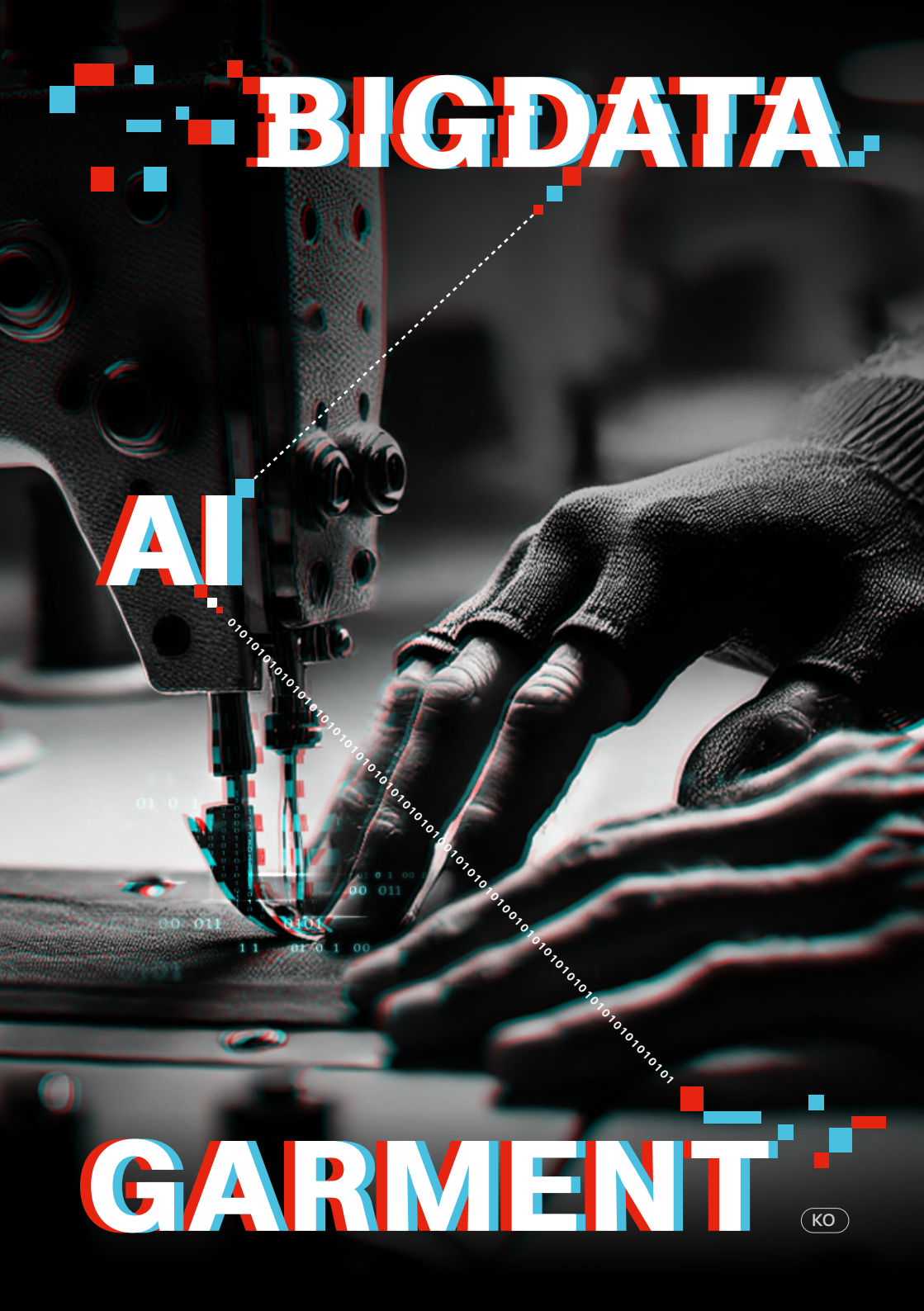
