Lab HSE · May 23, 2026

Executive Decision Agent

Hands-on in Yandex AI Studio: from knowledge base and search to calculations, options and an executive brief

Alexander Polomodov

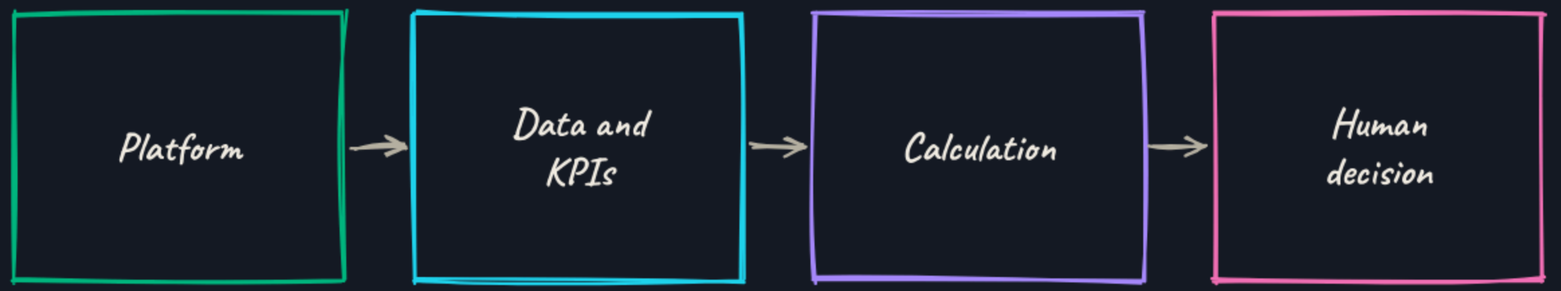
Technical Director & Fellow, T-Technologies

Speaker Context

- Architecture, engineering R&D, AI adoption.
- Closes HSE series with agent loop.
- Focus: agent for executive decisions.

Bring course topics into one loop

Series bridge Part 7





Part 1

01

What we build

Executive Decision Agent: an agent that prepares a board-level management brief

Not a chatbot: decision support

Outcome Executive agent



Question for the agent

Realistic request, safe data

Scenario Board brief

- Launch AI support next quarter?
- Brief: options, economics, risks, checks.
- Internal docs are primary facts.
- Missing data → assumptions/questions.

Final answer: short and executive-ready

Format One-page brief

Decision, trade-offs, next steps

+ Brief structure

- Decision in one paragraph.
- 3 options: launch/pilot/postpone.
- Economics, risks, dependencies.

+ Management standard

- Separate facts, estimates, recommendations.
- Show sources and unknowns.
- End with checks before decision.



