

From Blind Spots to Insights: How Vision AI Drives Improvement

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Requirements: Define what vision AI needs to do

The Problem

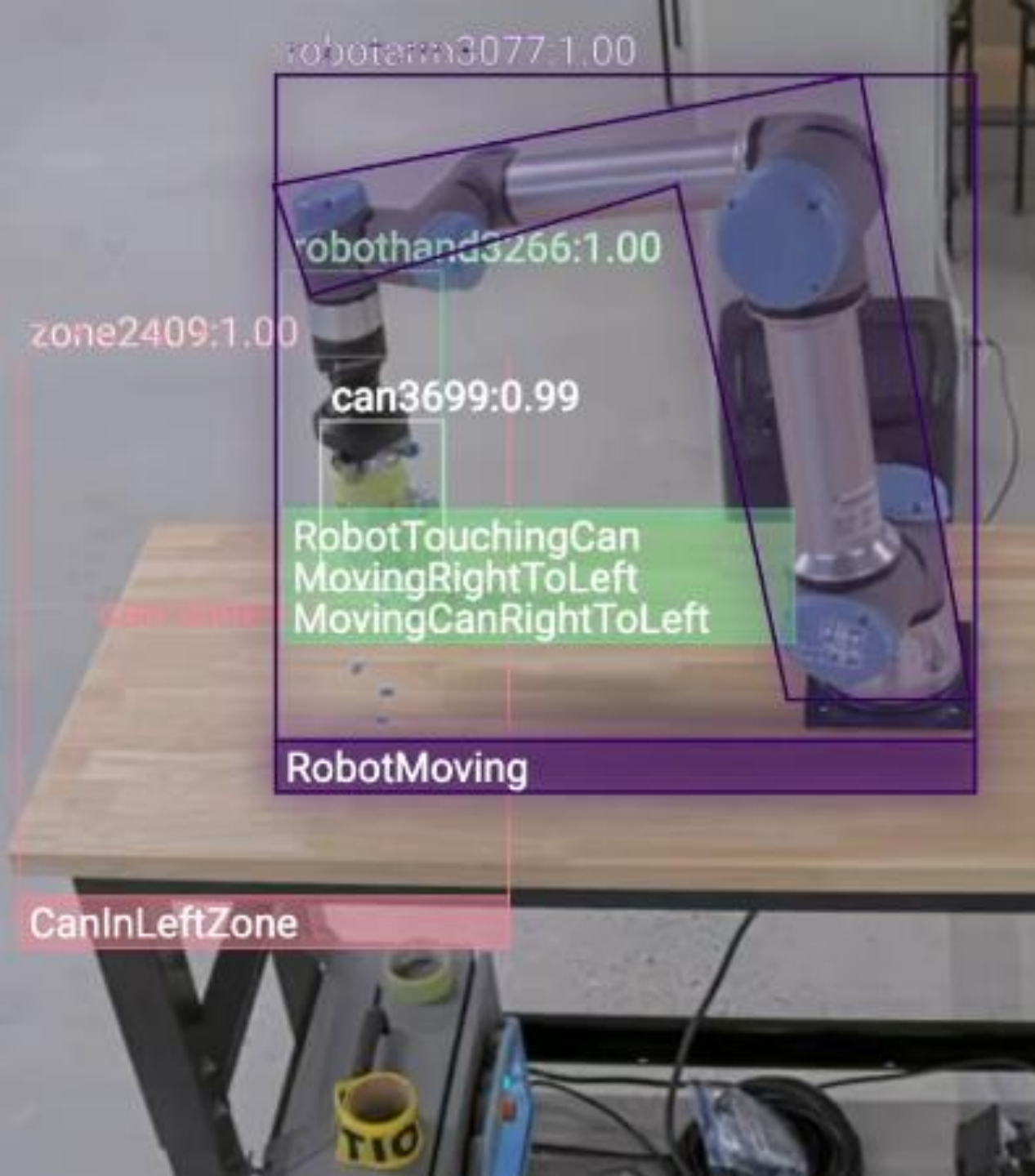
No live visibility into manufacturing and
logistics blind spots