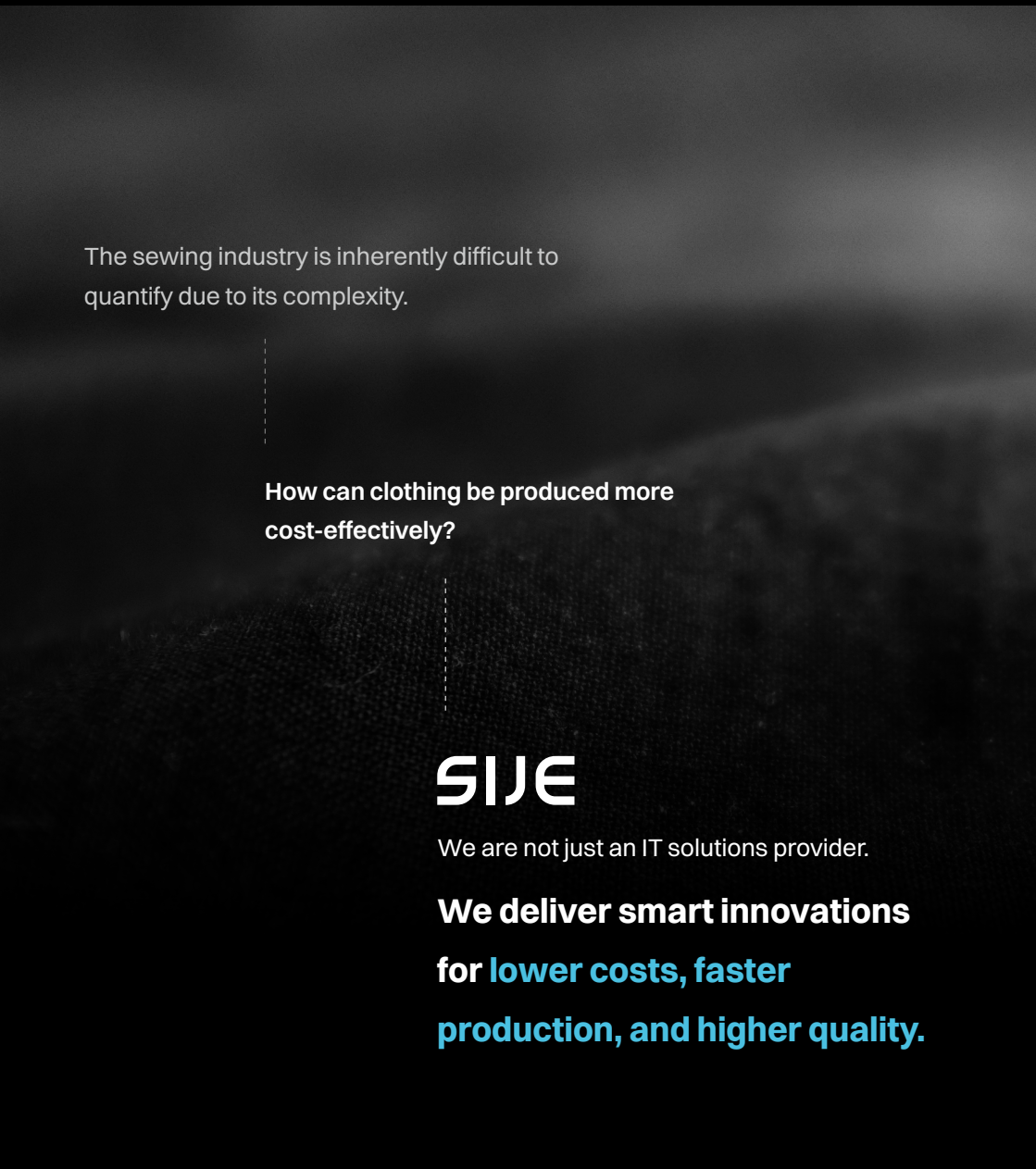

