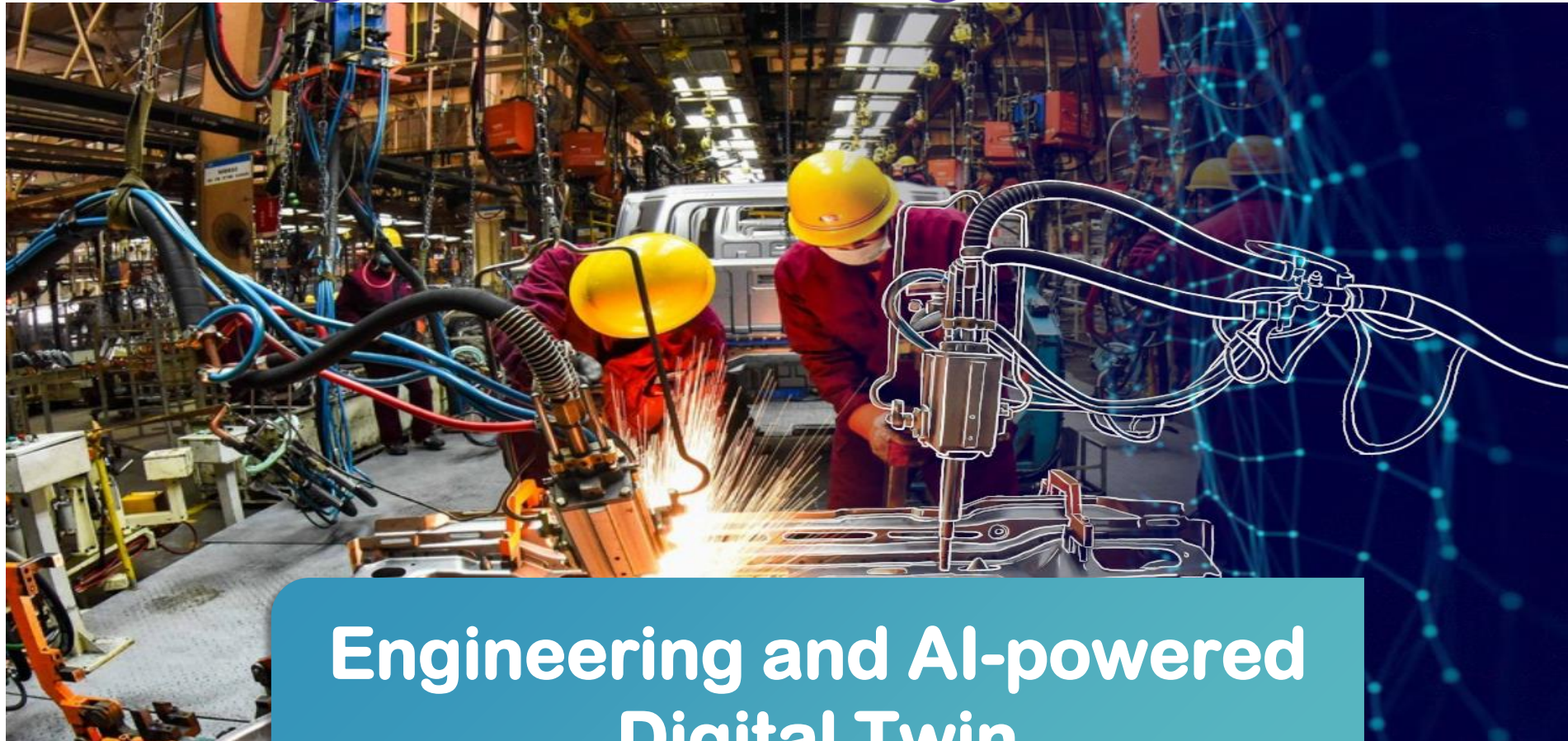


**Zwilling Labs Pvt. Ltd.**



Let us be your partners for digital transformation  
**Digitization to Digitalization**



