Create Production Platform

To Transform Mindsets in Japan

Game-changer for

Japan's small and medium-sized manufacturers

to improve production

YADA INDUSTRY CO., LTD.

Executive Managing Director

Akio Nomura

Outline

Company Profile

Company profile

Basic information

Company Name	YADA INDUSTRY CO., LTD.
Location	Nagoya, Aichi Prefecture
Establishment	July 1960
Employees / Sales	About 230 / ¥3.5B ($26.6M*) (Sep 2023)
Representative	Kenji Nomura

Inazawa Plant

Head Office Plant

Amagasaki Plant

Inazawa No. 2 Plant

escalator assembly plant

Inazawa No. 3 Plant
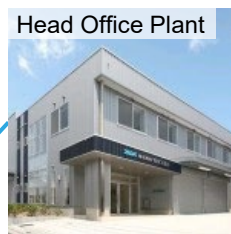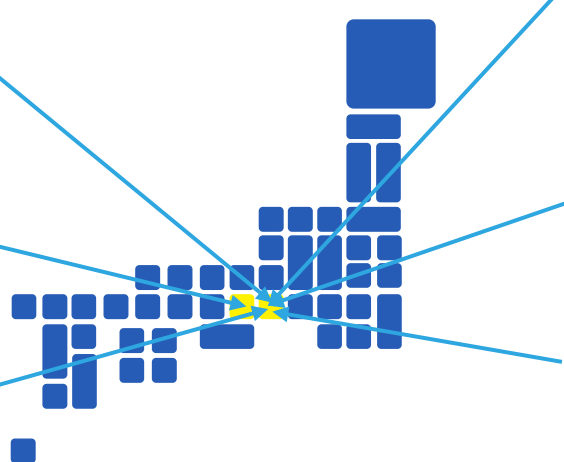
Main Business

sheet metal working and painting

Elevator

Transformer

Distribution board

Major business partners

Mitsubishi Electric

Panasonic affiliates

Toshiba affiliates

etc

*Calculated at 131.43 yen to the dollar based on average annual prices in 2022

This Project

Key points

A tool to promote management reform through a change in the way of rethinking about process management.

