECT CONNECTIONS VERSUS A LAYERED ARCHITECTURE



02 · WHAT AN INTEGRATION FOUNDATION DOES DIFFERENTLY

Don’t connect harder. Connect differently.

A layered approach is not a technical preference. It is an organisational choice. Instead of wiring systems directly together, you build a layered network of reusable APIs. Each layer has its own role. Each layer can grow independently.

THE THREE LAYERS · ONE ARCHITECTURE, THREE RESPONSIBILITIES

01

Experience

THE OUTSIDE

Specific to each channel. The webshop API looks different from the POS API, while under the hood they call the same processes. Adding a new channel doesn’t require a rebuild.

02

Process

THE BUSINESS LOGIC

This is where the processes every retailer knows live. Placing an order, reserving stock, recognising a customer across channels. Built once, reused everywhere.

03

System

THE SOURCE SYSTEMS

Connected to ERP, WMS, OMS, CRM and POS. Abstracts the complexity of each source system into reusable building blocks. The rest of the organisation no longer needs to know how SAP works internally.

The power is in the separation. When marketing launches a new channel, it only touches the Experience layer. When IT migrates the ERP, the Process layer stays put. Teams work in parallel, without getting in each other’s way or waiting on one another.

WHAT ACTUALLY CHANGES

Same landscape. Different behaviour.

BEFORE · SPAGHETTI

- Price change in ERP, three channels fail at different moments.
- Opening a new store, two months of connections and testing.
- Adding click and collect, four teams waiting on each other.
- In-store inventory is off, no one knows exactly which system leads.
- New developer, three months before they dare to change anything.
- AI pilots start and stall on data access.

AFTER · LAYERED

- Price change in ERP, one System API updated, the rest stays put.
- Opening a new store, existing Process APIs reused, days of work.
- Click and collect, one new Experience API on top of the existing Process layer.
- Inventory live, one source, one truth, every channel looks at the same answer.
- Documentation in Anypoint Exchange, onboarding in days, not weeks.
- AI agents tap straight into existing, secured APIs.

Reuse

System APIs become building blocks for everything that follows.

Governance

One standard for security, monitoring and versioning.

Speed

Teams work in parallel without waiting on each other.

Certainty

A change in one layer doesn't break the rest.

Integration stops being a chore tacked onto every project. It becomes a product line that grows with the organisation. That's not jargon, it's exactly what separates an organisation that scales from one that grinds to a halt.

03 · FOUR PATTERNS THAT KEEP RETAIL RUNNING

No theory. Four patterns you'll recognise tomorrow.

The same four patterns return in every retail implementation. They are the building blocks that turn inventory, customer, fulfilment and service into one shared reality.

PATTERN 01 · INVENTORY

One inventory, live across every channel.

Warehouse stock from the WMS, store stock from the POS and inbound deliveries from the ERP meet in one Process API. Every channel asks the same source the same question, and sees the same number at the same moment.

EFFECT **-42%** — MISSED DELIVERIES **and higher conversion**

PATTERN 02 · CUSTOMER VIEW

One customer, recognised across all channels.

The Customer 360 API connects ecommerce, loyalty, service and marketing. A customer who returns something in store sees it in the app. The service agent sees the webshop order without searching. No duplicate profiles.

EFFECT **+18%** — REPEAT PURCHASE **within 12 months**

PATTERN 03 · FULFILMENT

Click, collect, ship from store, return.

One Order API picks the smartest fulfilment path per order. Delivery from the distribution centre, from the nearest store, or as click and collect. The associate gets a clear instruction, the customer a reliable promise.

EFFECT **-2 days** — AVERAGE DELIVERY TIME **without extra hub**

PATTERN 04 · SERVICE

One conversation, all context ready.

The Service API gathers order, delivery, profile and warranty in a single call. The agent no longer has to search across five screens. The customer doesn't have to repeat their story. What could have become a retention call stays a pleasant conversation.