BIGDATA
AI
GARMENT
KO

Problem

Why you need a solution



The sewing industry is inherently difficult to quantify due to its complexity.

How can clothing be produced more cost-effectively?

SIJE

We are not just an IT solutions provider.

We deliver smart innovations for lower costs, faster production, and higher quality.

Solution for Garment Manufacturing

Monolis

Apparel supply chain management solution

Go to Youtube ↗

Monolog

Production site monitoring IoT device

Go to Youtube ↗

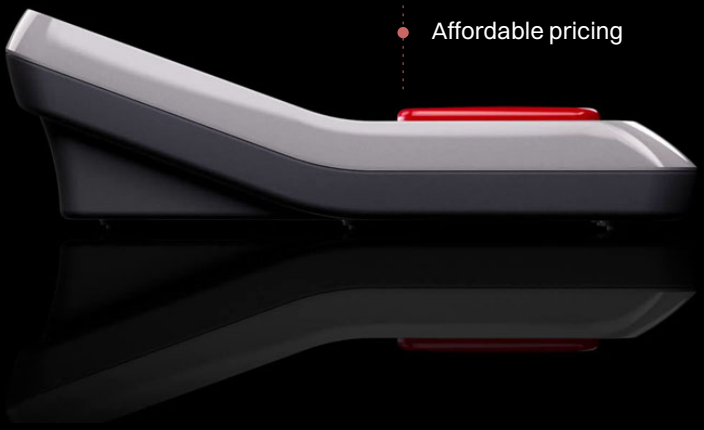
Solution

Digital Transformation of Labor-Intensive Manufacturing

Monolog

Real-Time Production Monitoring

- Durable and lightweight hardware
- Easy operation
- Affordable pricing



Production monitoring IoT system

Monolog

Monolog is an advanced IoT device driving the digitalization of apparel manufacturing, analyzing sewing patterns to generate millions of process data points each day.

1
Press the red button to update production and SMV in real time.

2
Captures 30 data points per second.

3
Tracks data regardless of worker location or process changes.

Dataization of sewing machine work

Data Collection

Data is extracted from human-machine interactions, capturing pedal movements and vibrations to distinguish machine operation from fabric handling.

1. Pedal

Operation Detection

2. Counter

Button + Sewing Machine Pattern

Data visualization

Real-Time Monitoring

Real-time data processing accurately visualizes production output, allowing instant bottleneck detection through Andon and Kanban systems at each factory.

1. Andon

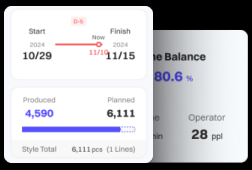
Real-time production monitoring through data analysis