Part 2

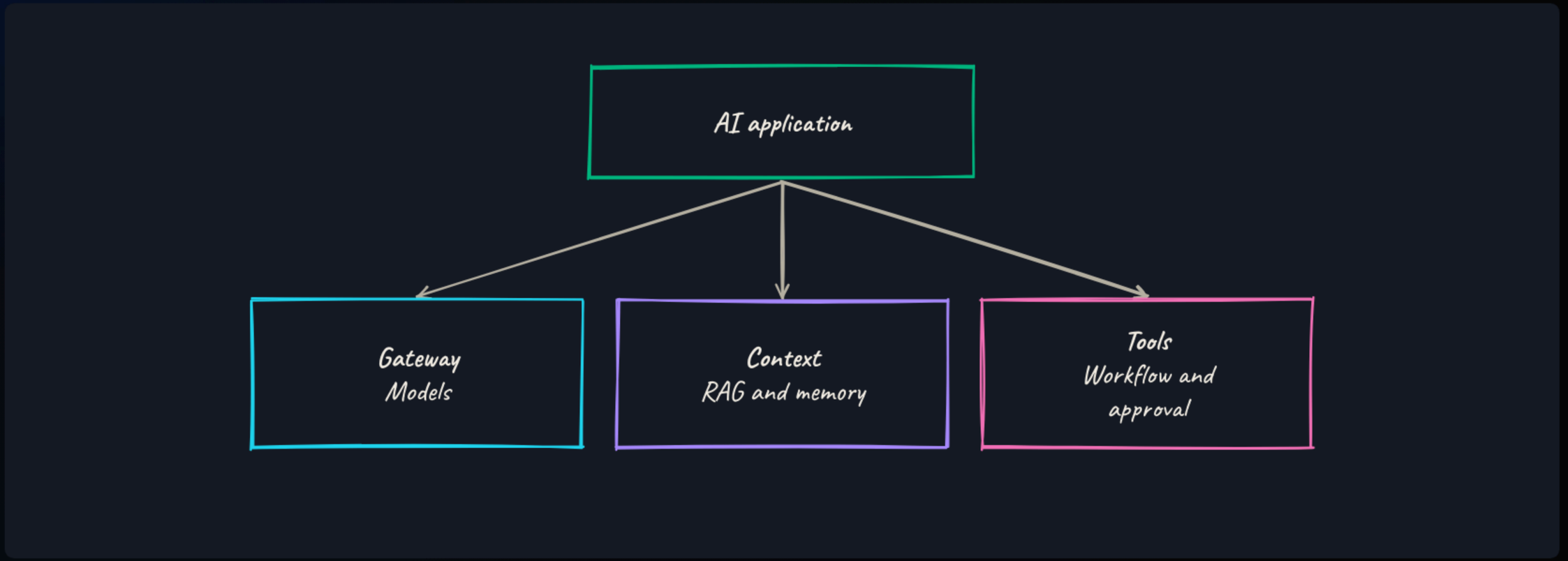
02

Yandex AI Studio

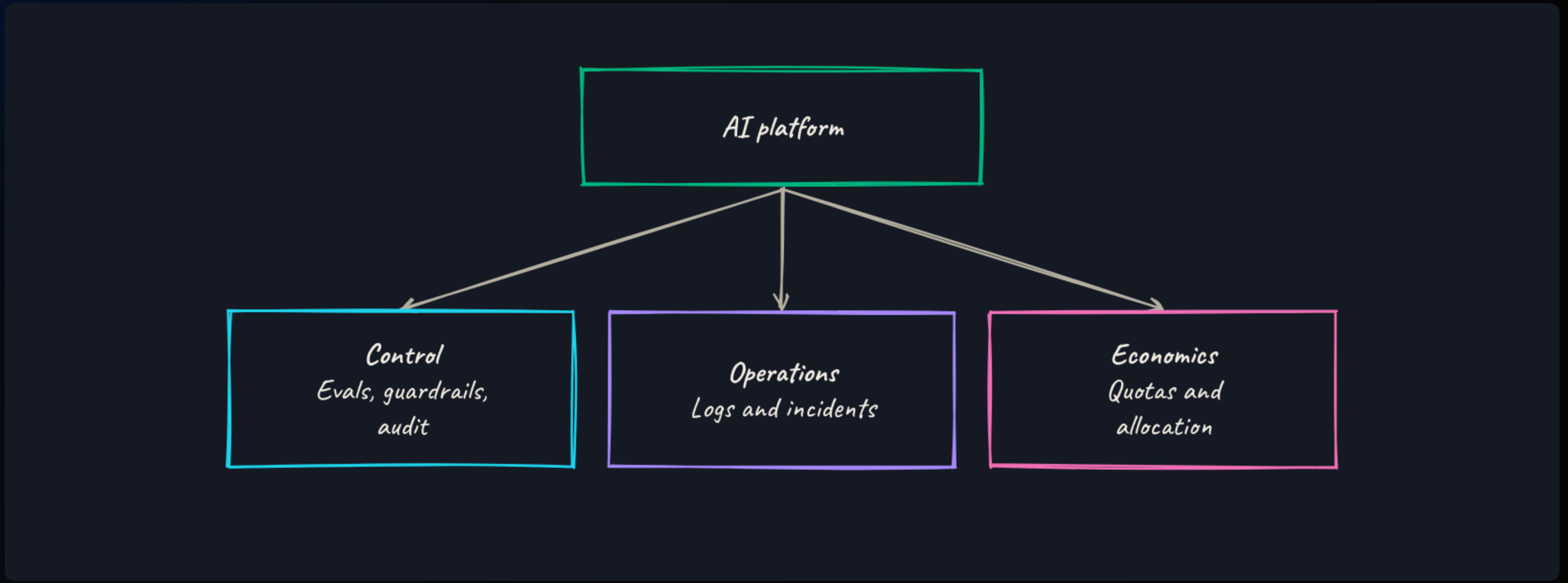
Which platform capabilities we use in the lab and why the agent needs them