1	**2**	**3**
TOC management	**Supply chain visualization**	**Easy-to-use**

Overview

Current Situation

Factory A

Parts and products → Factory B

To avoid trouble, they communicate longer lead times to each other

We can't see the progress of the next factory…

We can't see the progress of the factory behind us…

- **Misguided mindset**
- **Invisible supply chain**
- **Hard-to-use**

Ideal Image

Management ← Platform provider → Management

Factory A

Parts and products →
← Visibility of each other's progress →
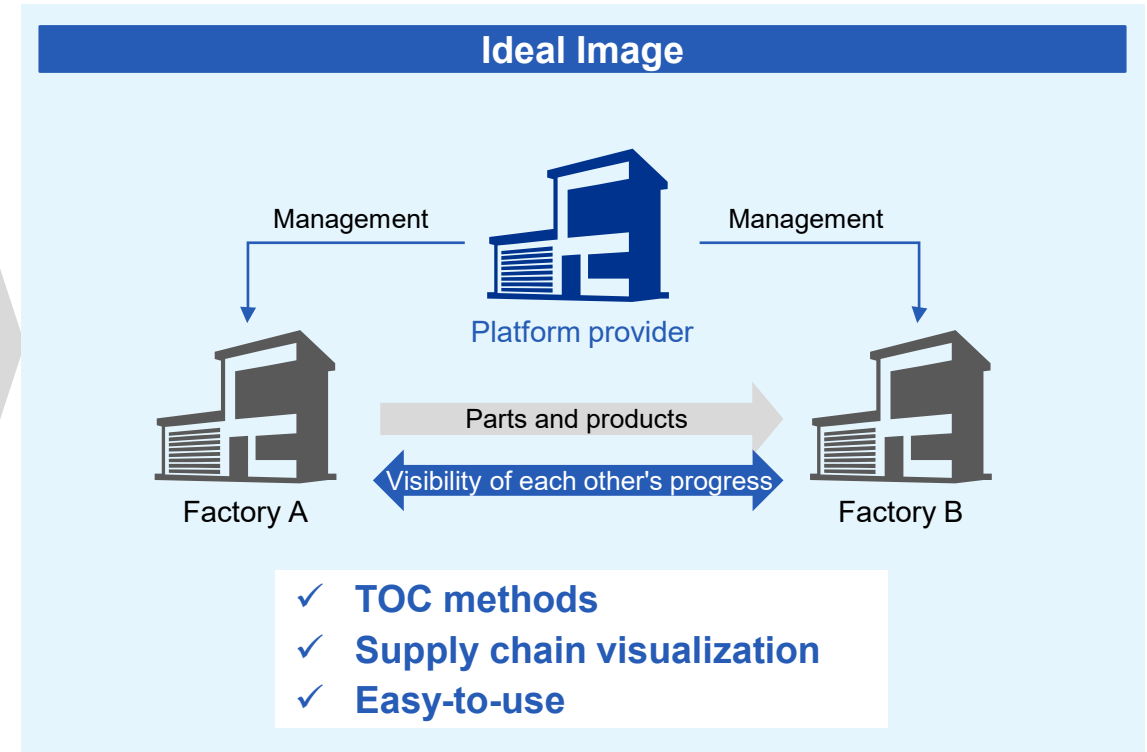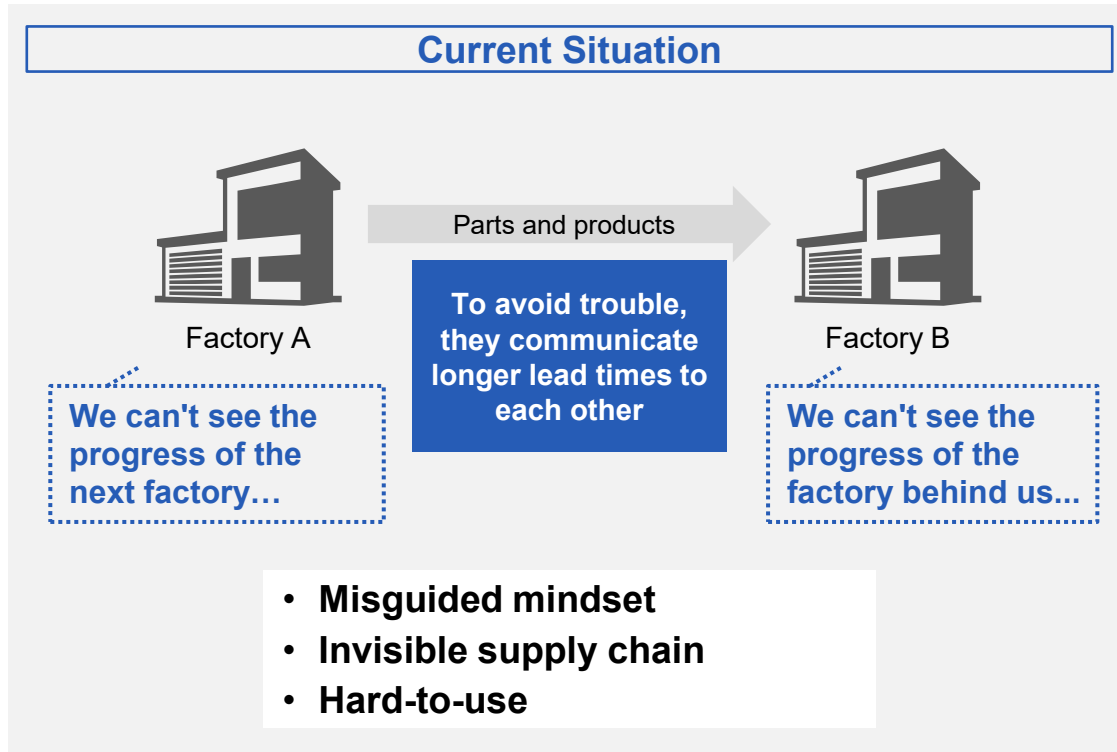
Factory B

