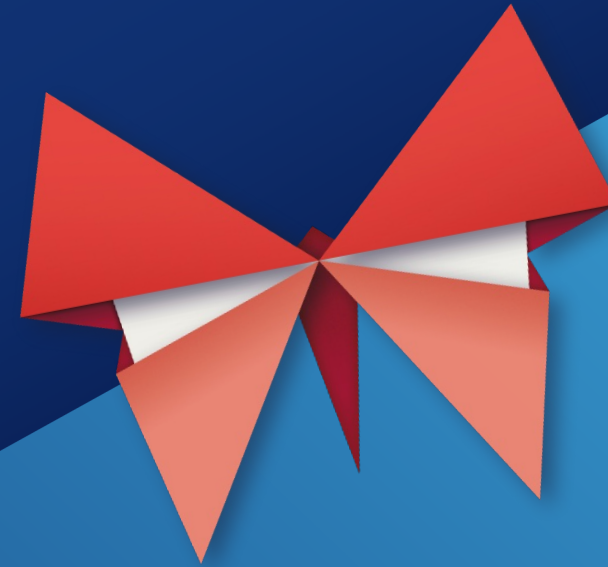


# 7 KEY CAPABILITIES for a Supply Chain Lean Transformation

(E2E, Demand Driven, Agile & Lean)

A New Paradigm for achieving Breakthrough Results and Competitive Advantage in Customer Service & Profitability



Webinar & White Paper



GEMBAKAIZEN™

Europe · Americas · Asia-Pacific · Middle East · Africa

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# Why we Need Resilient E2E, DD, Agile & Lean Supply Chains

## 7 Key Capabilities for a Lean Resilient Supply Chain Transformation

### 1. Strategic E2E Mapping of the Supply Chain

- Map the E2E Supply Chain and Learn to See the Logistics Loops
- Develop an E2E Lean Vision
- Prioritize a Roadmap
- Develop a Business Case

### 2. Implement a Pull Planning System

- Implement a Demand Driven Pull S&OP
- Implement Demand Driven Pull S&OE
- Implement Levelling
- Implement Synchronisation

### 3. Create Material & Information Flow

- Create Flow in Production
- Create Flow in Warehouses
- Create Flow in Transportation
- Streamline the Information Flow

### 4. Increase Resource Efficiency

- Improve OEE in Production
- Improve Efficiency in Warehouses
- Improve Efficiency in Transportation
- Modernize with Digitalisation & Automation Technologies (but respecting the Pull Flow System)

### 5. Reinforce the KAIZEN™ Culture

- Engage Top Management in E2E Supply Chain Transformation
- Implement Daily KAIZEN™ in All Natural Teams
- Learn how to do Focused KAIZEN™ Events
- Implement a Strategy Deployment Process
- Educate & Train with a KAIZEN™ Lean Academy

### 6. Increase Supply Chain Resiliency

- Explore the Pull System to Fight Instability and become more Resilient
- Develop a Supply Chain Digital Twin Model to Gain more Visibility
- Install an Oobeya Room for Visual Risk/Crisis Management
- Implement a Tiered Help Chain Process

### 7. Pilot, Assess, Benchmark & Scale

- Engage in Pilots & Benefits Tracking
- Develop and Use an Assessment Maturity Model
- Do Internal & External Benchmarking
- Go Quickly with the Deploy & Scale Process