**Engineering and AI-powered  
Digital Twin**

# Zwilling Product Lines



## Zwillio (Manufacturing)

- **Machine Digital twin platform** for high-end and critical machinery : Data extraction using IoT/controller/PLC/IoE, 3D virtual model, condition monitoring, root cause analysis and prescriptive feedback using advanced supervised and unsupervised AI models
- **Factory Digital twin**, a digital thread for factory processes with visual flows to enable optimal machine usage and manpower allocation, order tracking and visibility and increased OEE and other KPIs

## MinePulse (Mining DT)

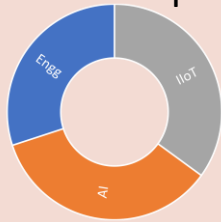
- **MinePulse** is an AI driven Truck Health and Fleet Operations Optimization. The solution utilizes J1939 and specialized in-tyre IoT data capture, domain-specific feature engineering, subcomponent health indexing(CMI), and Deep Learning prognostics (RUL) to predict component failure and recommend optimal maintenance actions

## Machine Digital Twin

87%	450	400
OEE	Capacity	Total Produced
89%	98%	100%
Performance	Quality	Availability

### Machine Efficiency

Optimal process parameters  
OEE and Utilization  
Losses Analysis



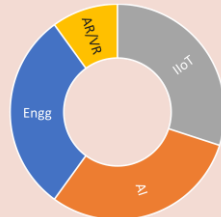
Scrap reduction

Loss reduction

### Machine Health

Real-time monitoring  
Prescriptive maintenance for high-value assets  
AI based anomaly detection  
Event and alarm generation

Downtime reduction



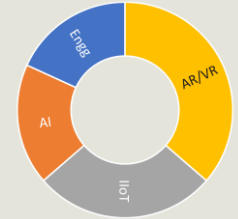
Higher throughput & OEE

## Factory Digital Twin

### Process Trail

Factory visibility

- Digital thread for the factory floor
- Activity heat map
- Logistics
- Bottleneck
- Overcapacity

