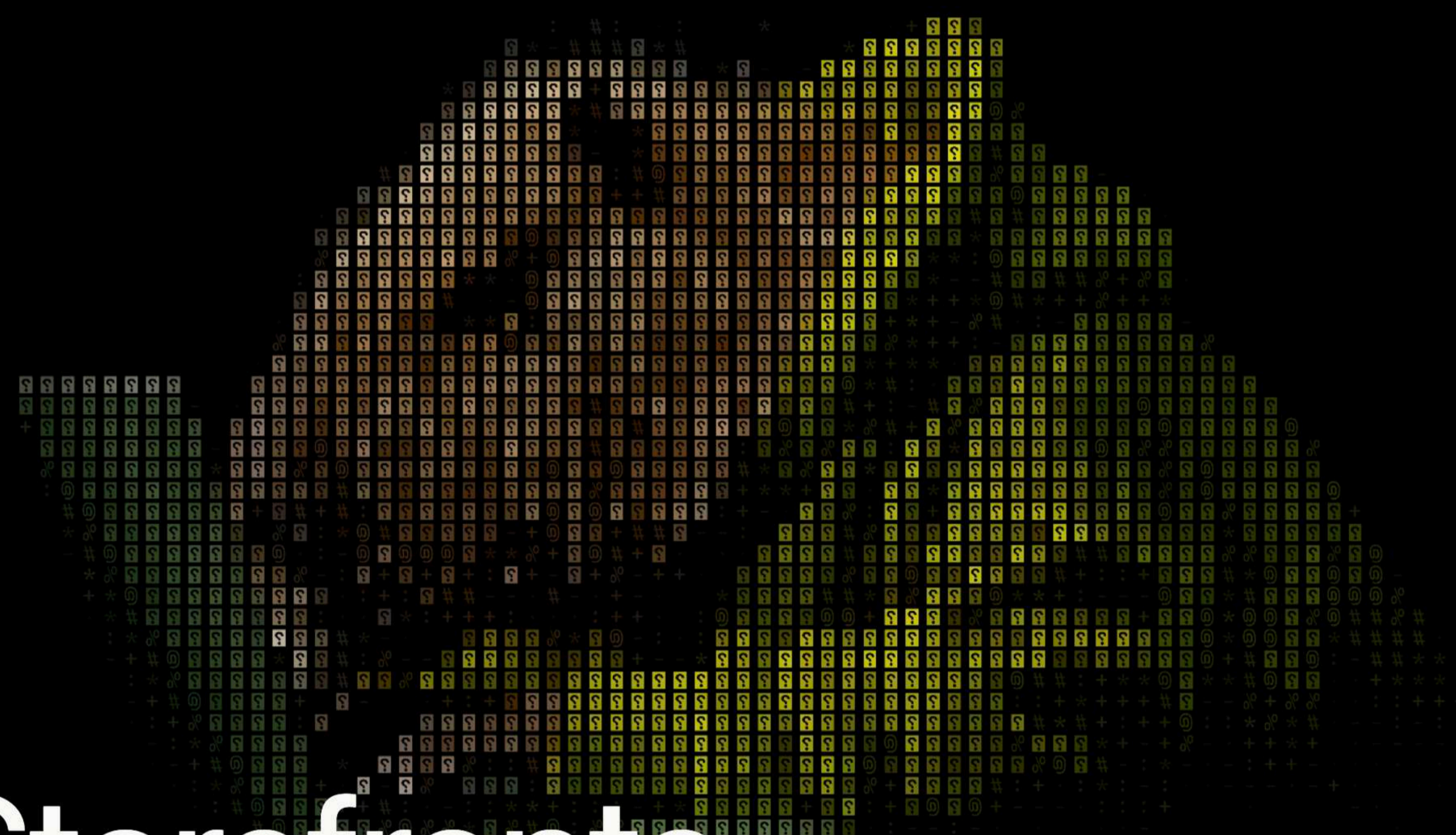




BUILDING SELF-HEALING AGENT LOOPS

MCP for Autonomous Storefronts



#BrazilianEngineering

Check it out on brazilian.engineering



We run hundreds of high-volume
enterprise storefronts

FILA

LEROY MERLIN

AL'S

Electrolux

FARM RIO

OSKLEN

GRANADO
DESDE 1870

CASA&VIDEO

Le biscuit

HERING

Thiess

BAGAGGIO

TECHNOS

nk

Oficina[®]
RESERVA

LIVE
MODE

MONTE CARLO

We guarantee they are fast, high-
converting, and healthy



High-volume storefronts are **always** bleeding.