AI Studio provides the agent prototype loop

Loop Studio toolchain



Govern quality, operations and cost



Knowledge base grounds the agent

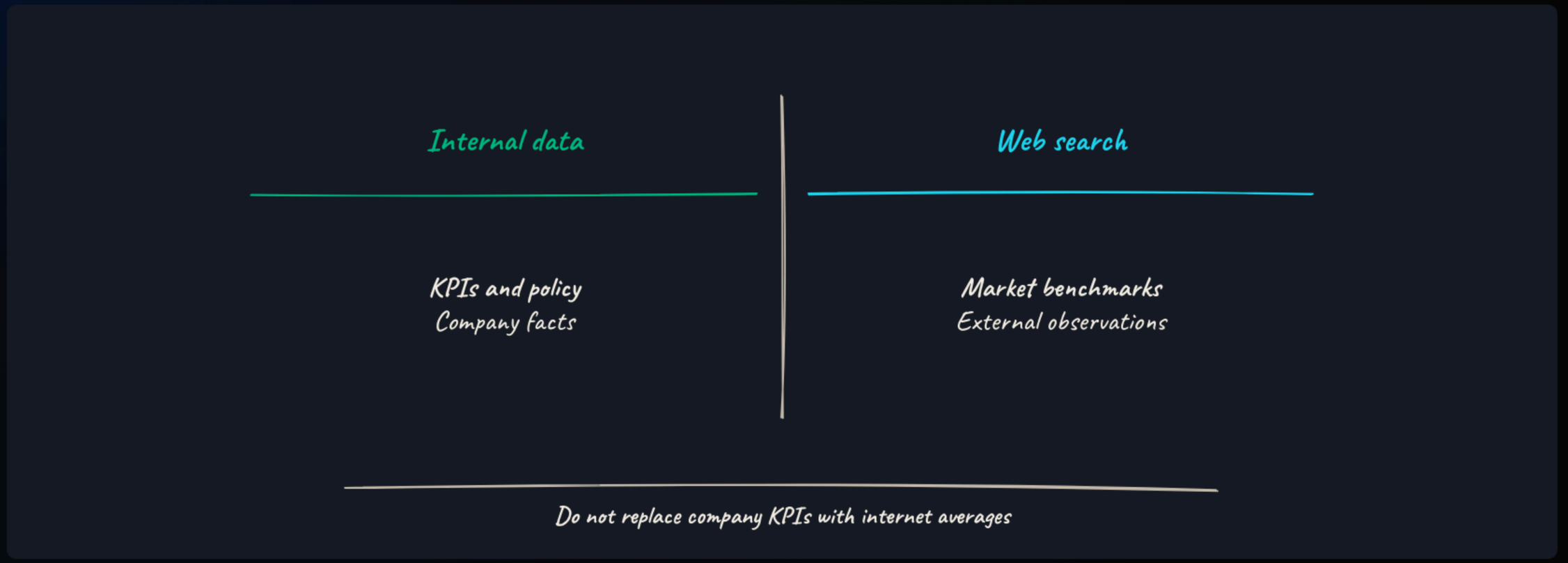
Knowledge `File Search / AI Search`



Missing data → assumptions and questions, not invented KPIs

Web search is only market context

External context Web Search



Calculation must be a tool

Tool Function calling





Part 3

03

Agent assembly

From system instructions and knowledge base to a calculation tool and first run

System instruction defines behavior

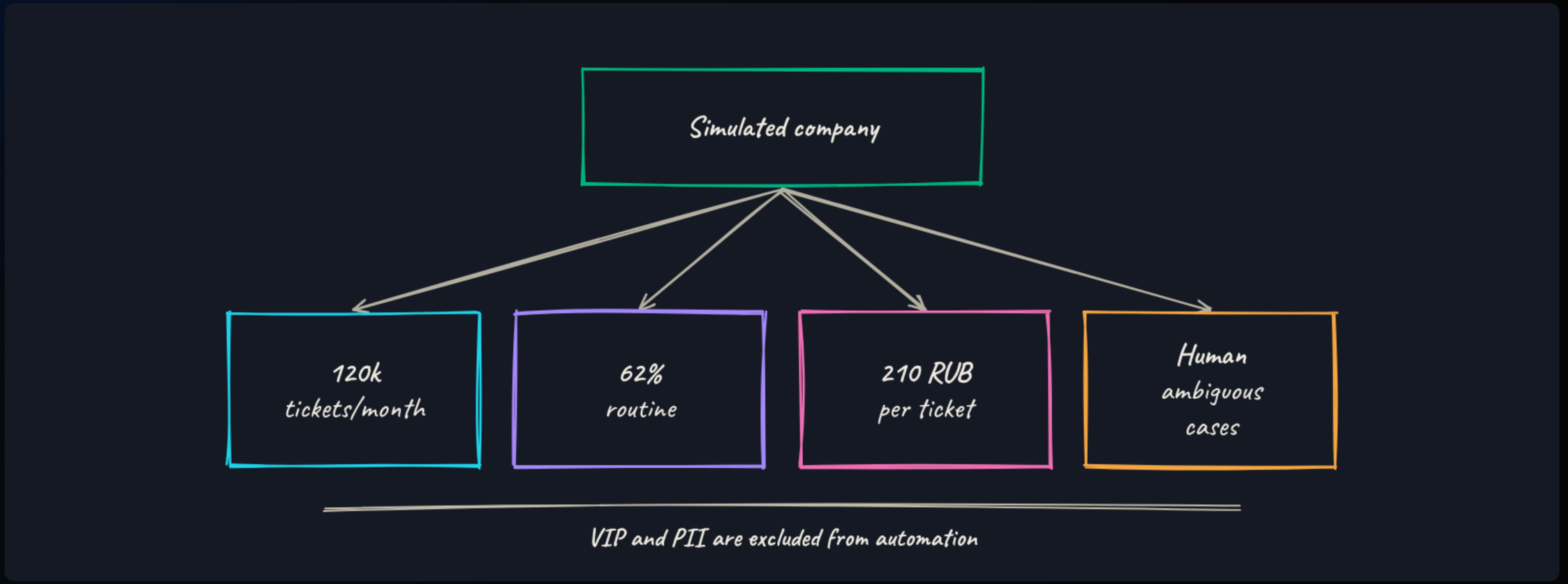
Instruction System prompt