Manufacturing blind spots



Reasons for incomplete data:

- Manual work areas
- Critical legacy equipment
- Multiple processes to produce one output
- Incomplete machine data



AI Cameras

- Identify objects, actions, activities
- Measure events, interactions, and duration
- Track many processes from one viewpoint
- All data is logged in a consistent and easy to access format

Low IT/OT Overhead

Integrate with IoT, MES, BI, ERP

```
"payload": {  
  "start_time": "2025-08-04T14:13:50.453416+00:00",  
  "end_time": "2025-08-04T14:14:50.453416+00:00",  
  "categories": [  
    {  
      "name": "Welding",  
      "time": 0.0,  
      "value_add": true  
    },  
  ],  
}
```

Or bypass the middleware

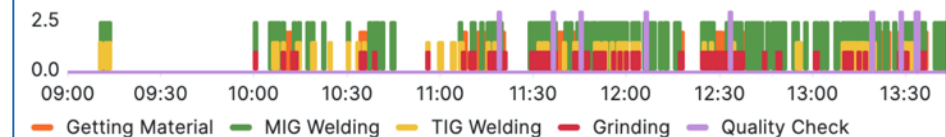
Ask Leela

How can I help you today?



Shift	Avg Cycle Time		Num Cycles		
Shift 2	218.0		2.0		
Shift 1	304.0		1.0		
Shift 2	167.0		3.0		
Shift 1	Serial	Cycle Time	VA	Grinding	Welding
Shift 2	AAC17008	48.0	53.4%	1.2	2.4
Shift 1	AAC17037	97.0	50.0%	1.9	9.3
	AAC17004	57.0	75.3%	1.8	11.6
				9.8	15.8
				10.5	2.5
				7.9	2.7

Fabricating



Benchmarking

Measure the pre-automation process

Baseline First

- What is the productivity of the current process?
- Reality on the floor rarely matches the production plan
- Bottlenecks are easy to misidentify
- Measure before changing the process