THE SHIFT

Enabling is over. It's time to do.



*"The AI app layer is stuck
"enabling" in a world that actually
prizes "doing"."*

— SOREN LARSON



We are building **autonomous storefronts**



that **correct** and **improve** themselves



We turned an entire API into an MCP server

vtex-openapi-specs / 68 schemas

```
GET /api/cms/pvt/sites
POST /api/cms/pvt/sites/{siteId}/templates
GET /api/suggestions/{sellerId}/{sellerSkuId}
PUT /api/suggestions/{sellerId}/{sellerSkuId}
GET /api/rns/pub/subscriptions
POST /api/rns/pub/subscriptions
GET /api/giftcardprovider/giftcards/{giftCardId}
POST /api/giftcardprovider/giftcards
GET /api/catalog/pvt/product/{productId}
PUT /api/catalog/pvt/product/{productId}
GET /api/catalog/pvt/stockkeepingunit/{skuId}
POST /api/catalog/pvt/stockkeepingunit
GET /api/catalog/pvt/category/tree/{categoryLevels}
GET /api/catalog/pvt/brand/{brandId}
POST /api/catalog/pvt/specification
GET /api/checkout/pub/orderForm/{orderFormId}
```

68

API domains



710

MCP tools

✓ MCP Server — VTEX Commerce

```
get_product update_product get_sku create_sku
get_category_tree get_brand create_specification
get_order_form add_items_to_cart set_shipping_data
get_order cancel_order list_orders add_invoice
list_warehouses create_warehouse list_carriers
create_shipping_policy get_price update_price
get_price_pipeline create_promotion get_benefit
create_coupon get_transaction create_transaction
search_facets search_products search_by_trade_policy
update_document search_documents create_document
get_segment create_session get_account get_user
add_subcollection get_collection update_inventory
get_inventory create_seller get_seller list_sites
create_template get_suggestion update_suggestion
```

08 / 25



STEP 0

Centralize tools with MCP

Standard protocol

Full governance

Humans + agents

- ← Settings
- General
- Connections
- Store
- AI Providers
- Monitor
- Members
- SSO
- Plugins
- MCP Workflows
- Profile & Preferences

Connections

Search for a connection



Custom Connection



Connect

ClickHouse

Query and manage ClickHouse databases. Run SQL, explore...



Connected

GitHub

OAuth proxy for the official GitHub MCP Server — authenticates via...



Connected

HyperDX

Query observability data from HyperDX. Search logs, metrics, an...



Connect

VTEX Commerce APIs

MCP for interacting with VTEX Commerce APIs - Catalog, Orders,...



Connected

Cloudflare GraphQL

Query Cloudflare Analytics and data using GraphQL. Build custom...



Connect

Site Diagnostics

Blackbox performance and SEO diagnostics for storefronts and hig...



Connected

Cloudflare Observability

Monitor and analyze your Cloudflare services with comprehensive...



Connect

Supabase

MCP server for interacting with the Supabase platform

09 / 25



One engineer. 2.5x more bugs resolved.

I used to manually filter Cloudflare dashboards.
Now I connect Clickhouse and Cloudflare and the agent analyzes for me, suggests which rules to apply.