## KEY CAPABILITY #4

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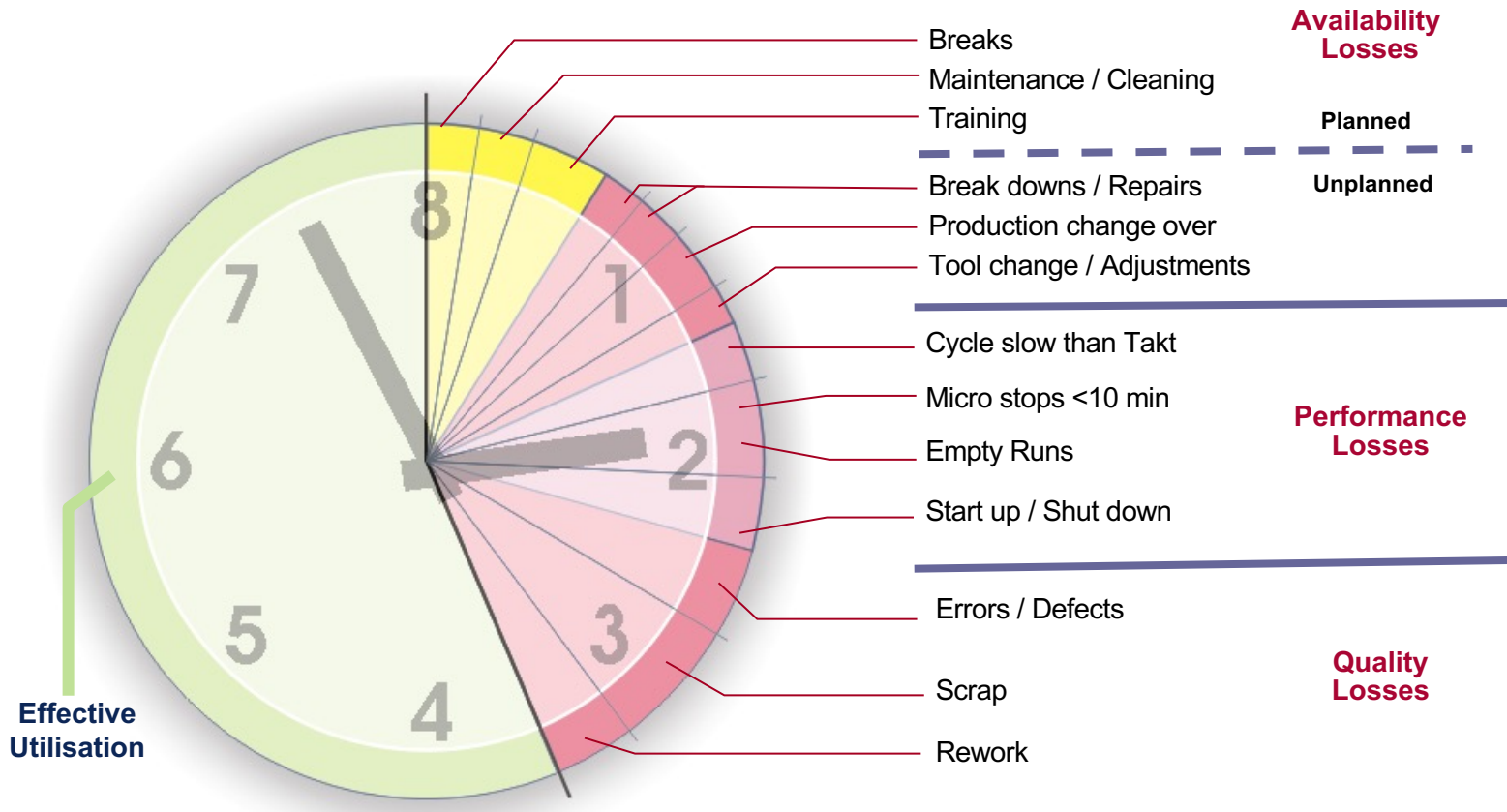
# Increase Resource Efficiency

- Improve OEE in Production
- Improve Efficiency in Warehouses
- Improve Efficiency in Transportation
- Innovate with Digital & Automation - Technology (but respect the Pull Flow System Blueprint)

# Increase Resource Efficiency

Types of Losses that affect Equipment O.E.E. – Overall Equipment Efficiency

There are Many Opportunities to Increase Efficiency with Organization & Low Cost Automation