Clear rules beat long prompt

- Prepare a CEO/COO/CIO executive brief.
- Facts from knowledge base first.
- Separate facts, assumptions, risks and options.
- Missing data → owner questions.

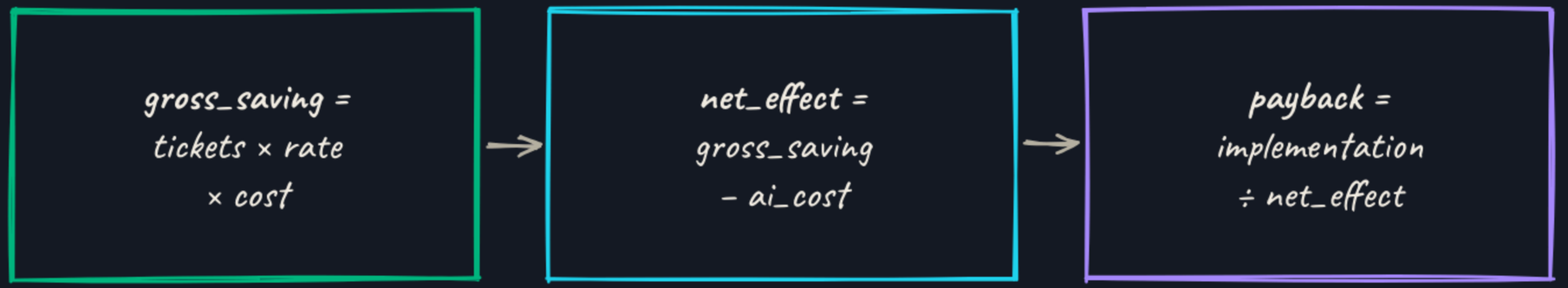
Participants get a small simulated company

Lab pack Inputs



Minimal calculation schema

Function `calculate_business_case`



Payback is defined only for positive net_effect

First run Prompt

Launch prompt checks loop

Documents + search + calculation

- Launch AI support assistant next quarter?
- Prepare a one-page board brief.
- Compare launch, pilot and postpone.
- Show economics, risks and checks.