— Aline, Support Engineer

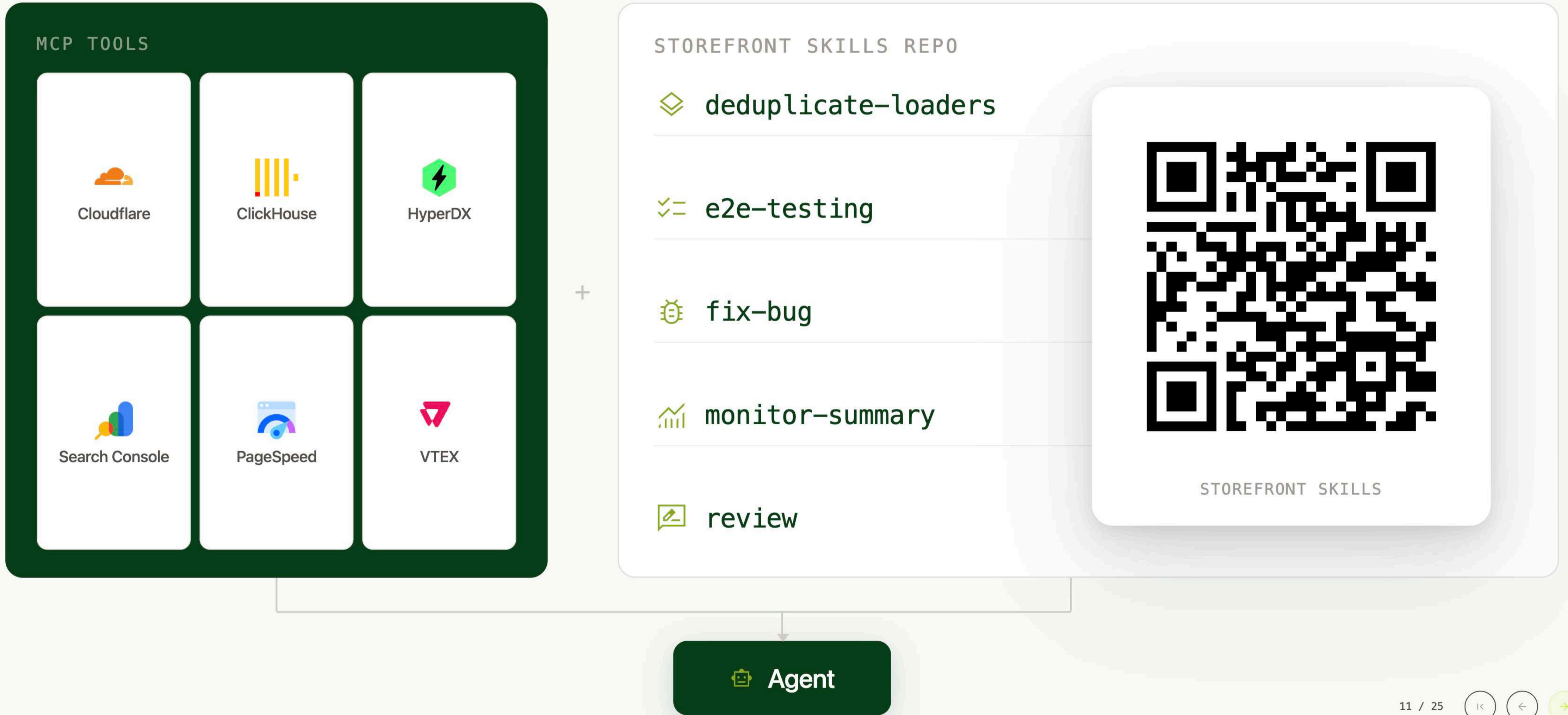
10 → 25

tickets resolved / week

90%

resolved via storefront skills repo

Centralize knowledge using skills



Agents with tools can surface **unknown unknown** patterns in data



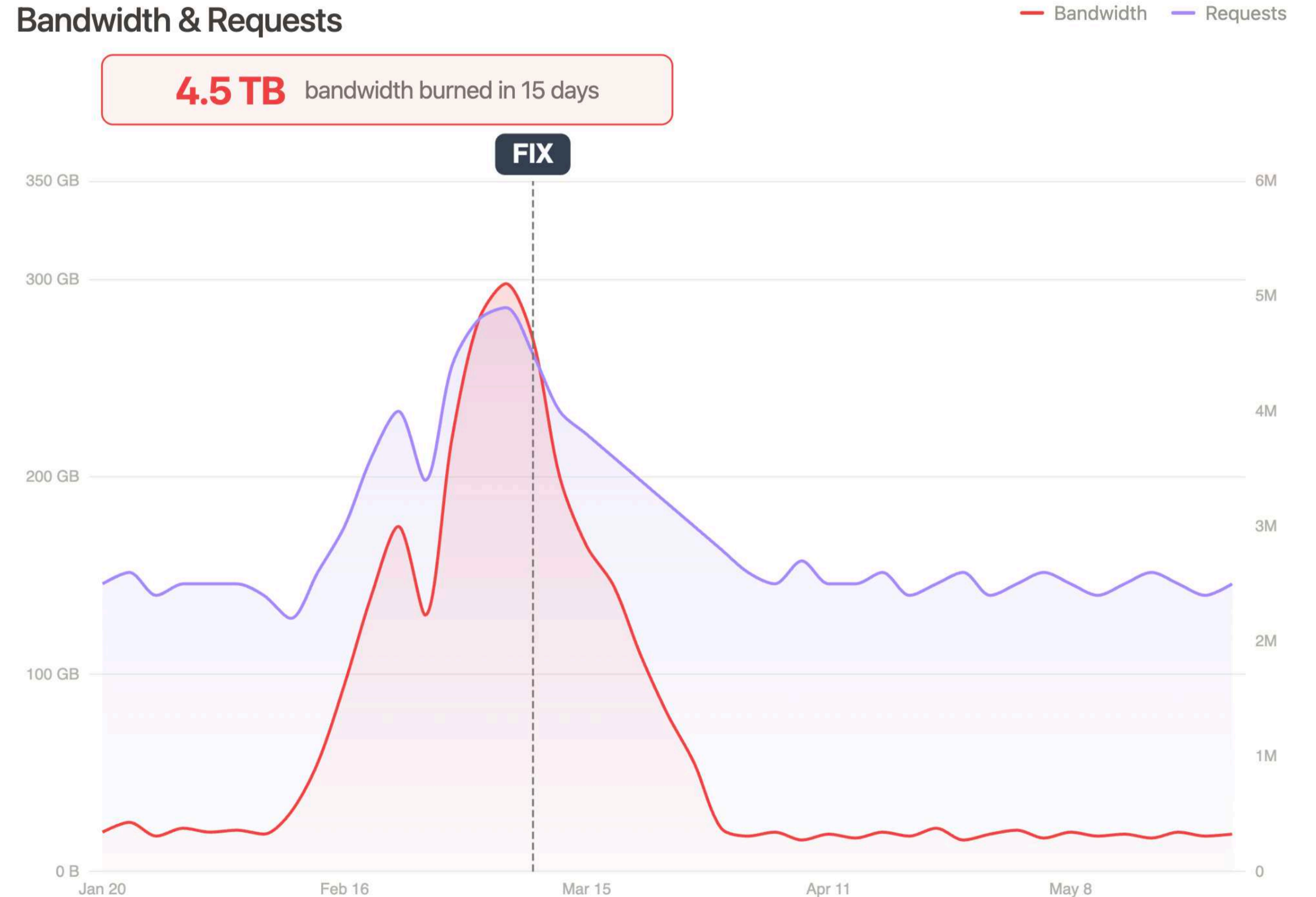
We saw increased latency on fila.com.br. No dashboard showed where it came from.

Pattern was hidden across CDN, WAF, and origin metrics.