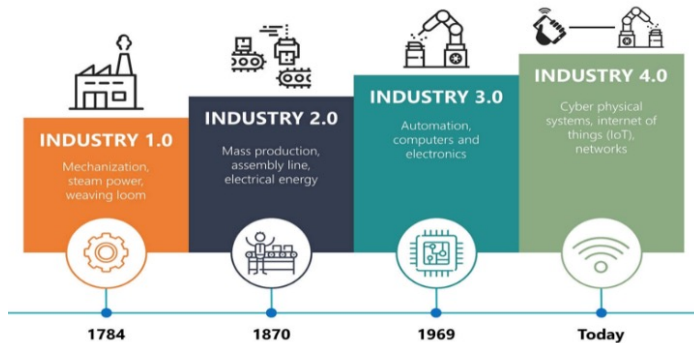


- Improve **OEE Overall Equipment Efficiency** with TPM world Class Kaizen:
  - Focused (Kobetsu) Kaizen
  - Autonomous Maintenance
  - Planned Maintenance
  - Education & Training
  - Early Equipment Planning
  - Safety & Environment
- Improve Efficiency in **Warehouses** by streamlining Shelf Design, Inbound, Outbound & Planning
- Improve Efficiency in **Transportation** by streamlining Truck Planning, Loading & Unloading
- Innovate and use the most effective **Technologies** including Ind4.0, Data Analytics & Optimization, Digitalization...
- ...but always maintain the **Process Flow Design VSM Blueprint** and keep an eye on High Investment ROI

# Increase Resource Efficiency

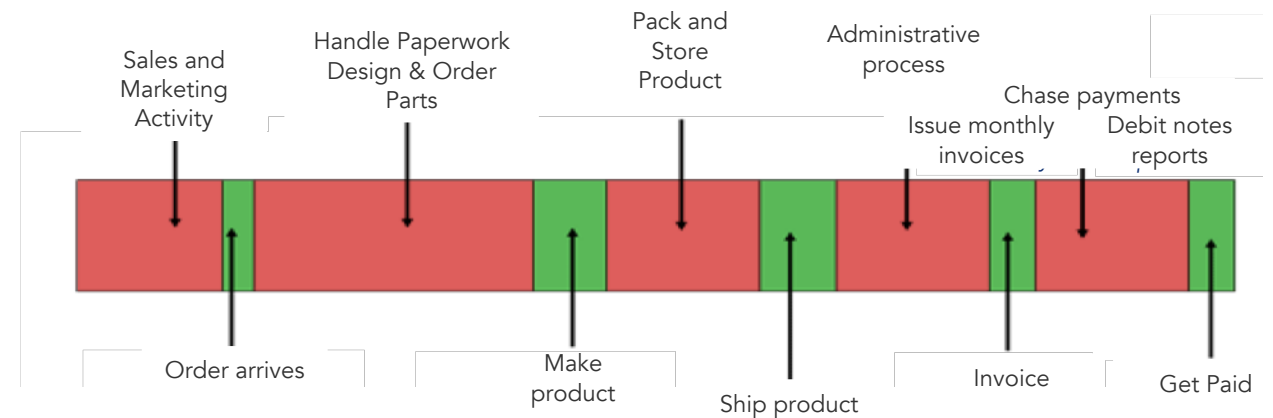
## Be Careful to Avoid AUTOMATION OF WASTE