- ✓ **TOC methods**
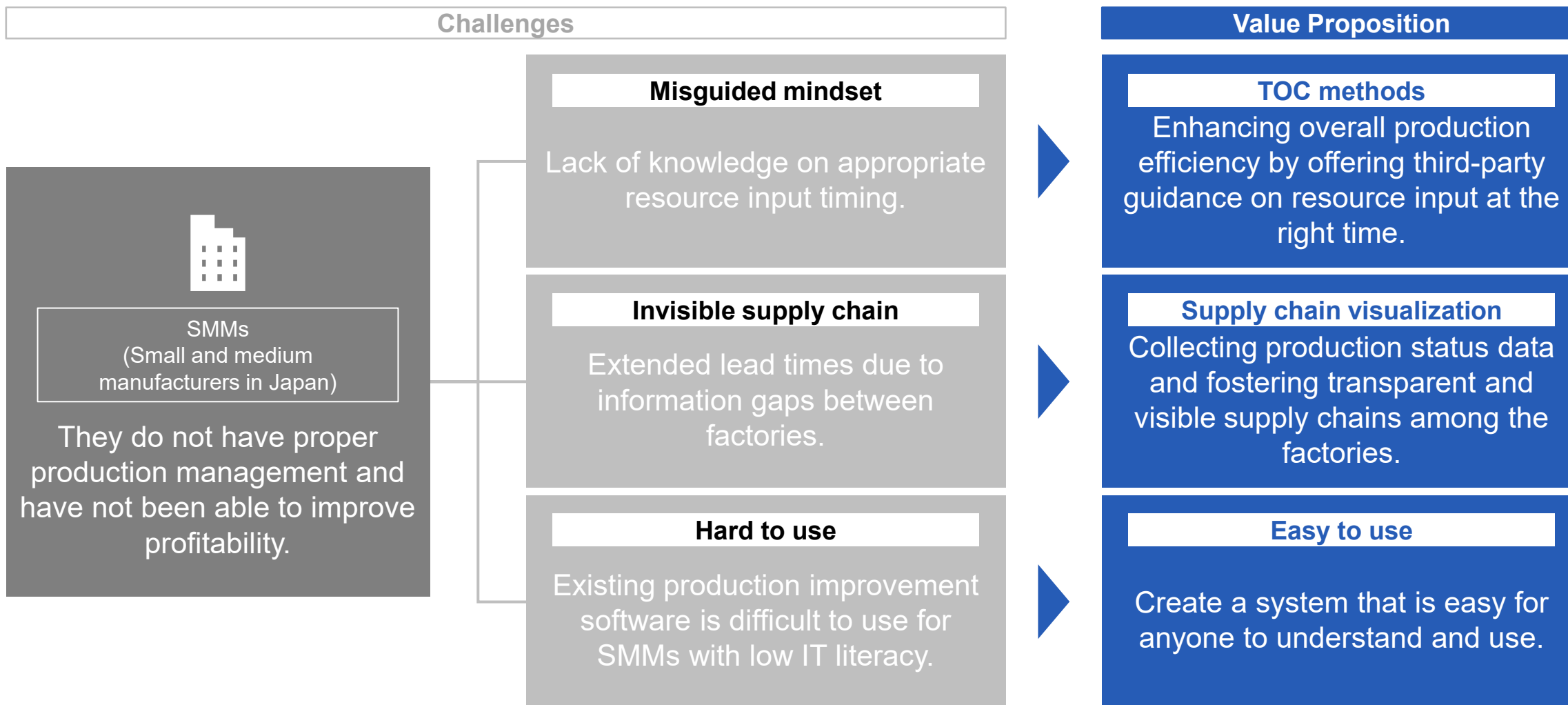- ✓ **Supply chain visualization**
- ✓ **Easy-to-use**

Required Technology

Production Management Cloud

- ■ Simple system
- ■ Recognize and upload identification (using device, app and etc…) (p.14)
- ■ Share the progress of guest production with hosts and guests (using cloud) (p.16)
- ■ Analyze accumulated data and optimize production (p.16)

Current challenges & Our value proposition

| Challenges | Value Proposition |

SMMs (Small and medium manufacturers in Japan)

They do not have proper production management and have not been able to improve profitability.

Misguided mindset
Lack of knowledge on appropriate resource input timing.

Invisible supply chain
Extended lead times due to information gaps between factories.

Hard to use
Existing production improvement software is difficult to use for SMMs with low IT literacy.

TOC methods
Enhancing overall production efficiency by offering third-party guidance on resource input at the right time.

Supply chain visualization
Collecting production status data and fostering transparent and visible supply chains among the factories.

Easy to use
Create a system that is easy for anyone to understand and use.