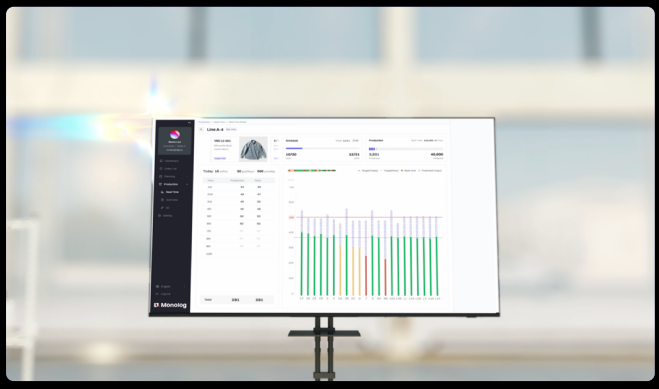
Production Traffic Lights

Good Warning Serious

2. KANBAN

Real-time production monitoring dashboard

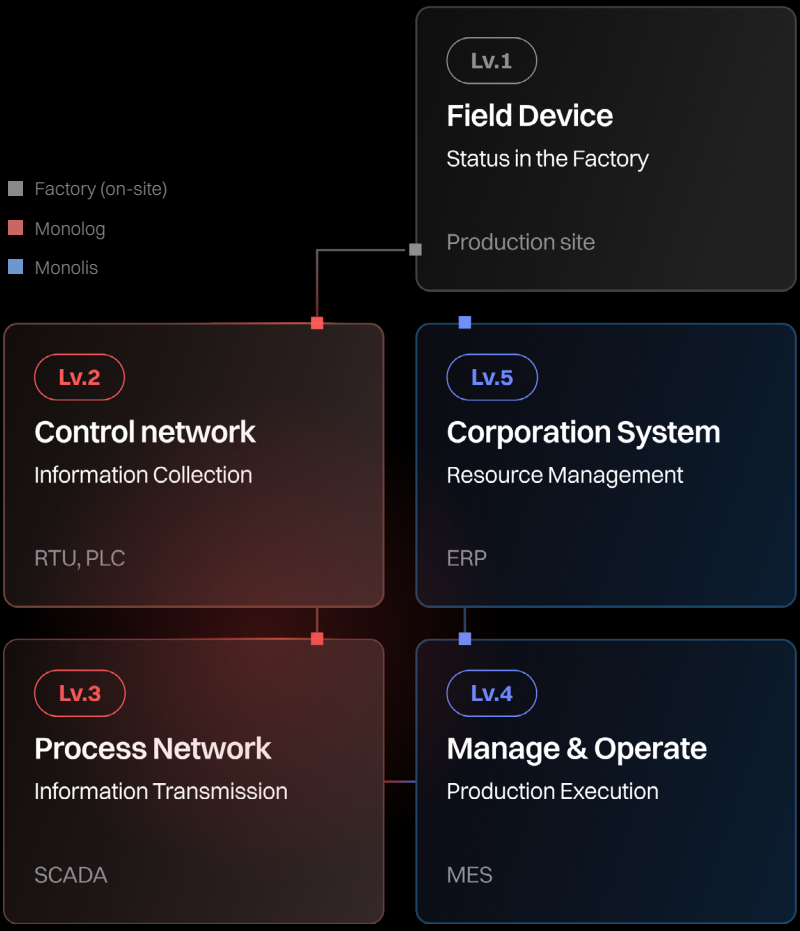




Digital Neural

Smart Factory

SIJE establishes an information network that integrates real-time factory production data into MES and ERP systems.



Big data

With a focus on scale, diversity, speed, and accuracy, our system swiftly and precisely collects millions of process data points and variables generated daily on the factory floor.

Deep Learning

Utilizing big data, our system processes information in real time to accurately display production status.

Data analysis (SMV)

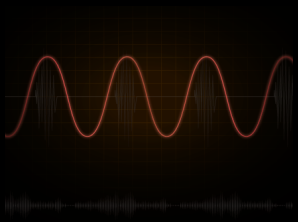
SMV

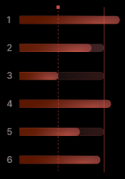
Monolis process analysis driven by Monolog data

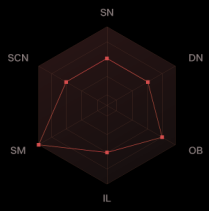
type	part_batch	op	seq	mc_type	ns	fabric_shell	smv_pred	action
blouse	back	attach i-lining keyhole + cut	1	irn	-	100% ecovero viscose, voile crepe	19.9	op
blouse	back	overlock keyhole facing	1	ovl3	-	100% ecovero viscose, voile crepe	20	op
blouse	back	ease keyhole facing	1	sn	-	100% ecovero viscose, voile crepe	20	op
blouse	back	ironing fold facing	1	irn	-	100% ecovero viscose, voile crepe	0	hp
blouse	back	fold edge stitch keyhole facing	1	sn	0.0625	100% ecovero viscose, voile crepe	-	op
blouse	back	attach keyhole facing	1	sn	-	100% ecovero viscose, voile crepe	30	op
blouse	back	cut + back stitch keyhole facing + downstitch top	1	sn	0.0625	100% ecovero viscose, voile crepe	32	op
blouse	back	ironing keyhole finish	1	irn	-	100% ecovero viscose, voile crepe	0	hp
blouse	back	make self loop, balik + tacking	1	sn	-	100% ecovero viscose, voile crepe	15	op

Production Efficiency

Use data to enhance production efficiency and quantify expected gains to optimize processes, lines, and factories.







Analysis of Work patterns
Detects and notifies of anomalies by patterns

Line Balancing
Displays work imbalances by process for corrective action

Management of workers
Manages workers using productivity indicators

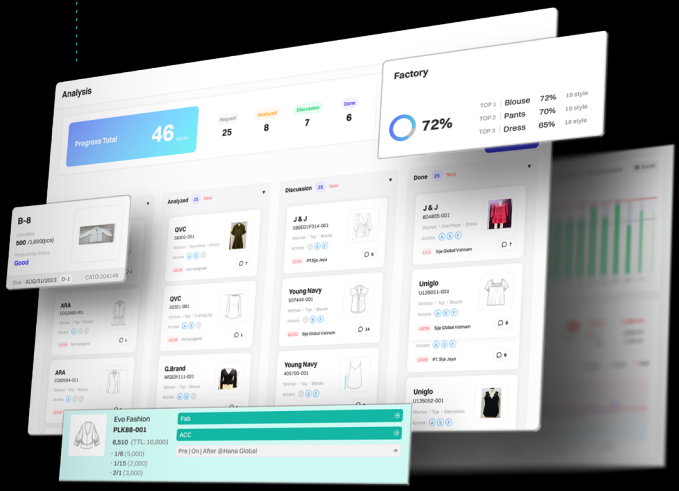
Solution

Smart Solutions for Automating Apparel Sourcing

Monolis

SaaS Solution for Apparel Supply Management

- Digitalization of Production Costs & Material Management
- Cloud-based system
- Automated process analysis & optimization



DESIGN AWARD 2024

SaaS Solution for Apparel Supply Management

Monolis

A production management and sourcing program that combines big data and AI, built on Monolog data.