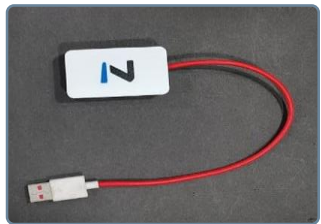


### Process optimization

Resource & Energy reduction  
Carbon footprint reduction  
Effluent reduction

Wastage reduction

Green factory



**IoE**  
Can **extract and write** data from any windows application, even without net connection.

Data

- SCADA/ERP
- IoT+ IoE
- HMI

Model

- Pretrained Models
- Deep Ai
- **Adv Engineering**

Digital Twin

- Machine Digital Twin
- Factory Digital Twin
- Machine Control Tool

Remote Monitoring

Smart Diagnostics

Predictive analytics

Prescriptive Analytics

AI Machine Control

# Machine Level Digital Twin



ZWL ADMIN  
Admin

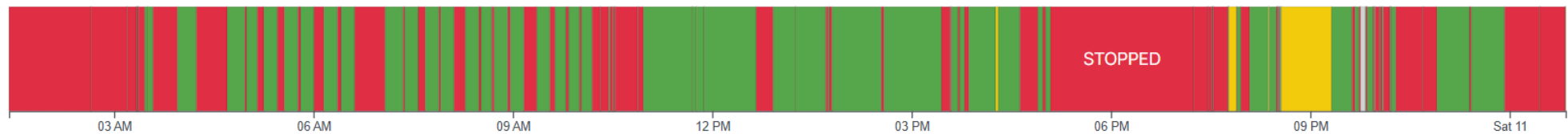


Biorad-Medisys > PunePlant > Shop\_3 > HAAS\_BRI-230

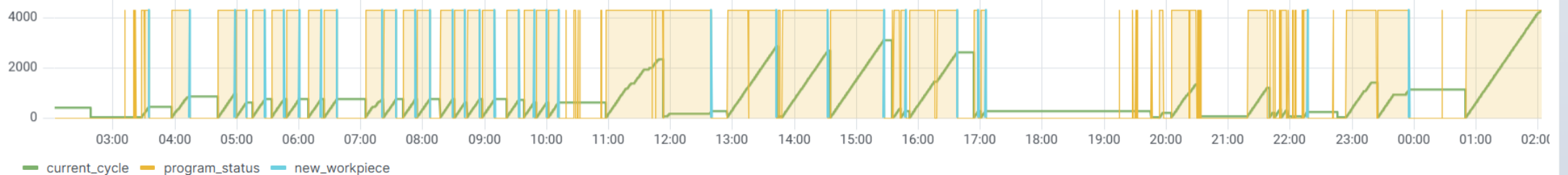
Machine On Time <b>23.9 hour</b>	Machine Idle Time <b>11.0 hour</b>	Machine Active Time <b>12.5 hour</b>	Total Cutting Time <b>11.0 hour</b>	OEE <b>52.0%</b>	Workpiece Count <b>31</b>	Current Cycle Time <b>1.20 hour</b>	Cycle Remaining ... <b>0 s</b>
-------------------------------------	---------------------------------------	---	--	---------------------	------------------------------	--	-----------------------------------