Use Case – our company

**Even though we initially lacked knowledge about production improvement,
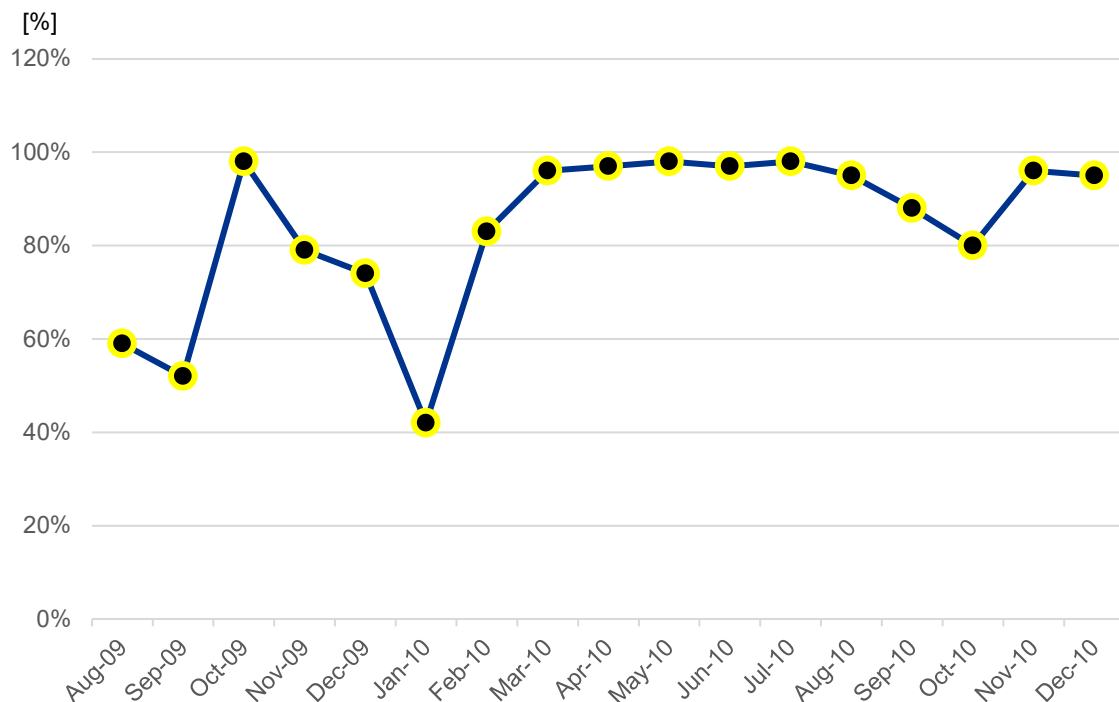I came across the TOC theory and managed to reduce lead times and enhance profitability.**

About TOC Theory

Use Case – our company

Production Efficiency Trend (Aug 2009 - Dec 2010)

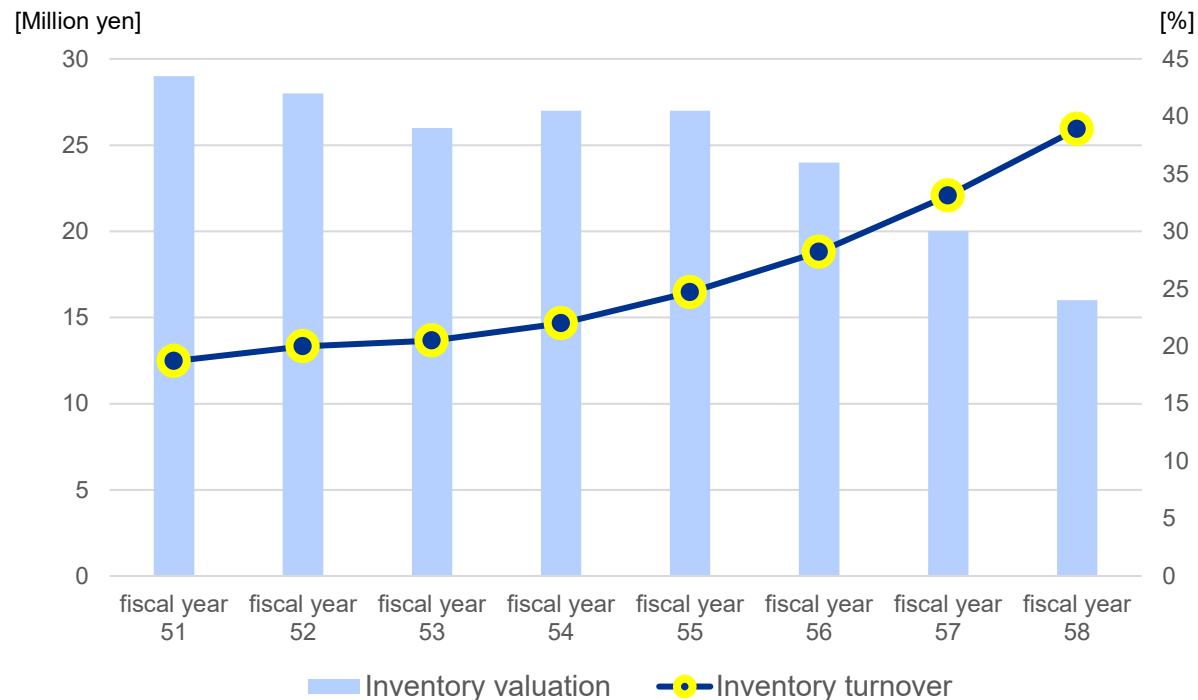✓ **Improved On-Time Delivery Performance**