Big data

Monolog data automatically generates process layouts and calculates manufacturing costs based on work instructions.

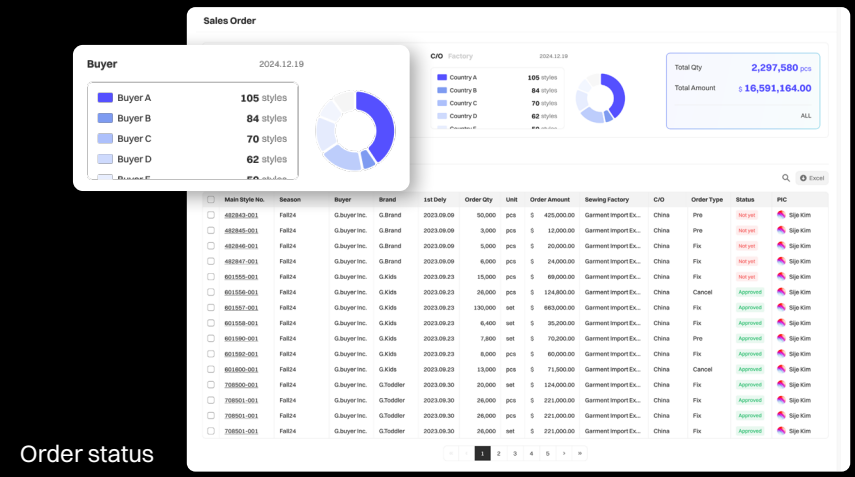
RPA

An intelligent system, built on sourcing theory and SOP, executes expert-level tasks while automatically processing and transmitting data.

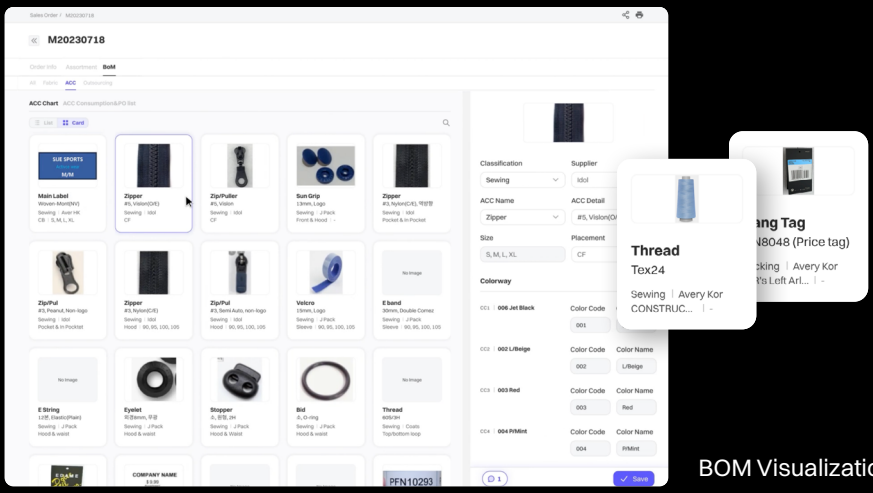
Merchandising

RPA

With a single input, various data points are automatically calculated
optimizing sourcing tasks like BoM management, material ordering,
and export control to maximize productivity.