Latest Machine Status		Current Program Status		Program Duration		
machine_status	<b>on</b>	program_status	<b>ACTIVE</b>	program_name	program_id	duration
duration	<b>23.95 hour</b>	duration	<b>1.16 hour</b>	ROTC_TBL_TRAY_SIZE_2.tap	2886	1.16 hour
				ROTC_TBL_TRAY_SIZE_2.tap	2882	0 s
				ROTC_TBL_TRAY_SIZE_2.tap	2880	30.07 min

Machine Timeline



Machine State



# Shop Floor Level Digital Twin



ZWLE ADMINER  
Admin



Filters

Organization

Boldrocchi

Plant

Boldrocchi\_Che...

Orders

1234

Time Range

From: now-6h  
To: now

Apply



Boldrocchi > Boldrocchi\_Chennai

ORD-73523    PO-123    2026-02-14    re-contextualize bleeding-edge schemas    Kevinshire    2    1

Start Date	End Date	Completion Progress	Inspection Progress	Pending Jobs	
scheduled	2026-02-14	scheduled	2026-02-14	job_number	job_progress
actual	2026-02-14	actual	2026-02-14	1	88.9

Job Progress

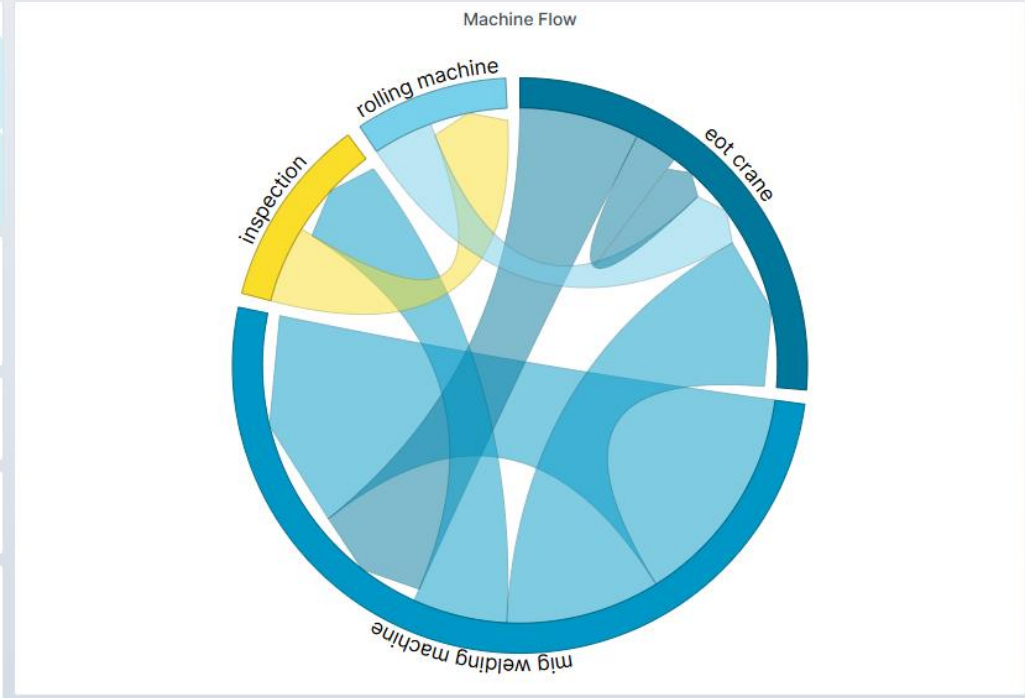
Job Number	Tag Number	Model Number	Weight	No of Activities	Completed Activities	Rework Count
1	No data	No data	150 kg	9	8	3