Inventory turnover and inventory valuation (fiscal year 51 to 58)

✓ **Increased Inventory turnover**

✓ **Reduction in Inventory valuation (inventory)**


Inventory valuation — Inventory turnover

Reducing the amount of inventory led to the decluttering of shelves and the creation of workspace, significantly improving the flow within the factory

Use Case – a company

When we implemented a similar production management approach in another company, production efficiency also improved.

Changes in on-time delivery rate
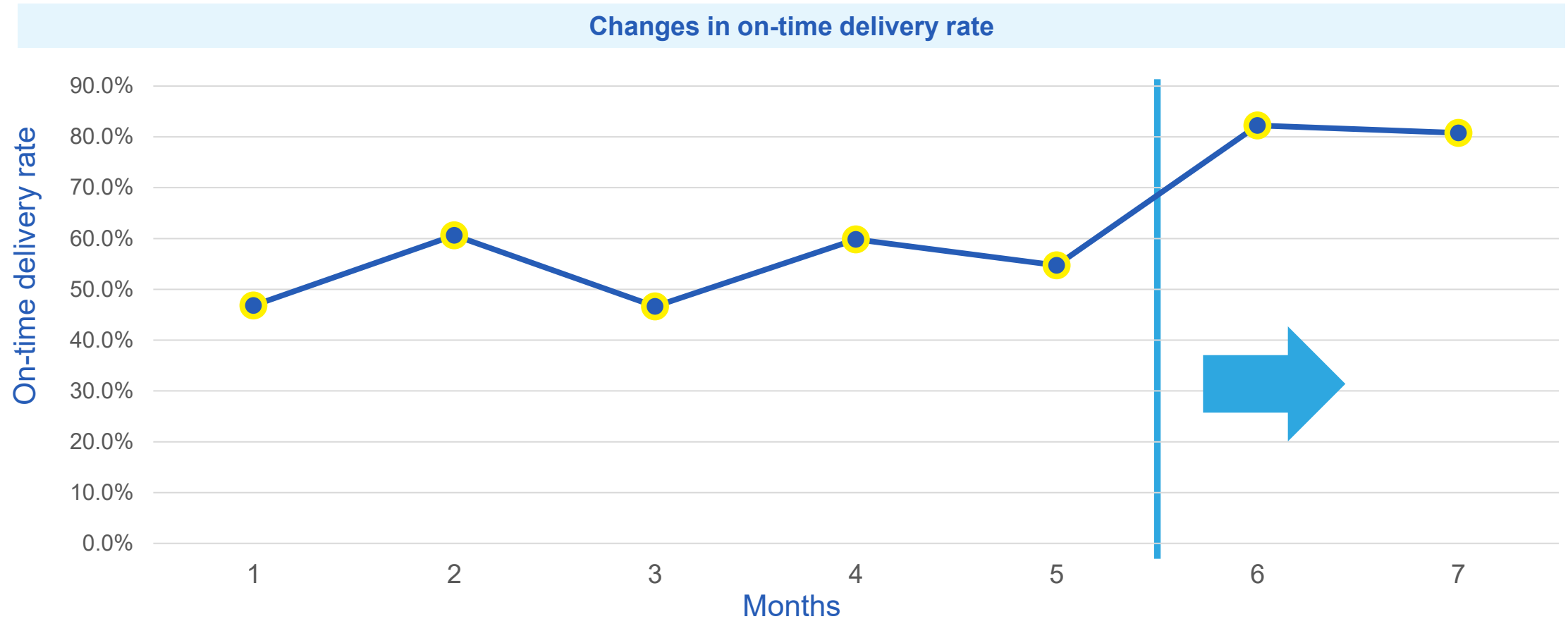
How Lead Times Are Reduced – Before Improvements

Workers might intuitively believe that starting early will lead to an earlier completion, but in reality, that's a misconception.

