



The logo features a stylized orange crescent shape on the left, followed by the word "ANNIE" in a bold, white, italicized sans-serif font. Below "ANNIE" is the phrase "BY 24 VISION" in a smaller, orange, italicized sans-serif font.

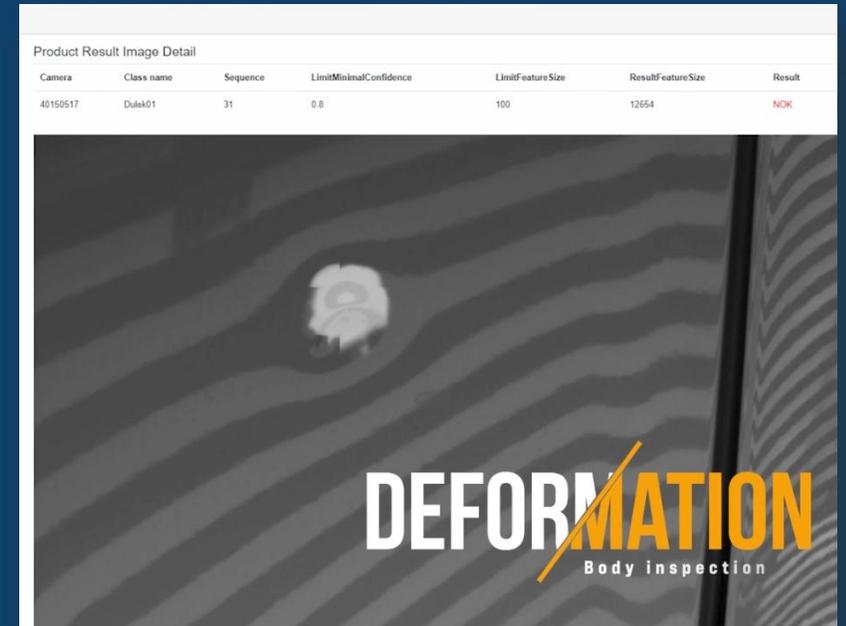
ANNIE
BY 24 VISION

WHEN AI HITS THE FACTORY FLOOR: WHAT BREAKS FIRST?

ZDENĚK NEUSTUPA
CTO & CO-FOUNDER, 24 VISION

We Had 98.7% Accuracy...

And still failed in production.





Why?
Because production is not a lab.

What Actually Happened

Deployed model worked perfectly in testing
Failed on production line



Reason: light reflection on metal surface
at morning shift

← SKRABANCE_SX

7FW 027252

RESULT FEEDBACK P

NOK

NONE

NOK

OK

NOK

TAGS

SET

DEVICE

TIME

13.03.20

MASK

TRANSPARENCY

0.00%

0%

The Illusion of AI

Dataset
Model
Accuracy
Demo

The model is the easiest part of the system.

Reality of the Factory

Lighting variability

Hardware constraints

Line speed requirements

Product variability

Imperfect data

Zero downtime tolerance

What Actually Breaks First?

Stability

Latency

Edge cases

Trust from operators

Not accuracy

The Gap

98% accuracy ≠ usable system

False positives kill trust
False negatives create risk
Latency breaks flow
Instability kills adoption

Key Principle

**Production cares about consistency,
not peak accuracy.**

What You Actually Need

AI in production is a system, not a model.

4 key pillars:

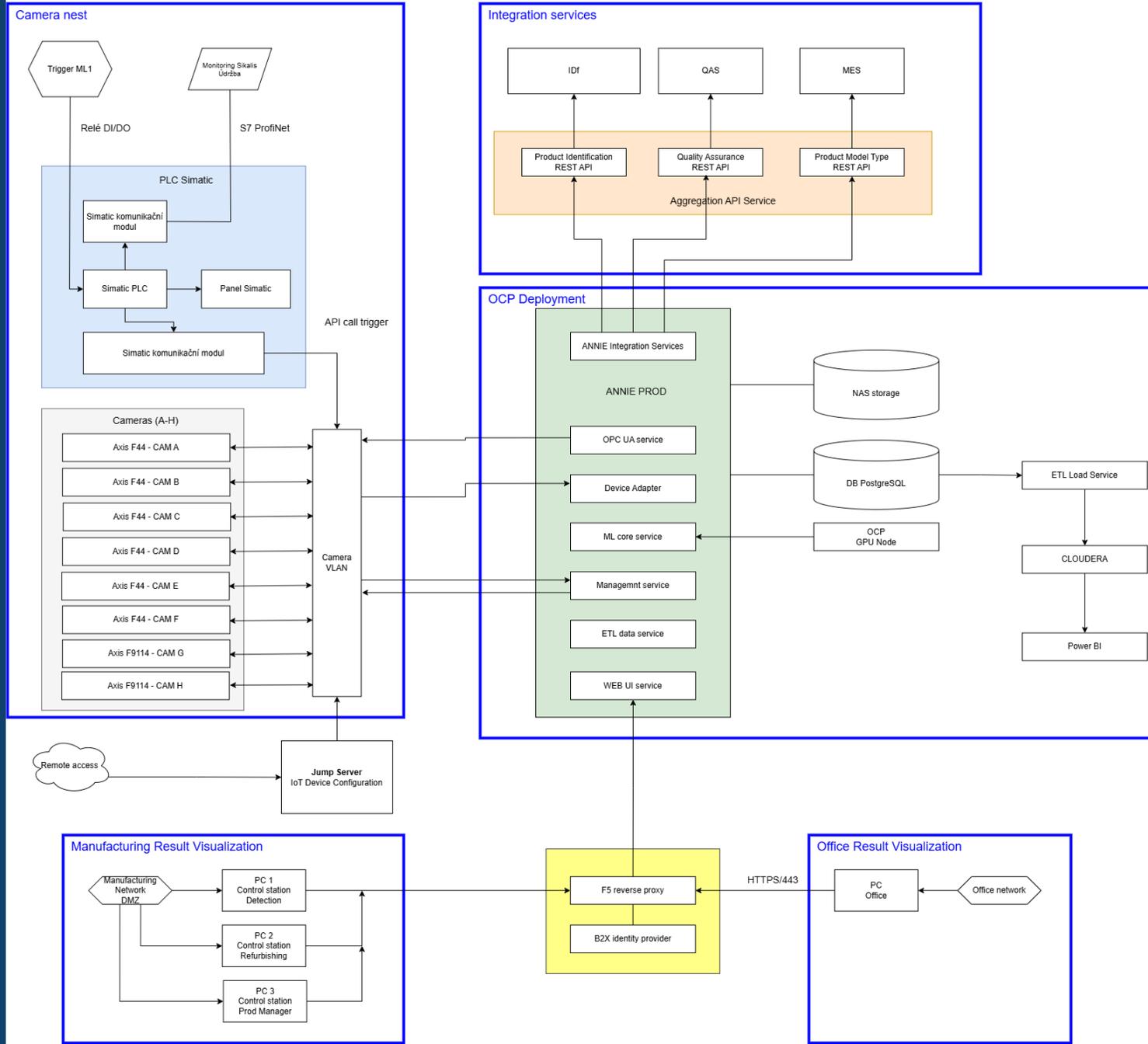
1. Deployment Architecture

Edge vs Cloud

Real-time constraints

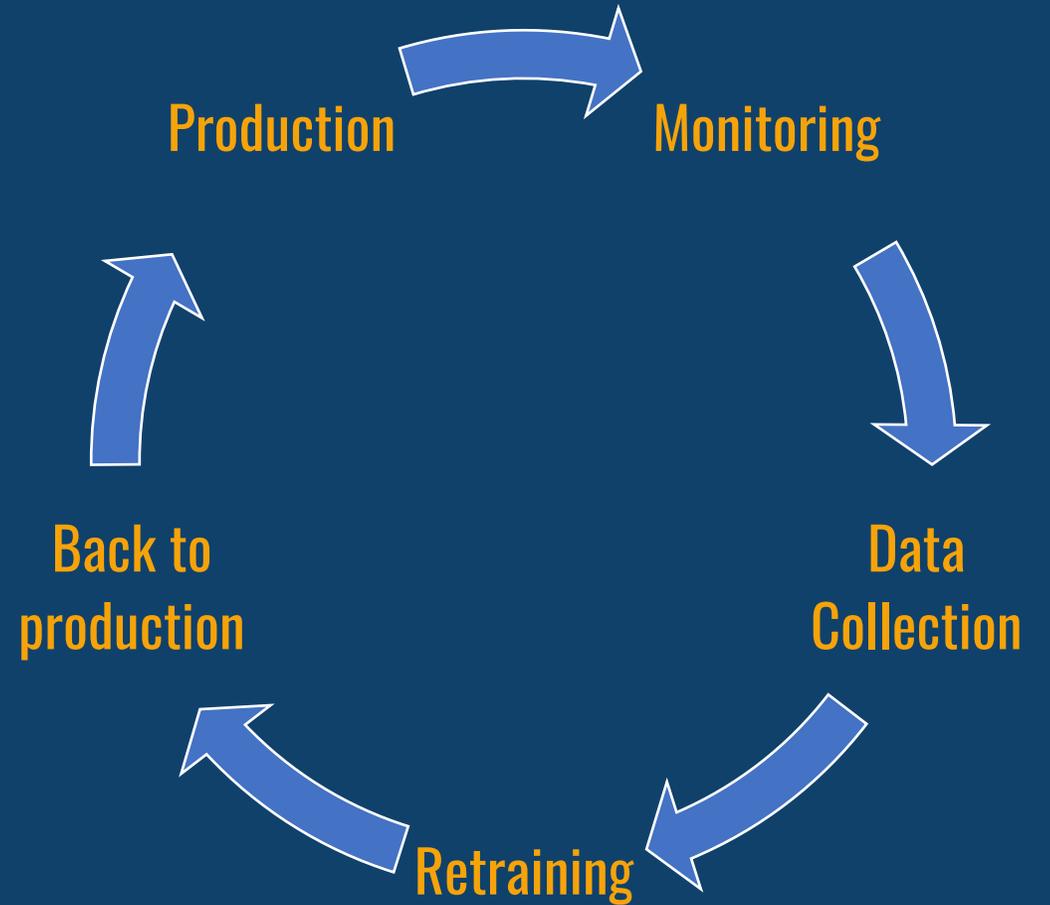
Integration with PLC / MES

Infrastructure layout



2. Monitoring & Feedback

Performance tracking
Drift detection
Data collection loops



3. Model Lifecycle

Versioning
Controlled rollout
Retraining strategy

4. Explainability & Trust

Decision transparency
Operator acceptance
Debugging capability



Hard Lessons

AI is a system

Data is always worse than expected

Stability > accuracy

Integration is hardest

Feedback loops are critical

Closing Thought

The real challenge is not building AI that works.

It's building AI that operators trust every day.



QUESTIONS ?

ONE STEP CLOSER TO FLAWLESS PRODUCTION