Loading Dock Case Study

Narrative before measurement

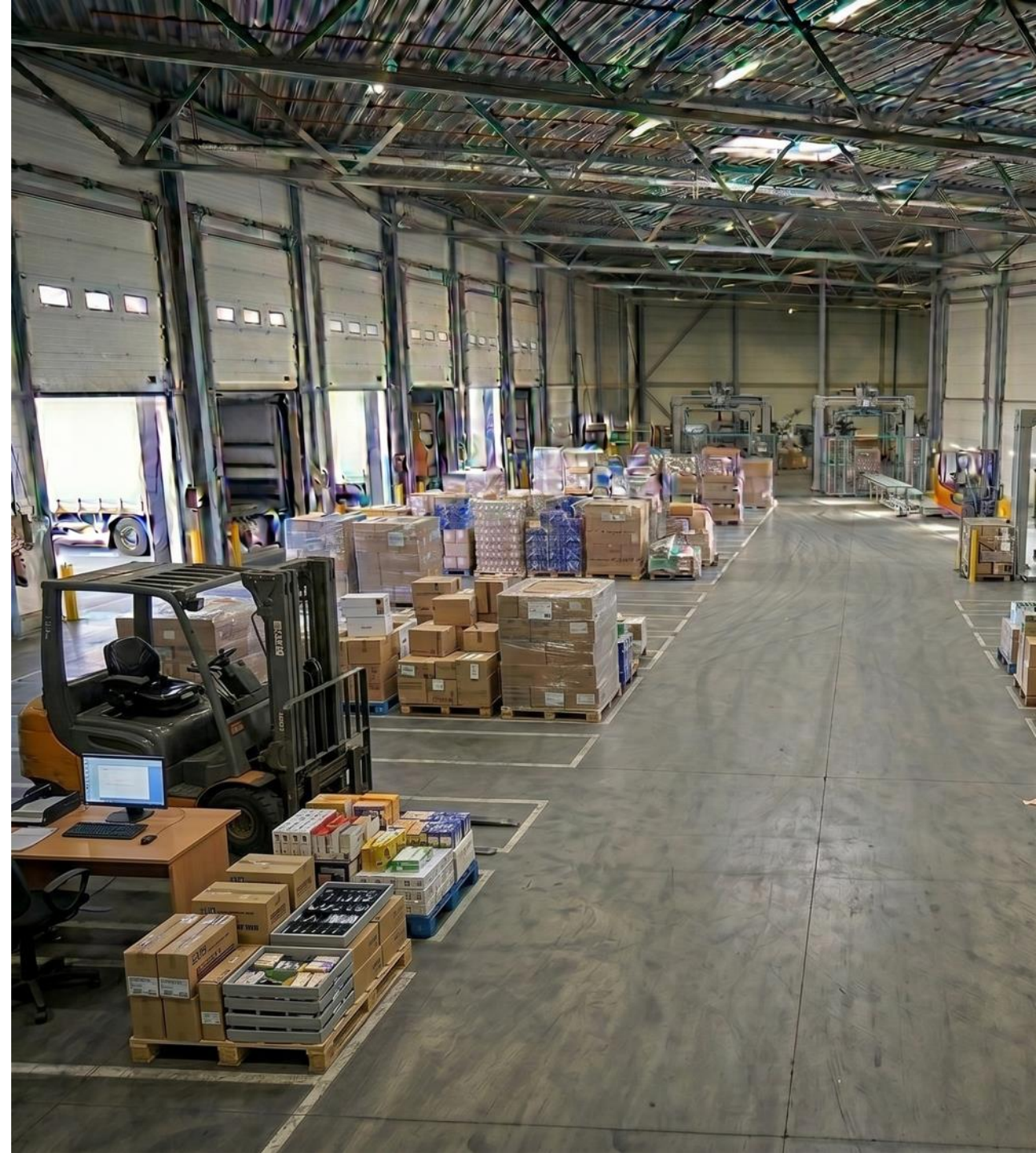
- Workers reported that waiting for pallet wrappers slowed down truck loading

The data showed

- Little to no wait for pallet wrappers, low wrapper utilization
- Loaders not on the floor 25% of shift