Completion Progress 	Inspection Progress 	Timeline start: 2026-02-14 end:
-------------------------	-------------------------	---------------------------------------

Machine Status 	Total Hrs 2.32 Hrs
	Active Hrs 0.767 Hrs
	Idle Hrs 0.153 Hrs

Inspection Pass Activity Plan vs Actual

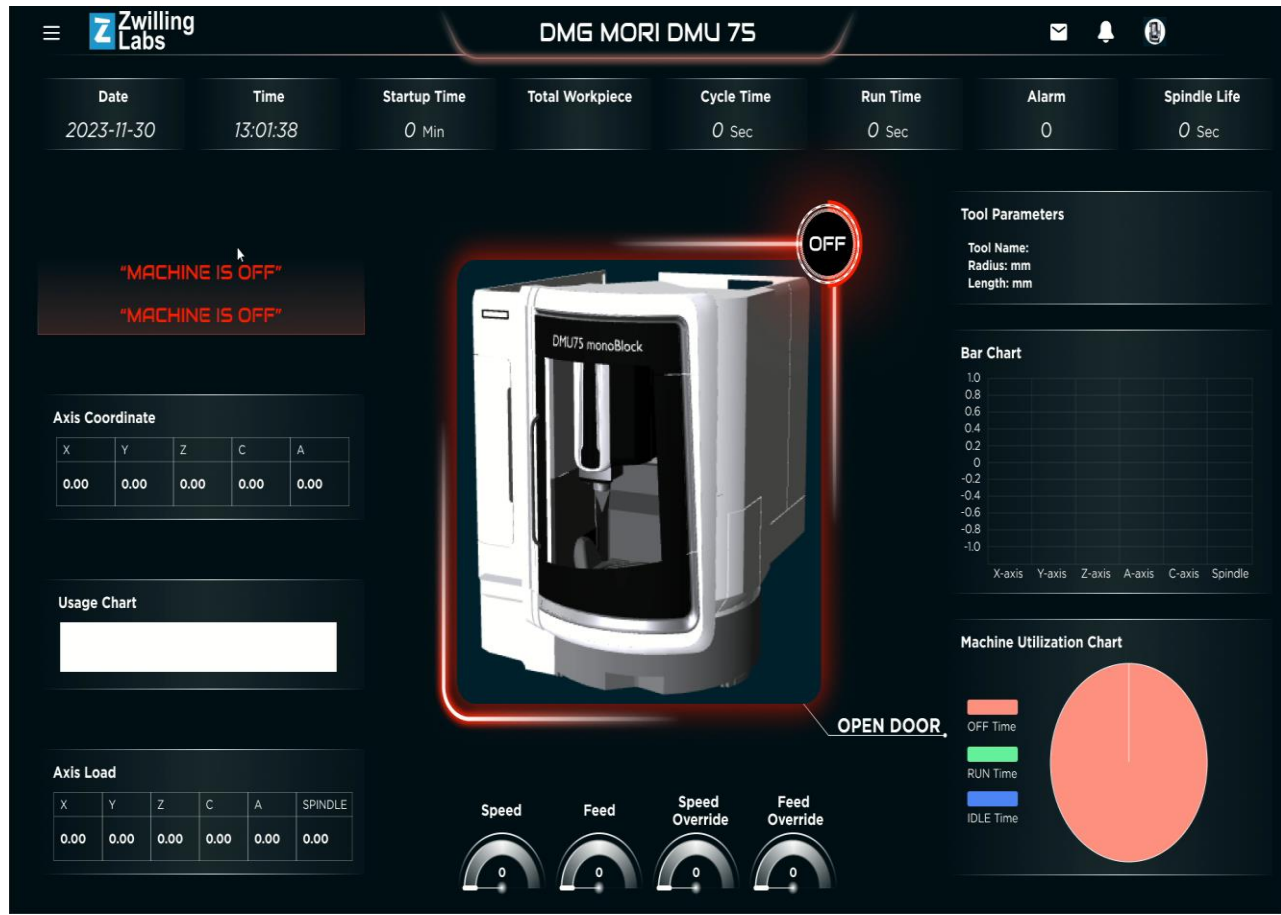
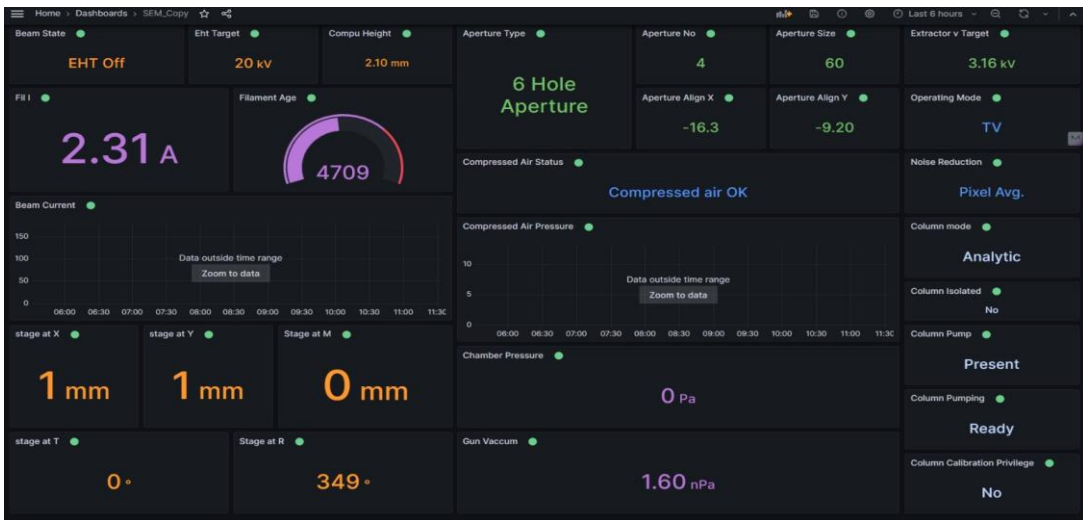
activity	planned_hrs	actual_hrs	rework_hrs	rework_count



Profile

Log Out

IoT/IoE → Data APIs → Time Series DB → Model APIs → Model Zoo → Model Env → TwinBoard