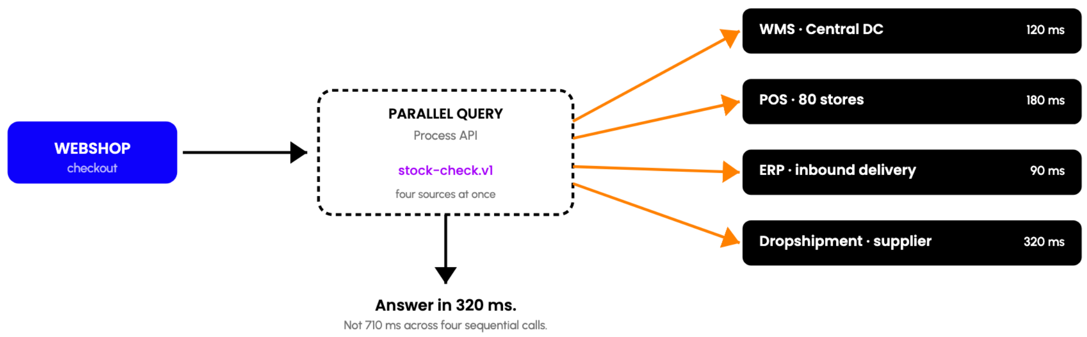
EFFECT **-35%** — HANDLE TIME **higher CSAT**

IN PRACTICE · INVENTORY API

One question, answered in parallel.

A typical example from an omnichannel retailer with 80 stores, a central distribution centre and two dropshipment suppliers. The customer's question is simple: *can I have this item tomorrow?* The answer requires data from four different systems.

PATTERN · PARALLEL QUERYING FOR A LIVE STOCK CHECK



WHAT THIS PROVES

The customer gets an answer in 320 milliseconds instead of nearly a second. More importantly: the logic is reusable. The same Process API feeds the app, the POS, the service desk and soon the AI agent. Built well once, value four times over.

WHAT IT DELIVERS

- Higher conversion through a reliable availability promise.
- Fewer cancellations because the stock promise holds.
- A blueprint for every next channel or new market.

04 · THE ROI OF A REUSABLE FOUNDATION

The curve flips.
And then it keeps falling.

The business case is simple. It's the cumulative value of reuse. The marginal cost of the tenth connection is structurally lower than the first.

57%

Faster delivery

Anypoint users report on average 57% faster development of new integrations.

SOURCE · OMDIA

74%

Less maintenance

Reduction in maintenance costs through reusable APIs. Capacity returned to new value.

SOURCE · OMDIA

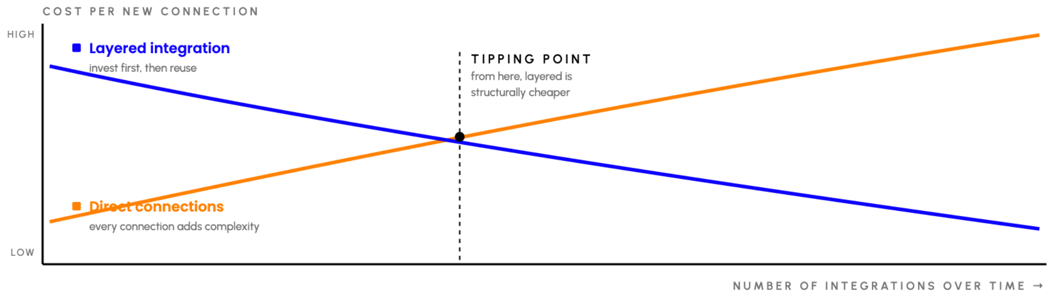
426%

ROI over 3 years

Forrester Total Economic Impact study. An average 426% ROI over three years with MuleSoft.

SOURCE · FORRESTER TEI

COST CURVE · WHY THE TENTH CONNECTION COSTS LESS THAN THE FIRST



> **„This is the moment integration stops being a cost centre and becomes a competitive advantage."**
>
> CONCLUSION · HARVEST × MULESOFT

THE MOMENT INTEGRATION STARTS BUILDING WITH YOU

The tenth API costs less than the first.