The data showed

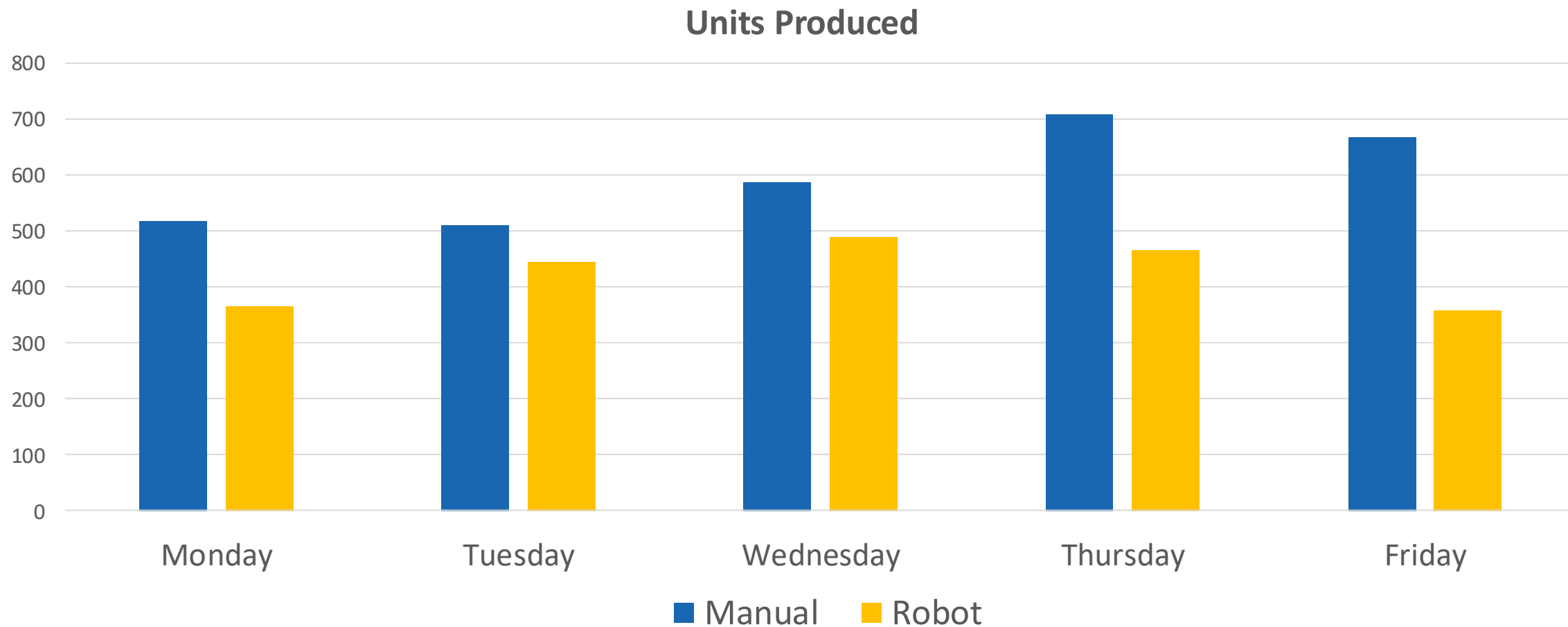
- Savings of \$250k per quarter



Validation

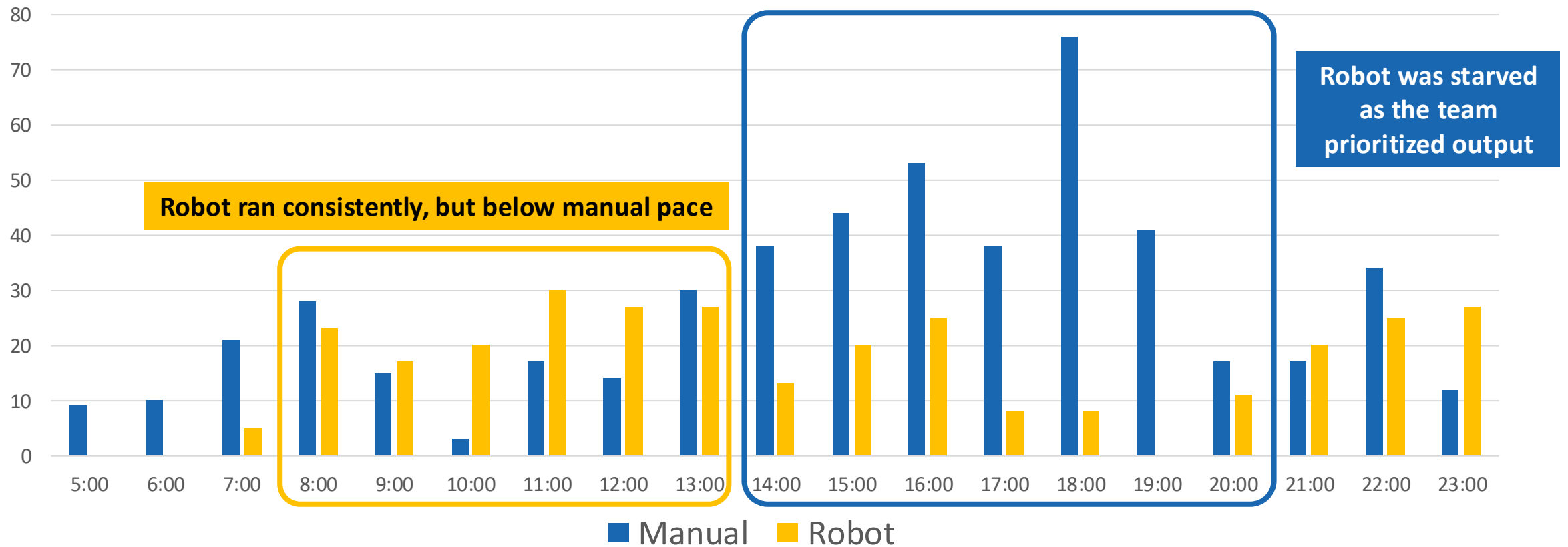
Measure the post-automation process

New Processes Always Lag



The Output Has a Backstory

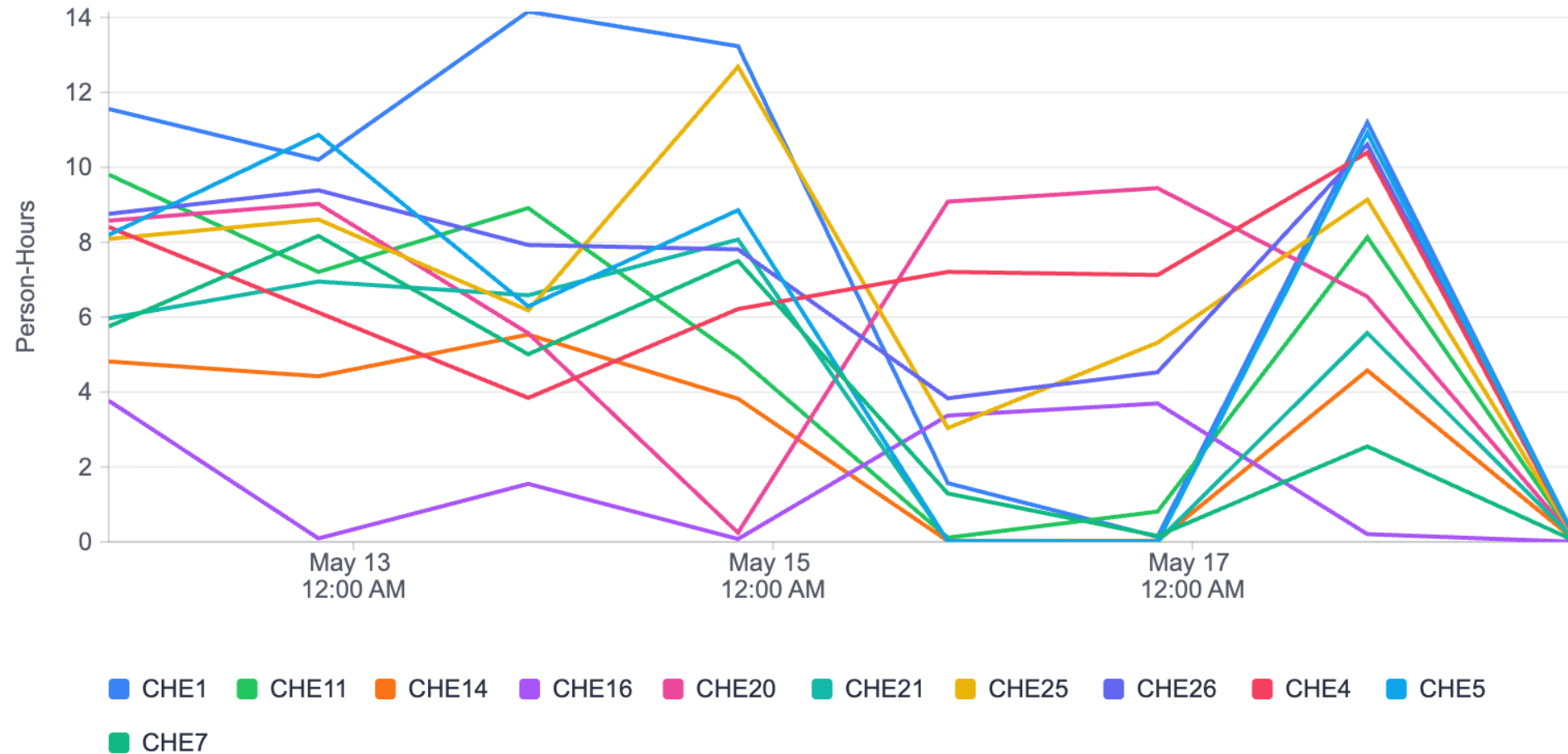
Units Produced



Scaling

Expand what works and
maintain performance

Adding Workstations



Daily Workstation Value-Add Input

Ways to Think About Scaling