Order status



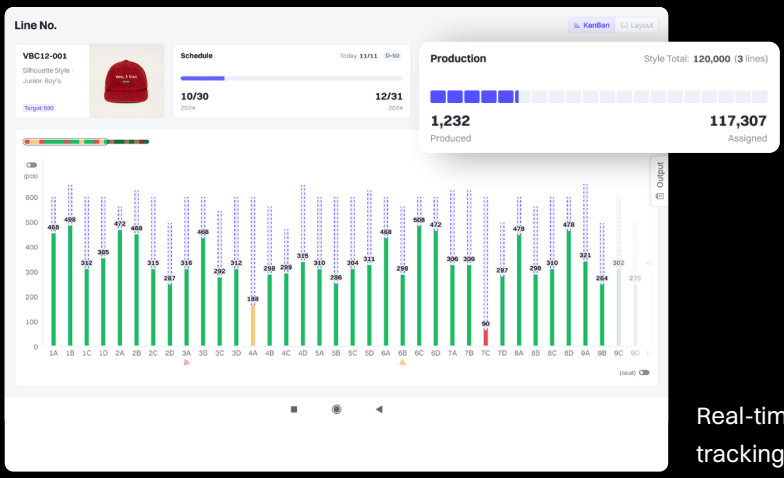
BOM Visualization

Production

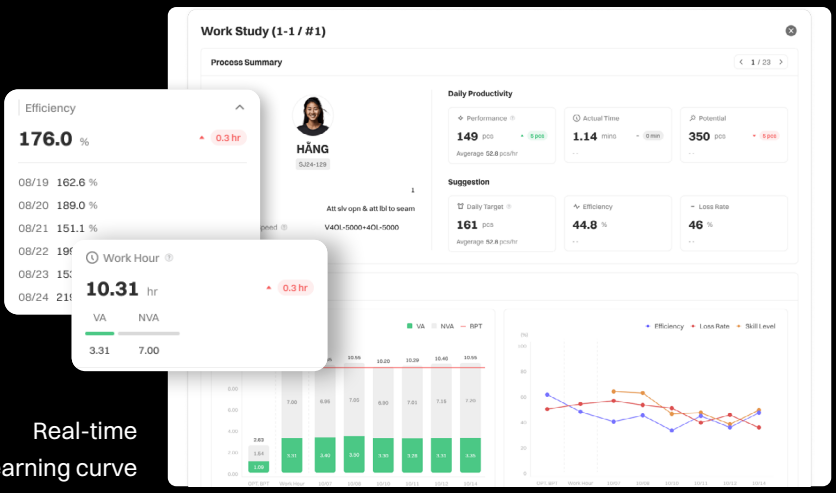
IoT

Real-time Production Status Monitoring

Through process analysis, target production volume and costs are precisely calculated, setting standards for sourcing and manufacturing.