Part 4

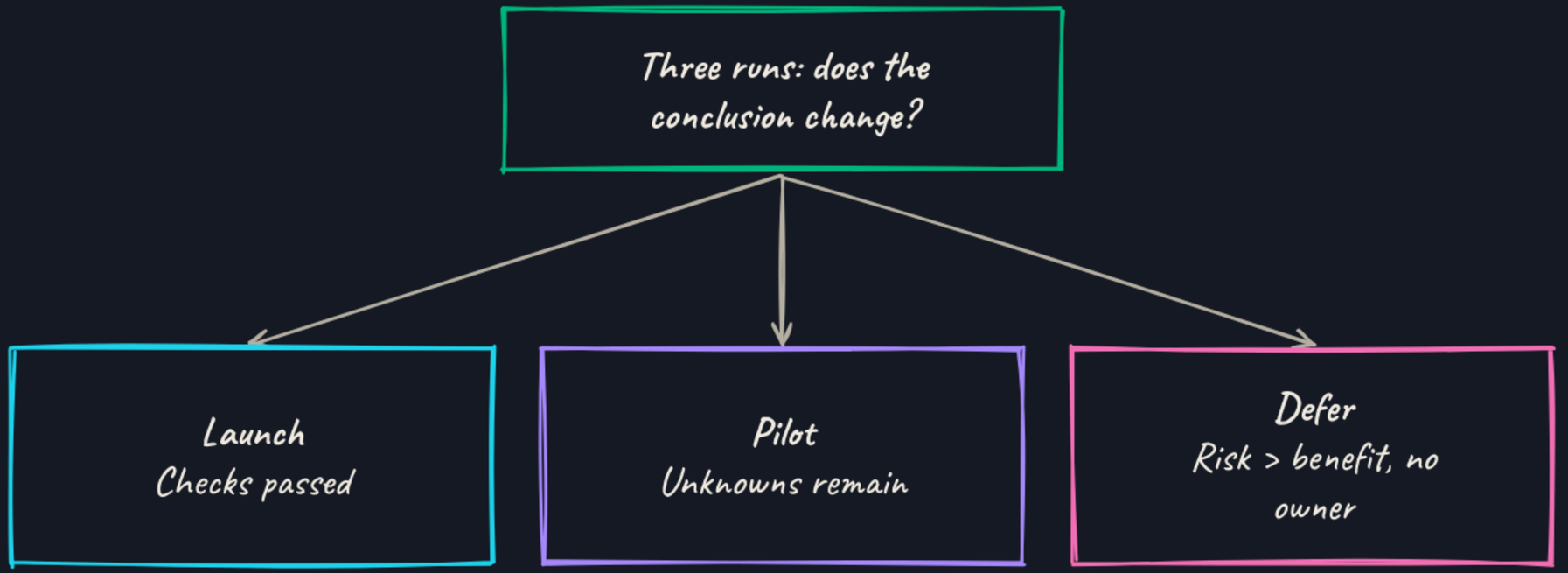
04

Quality checks

The agent is ready only after scenarios where it fails safely

Test stable behavior

Scenarios 3 runs



How to evaluate the result

Scorecard Acceptance

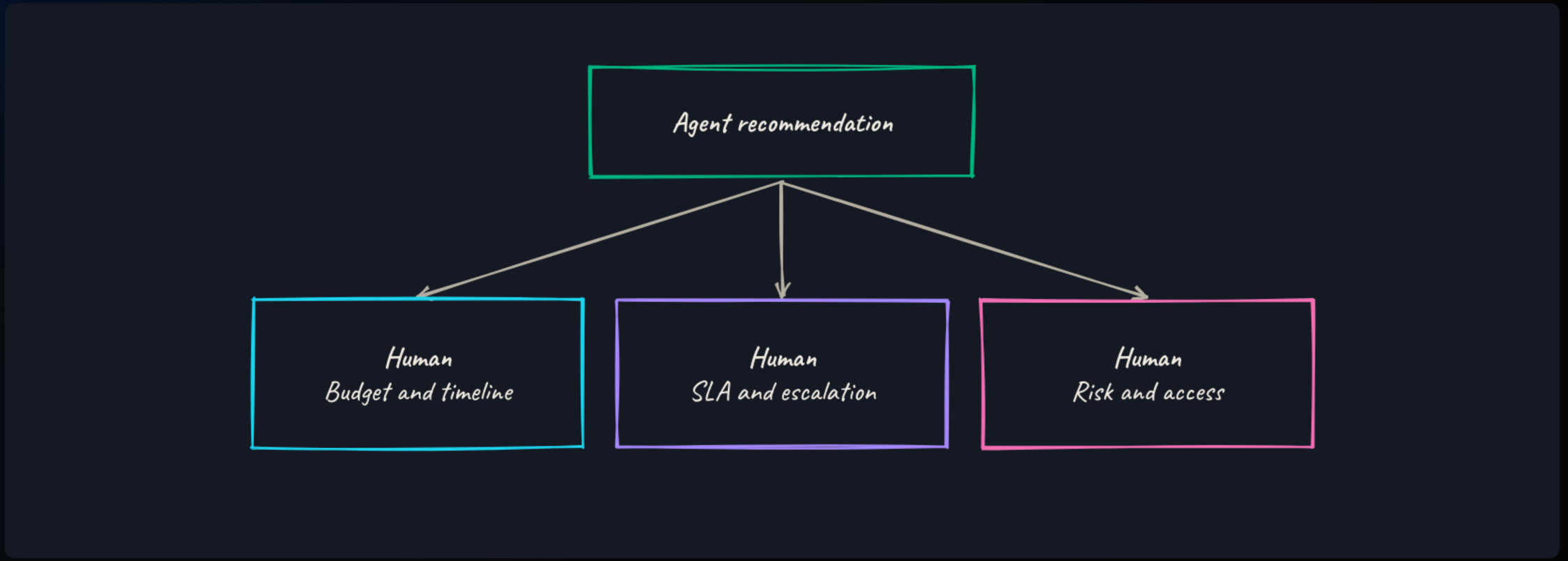
We judge decision usefulness, not text polish

- Facts: internal docs, no source substitution.
- Calculation: reproducible economics.
- Risk: guardrails, stop conditions, approval.
- Format: concise and executive-readable.

- Good agents aid decisions; bad ones just write beautifully

Human approval needed

Guardrails Safety





Part 5

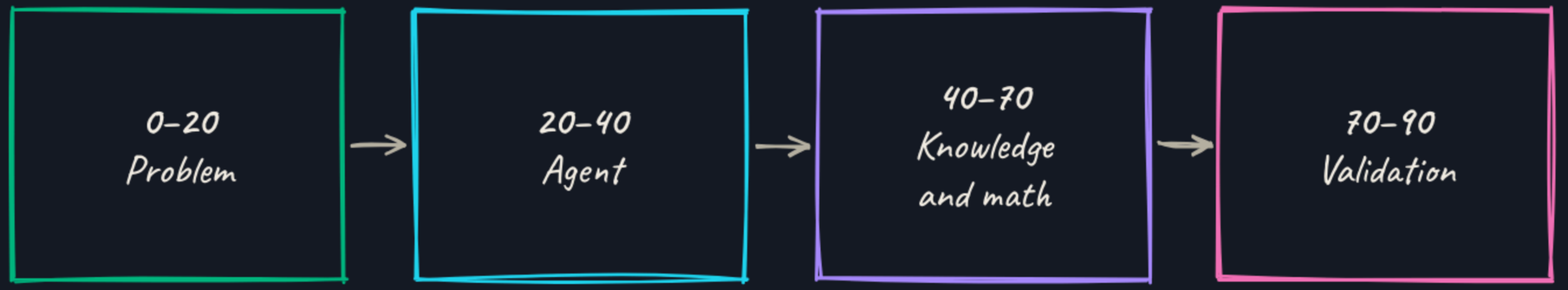
05

Decision review

Final debrief: where the agent helps and where it must be constrained

Lab plan

Timing 90 minutes



Result Definition of done

What each team should have

Working agent + path to org rollout

- One-page brief for AI support launch.
- Knowledge base + context + calculation tool.
- Facts ≠ estimates; risks are visible.
- Platform backlog: knowledge, tools, evals, access, cost.

- Bridge from learning to AI-platform work

Links and materials

Sources Materials

Docs and lab pack

- Yandex AI Studio agents/search/function docs.
- Lab pack + guide on GitHub.
- Previous lectures in the series.