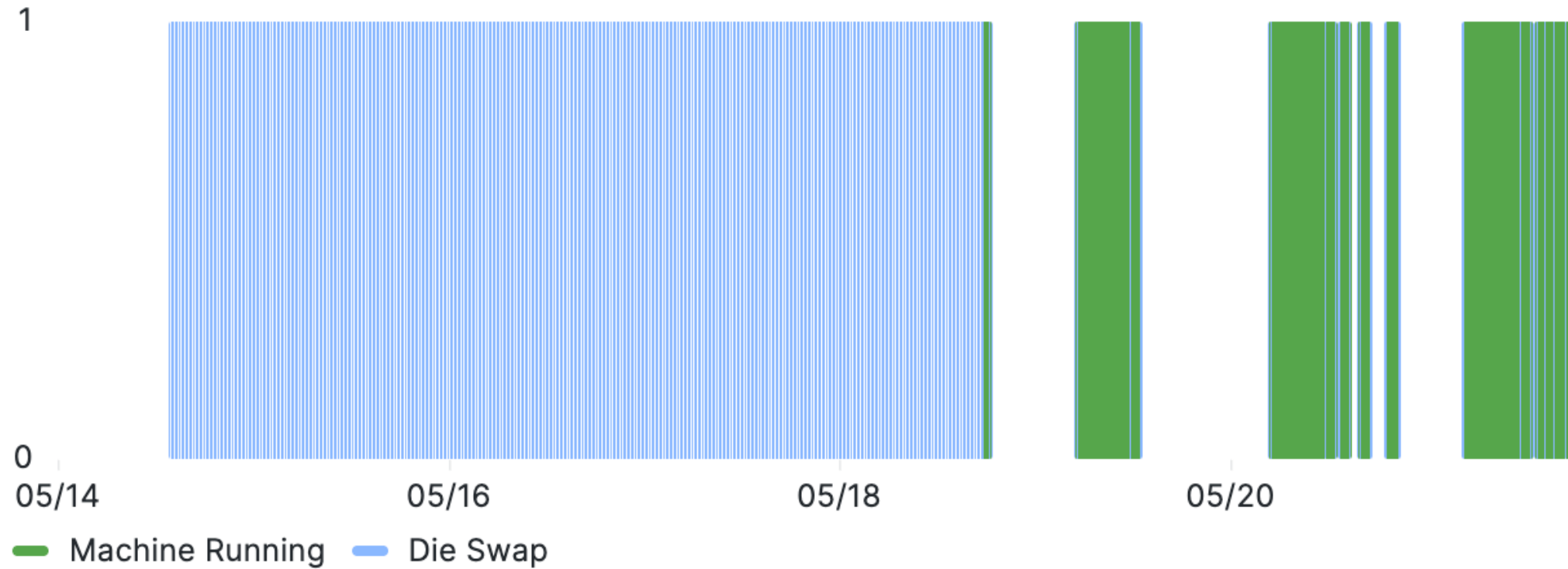
- **Workstations:** AI model flexibility enables easy ramp up
- **Use cases:** Covering multiple uses cases at same station
- **Time:** Ability to scale from day to years
- **Data:** Consider storage windows. How much look back and meta data do you need?
- **Integrations:** MES, ERP, WMS, EHS, QMS, IoT and beyond

Define your Requirements

Decide what your vision AI needs to do

Maintenance Case Study

Running, Die Swap, and Changeover



Contact Us



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Cyrus is an entrepreneur with expertise in machine vision and computational cognitive modeling. Cyrus has spent the last 7 years learning about the world of manufacturing operations and logistics operations from customers.

Thank You!



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