Long lead time

have a lot of work in process

start   completion

The workplace is always confused, creating a negative cycle.
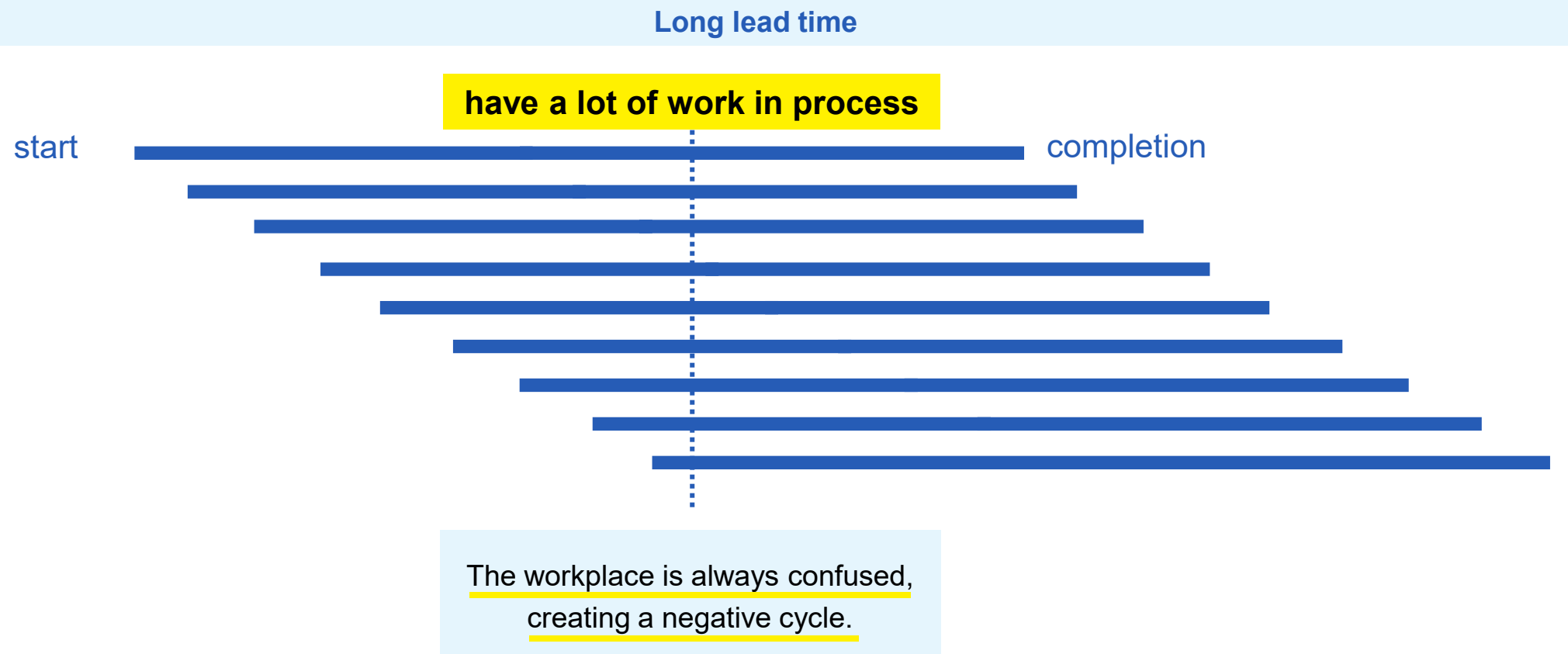
How Lead Times Are Reduced – After Improvements

Delaying the start of the work actually reduces work in progress

There will be less confusion in priorities within the factory.