41% → **13.7%**
cache hit rate collapse

97%
drop overnight after fix

Bandwidth & Requests



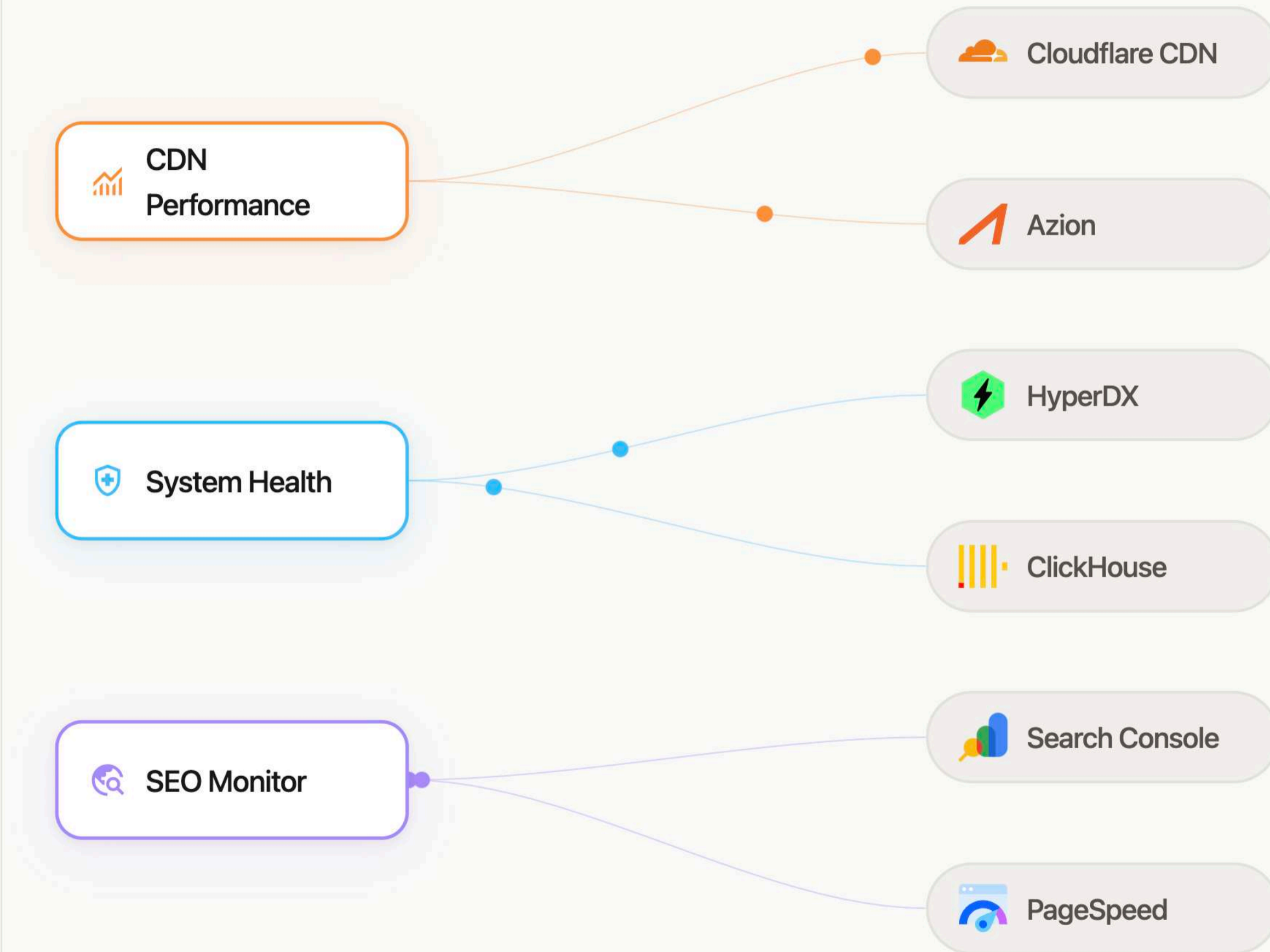
STEP 2