### TECHNOLOGICAL INNOVATION



### COMPANIES WHO ACHIEVE SUPERIOR RESULTS UNDERSTAND THE BASICS OF KAIZEN™

- Need to identify the ratio of Non-Value Added to Value Added

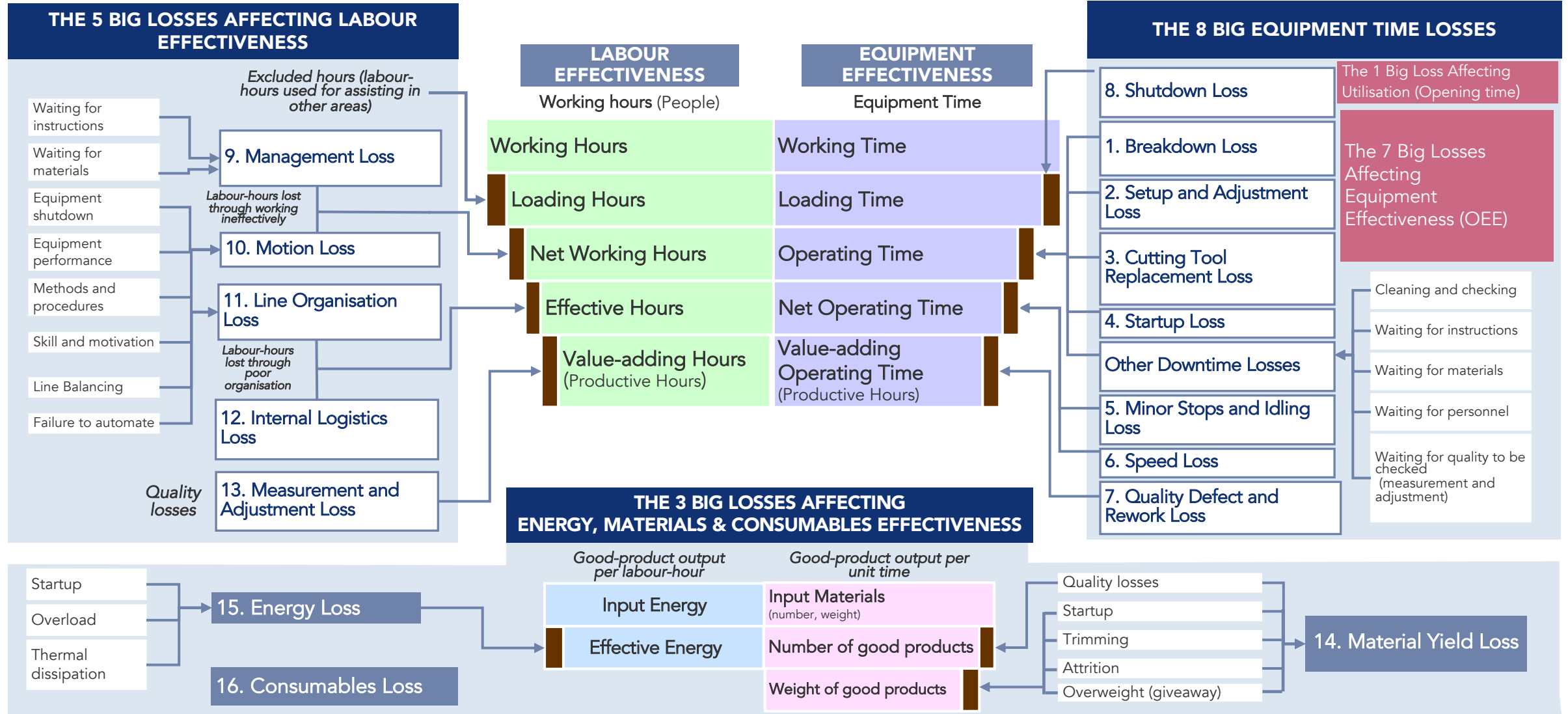


- When we invest in automation, which part are we improving?
- KAIZEN™ focuses on Waste Elimination...
- ... by Creating Flow and only looking at Resource Efficiency after !

# Increase Resource Efficiency

The 16 TPM Big Efficiency Losses = 8 Equipment + 5 Labour + 3 Energy & Materials

Additional Reading Material !



## CONCLUSIONS & NEXT STEPS

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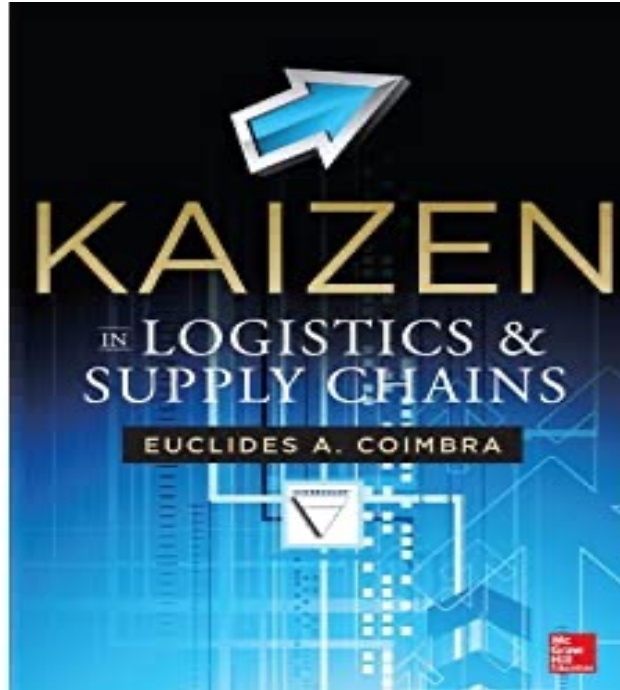
# How can I Learn More