Short lead time

have little work in process

start   completion

Employees can
start later

waiting time | working time

waiting time | working time

13
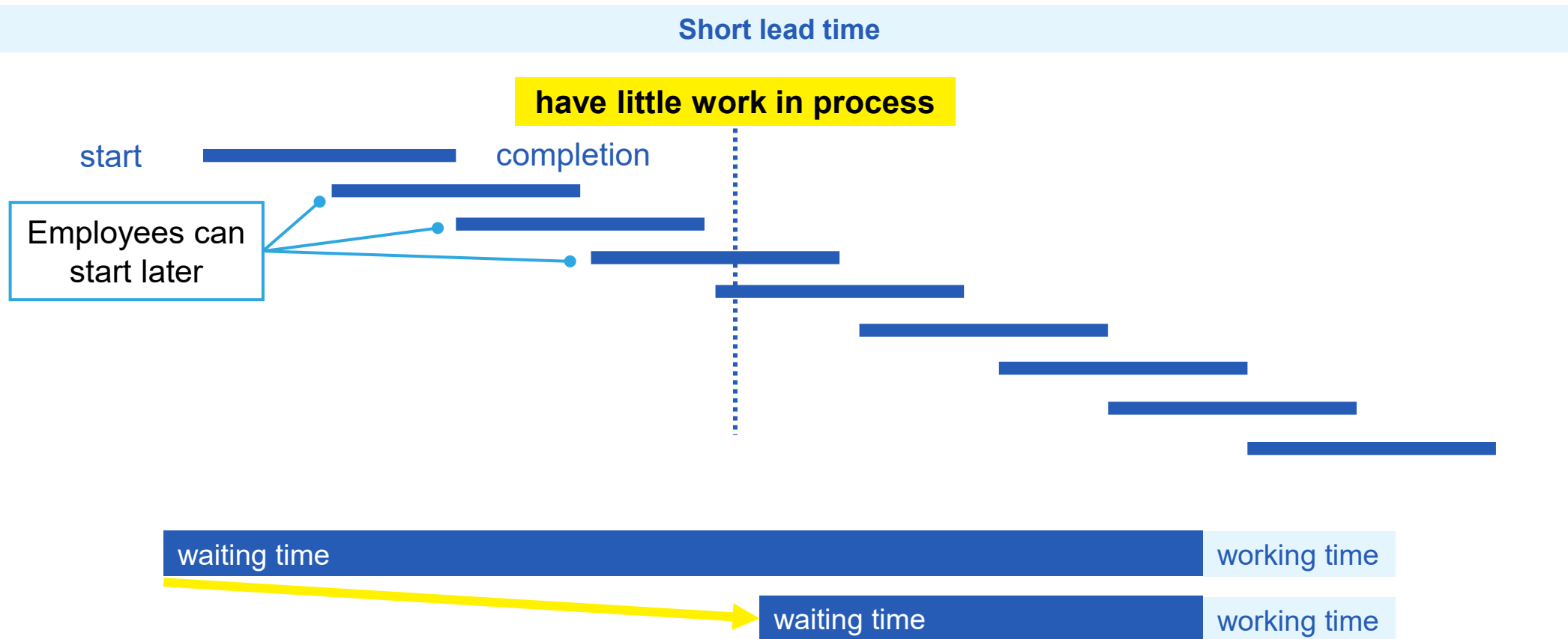
Current Solution – Production management rack

Use of simple stands

Manage timing of initiation

Priority | Today | Don't Start

Apply labels to documents for initiation control

Concept

Analog Proficiency for the Digital Era - See, Touch, Verify, and Control with Our Production Management Rack.