Agent use tools on demand

Cross-system insights

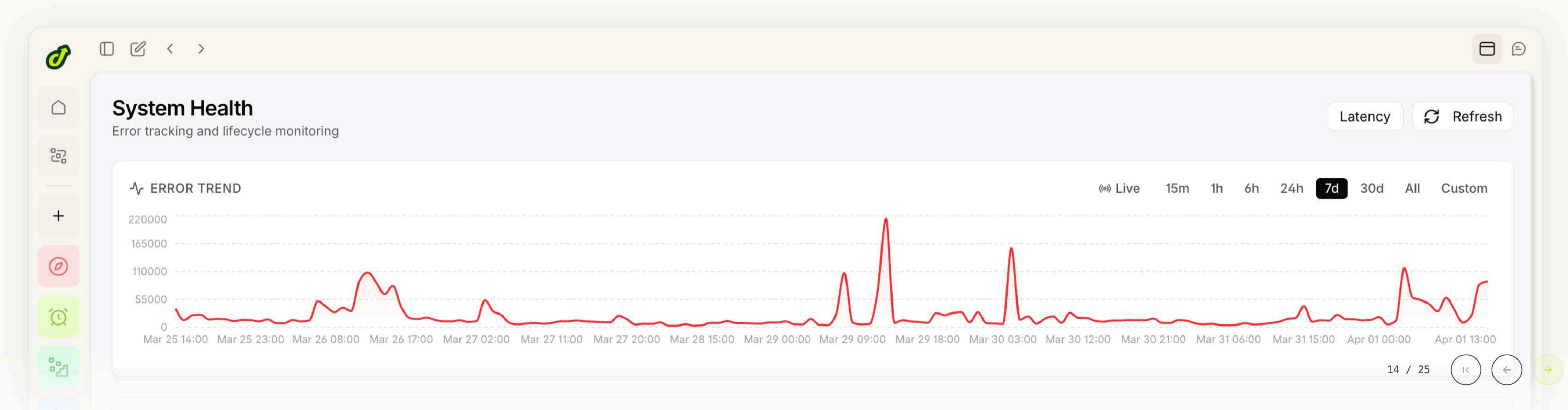
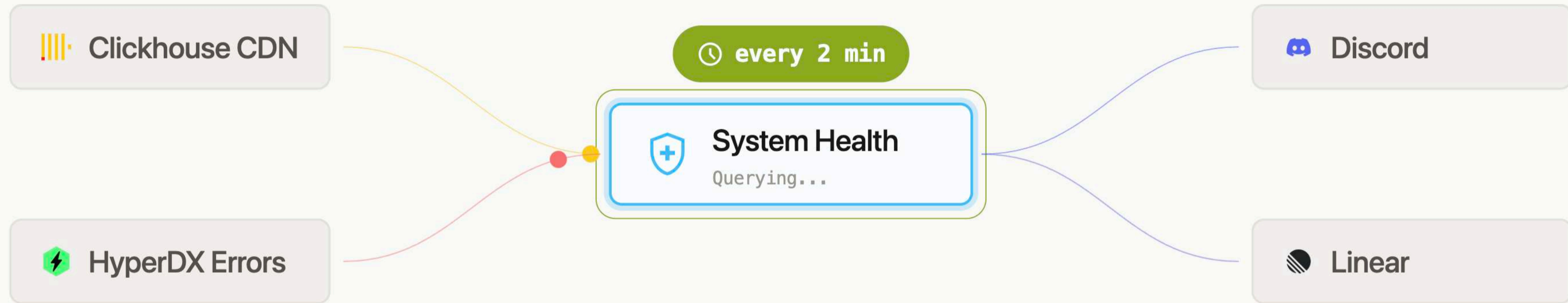
Faster debugging