With every new direct connection, costs rise. In a layered architecture, the marginal cost per new integration falls as the foundation grows. The reason is simple. The System layer already exists, the Process layer already exists. What remains is the Experience layer.

For retail that means: opening new markets gets faster. Launching a new brand gets faster. Rolling out a seasonal campaign gets faster. And above all, it stops depending on whether the right integration architect happens to be on holiday.

THREE EFFECTS

- **Time to market.** New propositions live in weeks, not quarters.
- **Resilience.** Changes in source systems stay local, without a chain reaction.
- **Leverage.** One team serves multiple business priorities in parallel.

3×

Faster to launch a new channel

From months to weeks. The Experience layer is the only thing that differs per channel.

−40%

Time spent maintaining integrations

The IT team works on growth, not firefighting in production.

+2×

Capacity without extra FTE

The existing team delivers more projects because they don't start from scratch each time.

05 · FROM INTEGRATION TO INTELLIGENCE

No foundation, no agentic retail.

AI in retail is everywhere. AI in retail that *works* is rarer. The difference is seldom in the model. It's in access to data and the ability to act on it. That is, by definition, an integration question.

88% of organisations are moving towards an agentic enterprise (MuleSoft Benchmark 2026). Yet 95% say integration is the biggest blocker, and half of all agents still run disconnected from the rest. That turns AI in retail into isolated bits of intelligence with nothing in common.

> **„The APIs you build today are the actions your agents will take tomorrow."**
>
> HARVEST × MULESOFT

MuleSoft is that foundation. With **MCP**, **A2A**, **Topic Center** and **Agent Fabric**, every existing API becomes directly usable by agents in **Agentforce 3**. No separate agent stack, no second architecture.

FROM SOURCE TO AGENT · THE STACK THAT LETS AGENTS ACTUALLY ACT

01 · SOURCE	02 · API	03 · AGENT READY	04 · AGENT
ERP · POS · CRM	**Anypoint**	**MCP · A2A · Topic Center**	**Agentforce 3 · Agent Fabric**
The systems where the retail truth lives. Inventory, price, customer, order.	Reusable, secured APIs. Built well once, reused everywhere.	A few clicks turn any API into a tool for agents. A2A lets agents collaborate with each other.	Agents that act, not just talk. With central registry, governance and orchestration.

What this means for your roadmap. Every API you build today is tomorrow an action for an agent. Not in a year. Today.

06 · HOW HARVEST HELPS

Down to earth. Iterative. With proven patterns.

Harvest is a MuleSoft implementation partner and Salesforce Summit Partner, the highest recognition within the global partner network. We combine deep technical expertise with an approach that delivers from day one.

01

Assessment

Which connections exist, what does maintenance cost, where is the biggest brake on your growth?

02

Architecture

A layered architecture that fits your retail stack, your channels and your growth strategy.

03

Build iteratively

System Layer first for critical sources. Then Process, then Experience. Value every sprint.

04

Deliver and embed

Working integrations, documented in Anypoint Exchange, with monitoring built in.

Ready to define your retail integration strategy?

In a half-day workshop we map out together which integrations are the biggest brake on your growth right now. After that you know where to start, what it delivers and at what pace.

Book a workshop →

HARVESTDIGITAL.EU / MULESOFT

ABOUT HARVEST

Let's make technology work.

Harvest is a strategic growth partner built on Salesforce, strengthened with AI and accelerated with our own industry tools. As a Summit Partner and MuleSoft implementation partner, we help ambitious retailers turn digital complexity into technology that works. No loose ends. No excuses. Only technology that delivers.

FIX. SCALE. WIN.

SUMMARY

One customer. One inventory. One truth. Why omnichannel in retail lives or dies on an integration foundation, and how to lay that foundation without rebuilding everything.

YEAR

2026

CONTACT

Harvest
Leonard Springerlaan 29
9727 KB Groningen
+31 (0)50 211 24 27
info@harvestdigital.nl
harvestdigital.eu