◆ Required technology

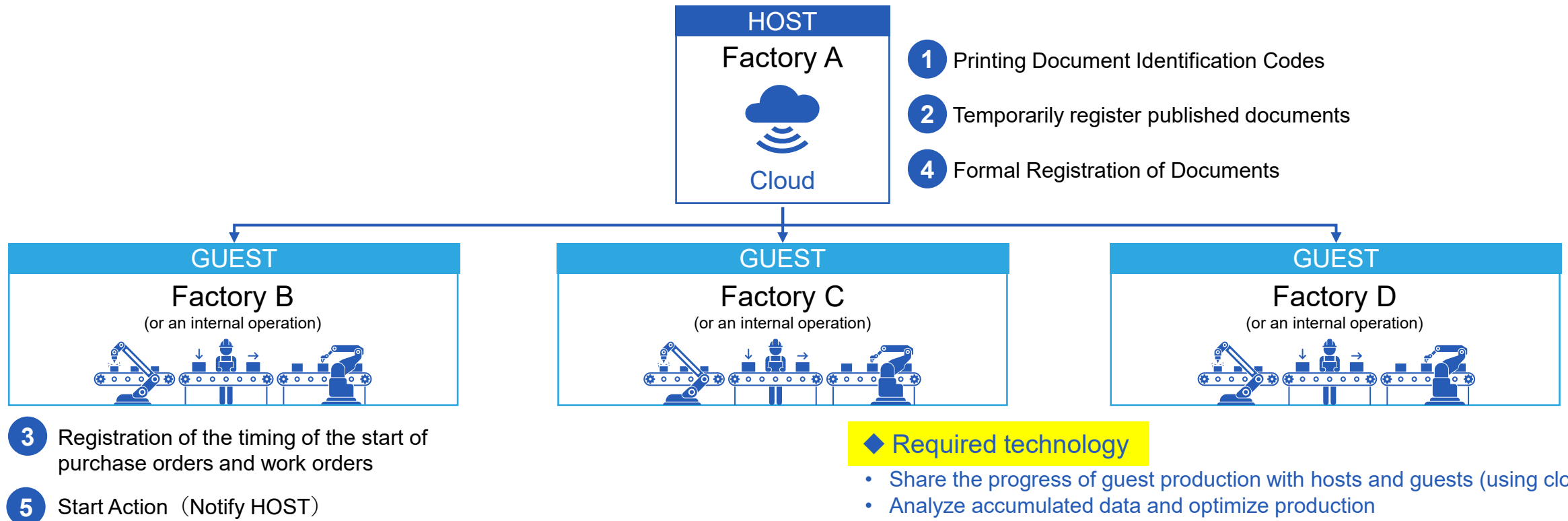- Recognize and upload identification (using device, app and etc.)

Collaboration Idea

Business model

We assume a system for visualizing the progress between the host and the guest.
We welcome your new ideas and solutions regarding the model.

Model

HOST
Factory A

Cloud

1 Printing Document Identification Codes

2 Temporarily register published documents

4 Formal Registration of Documents

GUEST	GUEST	GUEST
Factory B (or an internal operation)	**Factory C** (or an internal operation)	**Factory D** (or an internal operation)

3 Registration of the timing of the start of purchase orders and work orders

5 Start Action（Notify HOST）

◆ Required technology

• Share the progress of guest production with hosts and guests (using cloud)
• Analyze accumulated data and optimize production

Implementation Benefits

1	2	3
Reduce lead time	**Improve cash flow**	**Reduce inventory**

Milestone

	3 months	1 year	1 year

Current phase: Collaboration with Israeli startups

	① Production improvement in each plant	② Production improvement in supply chain	③ Expanding nationwide and launching new initiatives
Problem to be solved	**Ambiguous timing of initiation in the factory**	**Unclear delivery dates for previous and subsequent processes**	**Addressing new production bottlenecks**
Solution	**Production management rack (analog)**	**Progress sharing platform (analog + digital)**	**Advanced production management systems and an educational framework for the manufacturing industry based on TOC**
Necessary technology	**Hardware** Production management rack (p.14) (our current solution)	**Hardware** • Simple system • Recognize and upload identification codes **Software** • Simple system • Share the progress of guest production with hosts and guests	**Software** • Analyze accumulated data and optimize production

Optimization of the entire supply chain

Building a connection

Market education

FAQ

FAQ – About New Business

Q1

What vision do you have?

Restoring the perception that Japan is the strongest manufacturer and revitalizing Japanese manufacturing by enhancing the operations of small and medium-sized enterprises (SMEs) that contribute to Japanese manufacturing.

Q2

Why Israeli startups?

We recognize Israeli startups have an advantage over other countries in terms of software.

Q3

*BPR = Business Process Re-engineering

Are Japanese small and medium-sized manufacturers eager to start BPR?

They are not aware of business reform. Many manufacturers are reluctant to reform their operations because of complexity with reform.

Q4

Can't existing production management system solve the problem?

Existing production management systems are complex, and the installation of these systems places a burden on production sites. This project aims to build a simple platform.

FAQ – About Collaboration

Q1

What can you offer for a collaboration?

We can provide our expertise in business reform using the Theory of Constraints (TOC) and our network of connections with manufacturing companies in Japan.

Q2

What is the timeline for expanding the production management platform

The system will be introduced to manufacturers in Aichi Prefecture in 2025, and expand all over Japan after 2030.

Q3

What will you focus to choose a partner?

The simplicity of the system is important. To avoid the burden on the employees, we prefer systems that are easy to implement and use.

Q4

What is the schedule for PoC?

We will start demonstration tests with our business partners in 2024, aiming for commercialization in 2025.

Thank you for listening