On demand



System Health Agent

Monitors errors and latency every 2 minutes. Reports to Discord and Linear on spikes.










STEP 3

Agents start on triggers

Event or time-based

Always on

Activity			● Live 3s
03:00	 CDN Cache Audit	✓ Cache-hit ratio at 94% across 3 edge regions. No anomalies detected.	🕒 Every 6h
03:15	 System Health	✓ 0 errors in last window. P95 latency 142ms. All endpoints healthy.	🕒 Every 15m
06:00	 SEO Monitor	⌚ 3 collection pages de-indexed overnight. Coverage dropped to 97.2%.	🕒 Daily 6am
06:01	 SEO Monitor	⚡ Submitted re-index request for 3 URLs via Search Console API.	🕒 Daily 6am
06:15	 System Health	✓ 0 errors. P95 latency 138ms. All clear.	🕒 Every 15m
06:30	 CDN Cache Audit	✓ Cache-hit ratio 93%. Origin load within expected range.	🕒 Every 6h
09:00	 PLP Optimizer	✓ 12 products reordered by CTR in 4 categories. Projected +1.8% conversion.	🕒 Daily 3am

✓ Agent detected spike

✓ New skill saved

✓ Posted issue

And then the
store healed itself

✓ PR merged

✓ Agent found skill

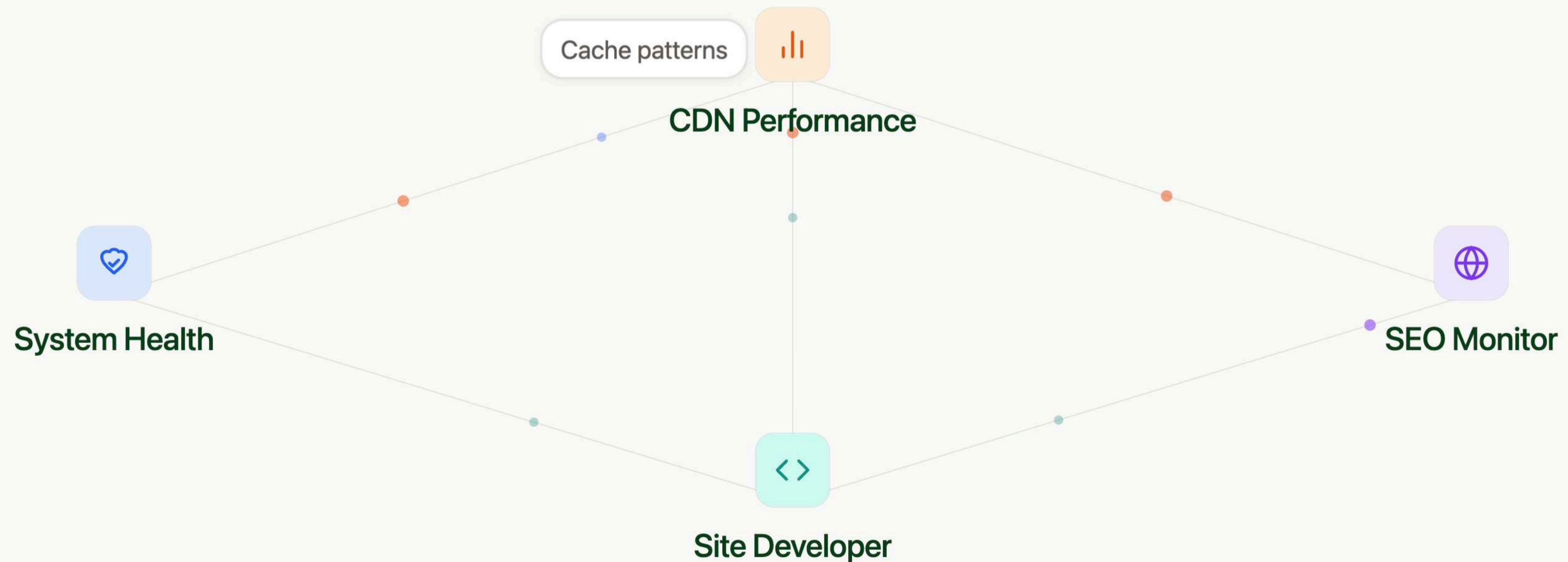
✓ Wrote fix

Agents that collaborate and follow-up

Native git

Skill memory

Compound knowledge





Turns out, agents that heal

can also improve conversion

LIVE EXAMPLE · FARM

Farm PLP optimizer

daily autonomous product ranking

-10h

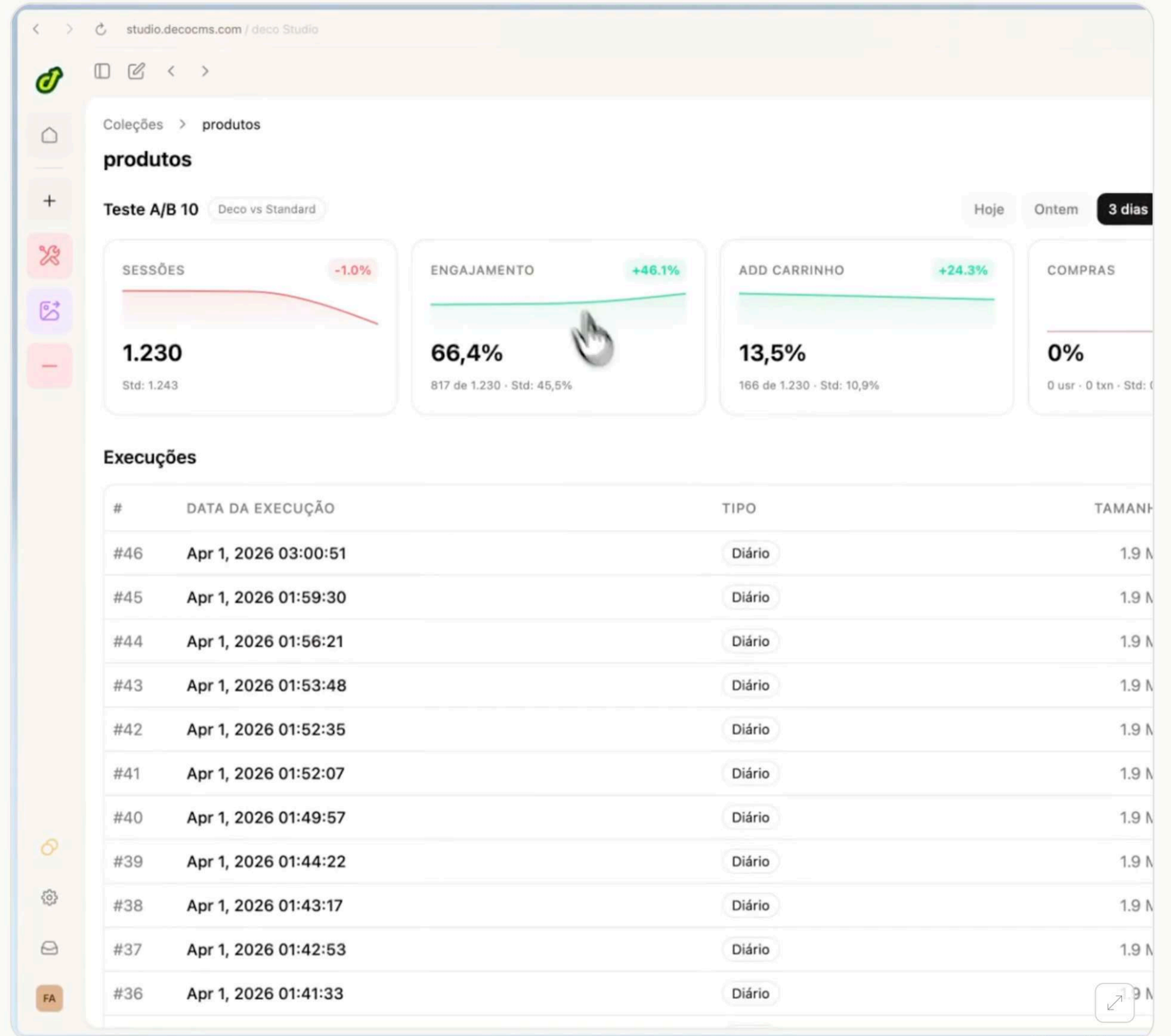
manual work per week

+15%

add-to-cart rate

100%

collections analyzed daily, no longer limited by human bandwidth



MCP servers expose apps, not just tools

Human in the loop

Scoped user decisions

The screenshot displays a web application interface for visual merchandising. On the left is a sidebar with navigation options: Home, New task, Settings, PLP Optimizer, and a Tasks section with 'Needs review 0', 'Running 0', 'Automations 2/2', and 'Done 0'. The main content area shows a breadcrumb trail 'Coleções > produtos > Predição' and a title 'produtos' with a subtitle '2 hours ago - 1345 produtos'. A search bar and filter tabs are present, including 'Disponibilidade', 'Lançamentos da semana', and 'Estampa'. The right side of the main area contains buttons for 'Baixar CSV' and 'Aplicar na VTEX'. Below the filters, four product cards are shown, each with a product ID, a score, and a percentage: #1 (↑218, 100%), #2 (↑208, 100%), #3 (↑198, 100%), and #4 (↑205, 78%). Each card features a model wearing a different outfit. At the bottom right, there are navigation arrows and a date '20/1/25'.