Real-time production tracking



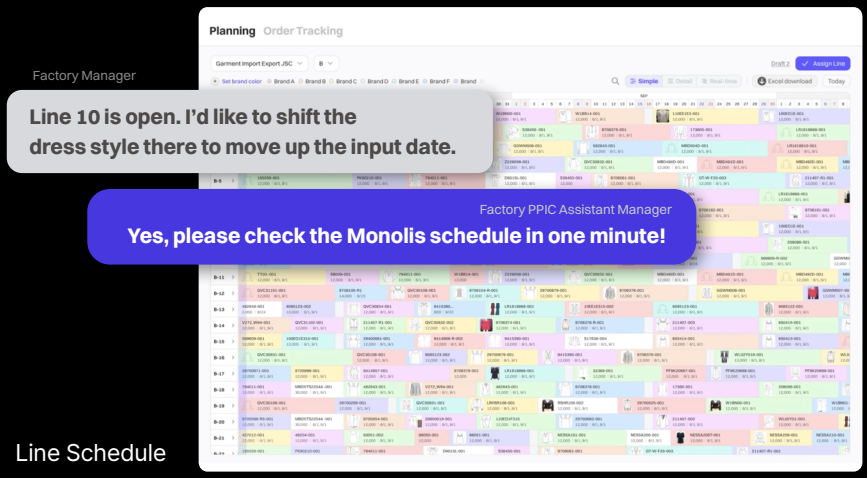
Real-time learning curve

Planning

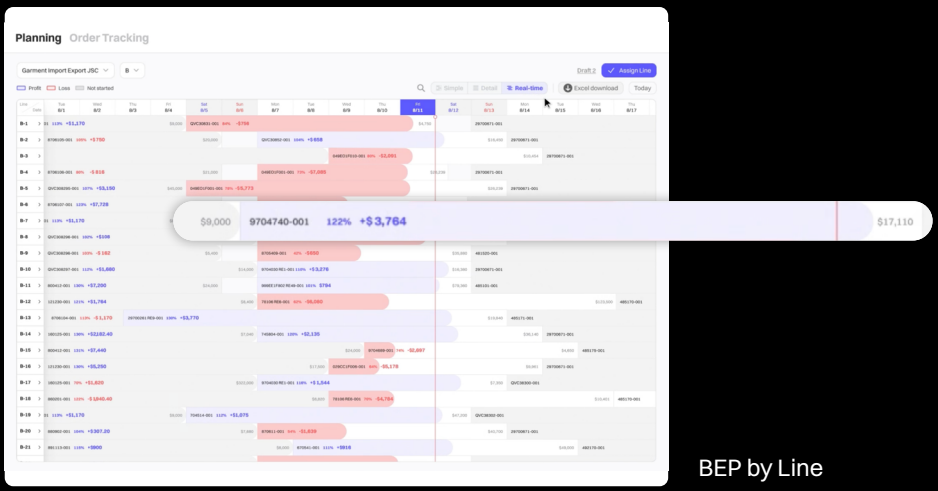
RPA

Optimizing Process and Task Allocation for Each Line Through Analysis

Production planning is based on order volume and deadlines, with real-time ETA tracking and visibility into each line's BEP status.

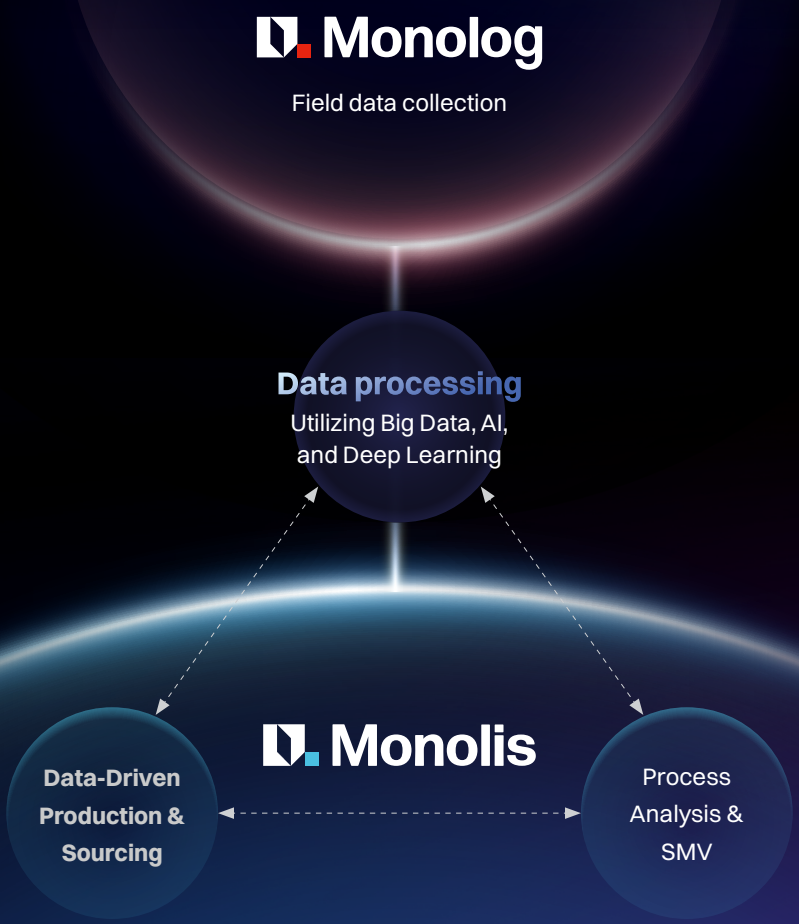


Line Schedule



BEP by Line

Using Monolog and Monolis
together maximizes efficiency by
leveraging real-time shop floor data.



Vision

Digital transformation of the apparel supply chain

Digital transformation not only boosts efficiency but also shapes future key industries.

Productivity Improvement

10.7% Increase ▲

+

Work Efficiency

29.8% Increase ▲

=

+α Cost Reduction ▼

Connecting the present and future of apparel manufacturing, we create lasting value through innovation.

Monolog Real-Time Production Monitoring

Monolis Apparel Supply Chain Management

SIJE

CS_+82(0)2-1644-4386
Email_biz@sijecorp.com
Web_https://sije.io

HQ_5F, 15-3, Incheon tower-daero 54beon-gil, Yeonsu-gu, Incheon
Lab_14-6, Teheran-ro 78-gil, Gangnam-gu, Seoul, Republic of Korea
VN_23F, CEO Tower, Me Tri, Nam Tu Liem, Hanoi, Vietnam