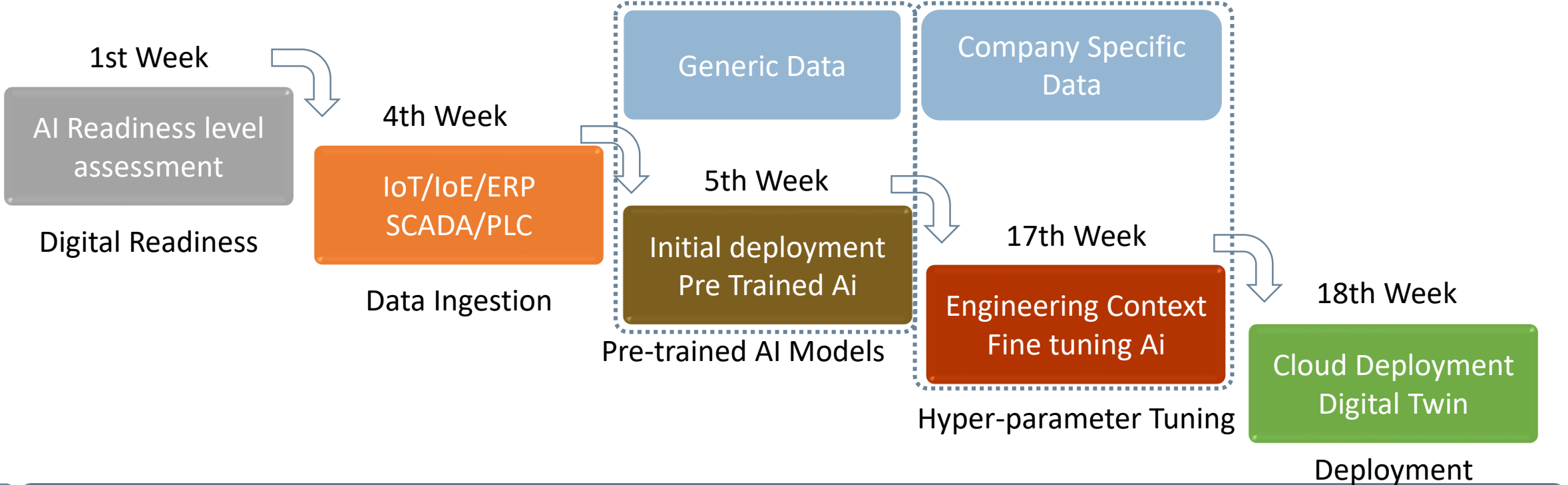
# Agentic Digital Twin



The screenshot shows a dark-themed chat window with the following elements:

- Navigation:** Top bar with 'Chat', 'Cowork', and 'Code' tabs. Left sidebar with icons for home, search, and other functions.
- Context:** 'BKT\_Smart\_Interaction / Server connection status check' at the top left.
- User Message:** 'Hi are u live? and sever connected' in a dark bubble.
- AI Response:**
  - 'Viewed 2 files, ran a command >'
  - 'Now let me check if the TimescaleDB server is connected.'
  - 'Searching available tools: timescaledb list tables >'
  - A loading spinner icon.
- Input Area:** 'Reply...' text field with a plus icon and a blue icon.
- Model Info:** 'Sonnet 4.6' with a dropdown arrow and a play button icon.
- Footer:** 'Claude is AI and can make mistakes. Please double-check responses.'

# Pricing Model & Deployment Timeline



₹ Hardware, Installation and Configuration charges

■ Onetime Revenue  
■ Recurring Revenue

Continuous Self-learning Ai Model

Continuous Learning

₹ Subscription charges





# Zwillio value proposition (Customer Rols)



Digital Twin platform, powered by Advanced AI & Engineering:



Up to **50%**  
Downtime reduction

Real-time Monitoring  
Ai-driven Decision Making  
Control Over Production  
Ai-driven Machine Control

Higher  
Throughput



Up to **20%**  
Scrap reduction

Sustainability

Downtime Reduction  
Scrap Reduction  
Loss Reduction  
Wastage Reduction



Up to **25%**  
Total Productivity gain

## Founders



Prof. Asim Tewari

Chairman and CEO



Dr. Deepashree Rajee

Managing Director



Anil Maharia

Director-Digital Twin Systems



# Contact Us



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