Services: The New Software

BY JULIEN BEK
PUBLISHED MARCH 5, 2026

The next \$1T company will be a software company masquerading as a services firm.

Every founder building an AI tool is asking the same question: what happens when the next version of Claude makes my product a feature? They're right to worry. If you sell the tool, you're in a race against the model. But if you sell the work, every improvement in the model makes your service faster, cheaper, and harder to compete with. A company might spend \$10K a year for QuickBooks and \$120K on an accountant to close the books. The next legendary company will just close the books.

When should agents be **autonomous**?

INTELLIGENCE

Rule-based work: coding, debugging, monitoring.
Autopilot. Sell the outcome.

JUDGMENT

Experience-based decisions: brand, strategy, culture fit.
Copilot. Human decides.

An aerial view of a railway yard. In the center, a yellow maintenance vehicle is on a track. To the right, there's a gas station with a white van and a red tractor. In the foreground, a yellow excavator is visible. The background shows more tracks and utility poles under an overcast sky.

We are now **locomotive engineers**

What rail is missing? That is the fundamental question.

RECAP

What we covered

1

Why MCP

One protocol for tools, MCP Apps & UIs, and full governance. **Build once, serve humans and agents.**

2

Steps to autonomy

Centralize tools. Add agents. Add triggers. **Let them collaborate via git.**

3

Intelligence vs Judgment

Verifiable output? Autopilot. **Needs taste? Human in the loop.**

Everything we showed runs on **deco studio**.
It's open-source.

bunx decocms

`github.com/decocms/studio`



Hire Agents

- Agent marketplace
- Composable agents
- Usage tracking



Connect Tools

- 50+ integrations
- One-click OAuth
- Cost per connection



Work Anywhere

- Web dashboard
- Real-time monitoring
- Full observability



Thanks!

Come find me after. I'd love to compare notes.