- Reading Materials
- Learning by Doing - Select & Start a **Pilot** Strategic E2E Value Stream Mapping
- Get Support from Kaizen Institute (or another Sensei)
- Make a Performance Based Partnership with the Sensei

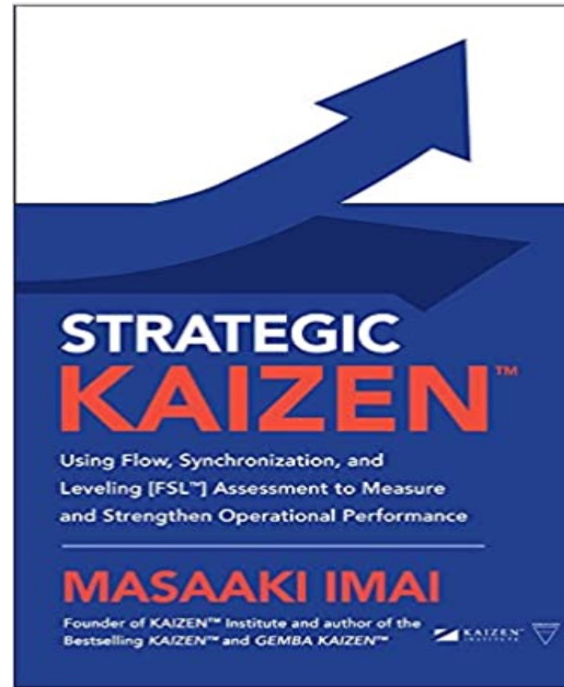


# How can I Learn More

Learn all the Details with Kaizen Books

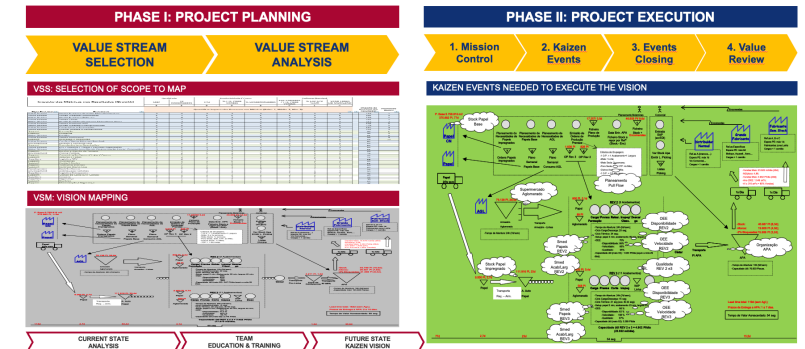


The Global Reference Book in Supply Chain Transformation



The Last Book about Strategic Assessment of Supply Chains

- Reading Materials
- Learning by Doing - Select & Start a Pilot Strategic E2E Value Stream Mapping
- For more information contact [ecoimbra@kaizen.com](mailto:ecoimbra@kaizen.com)



**WANT TO LEARN MORE: ORDER THIS BOOKS...**



# How can I Learn More

## Develop a Successful Pilot Project (to serve as a Beacon)

CASE	COMPANY	PROBLEM	SOLUTION	RESULTS
Plant Design		<ul style="list-style-type: none"> <li>Old line with a lot of material and operator movements</li> </ul>	<ul style="list-style-type: none"> <li>New Layout and line design with 50% less space</li> <li>Mizusumashi Standard Work - 20% increase in Productivity</li> </ul>	<ul style="list-style-type: none"> <li>Quantifiable benefits 3,300,000 Euros / year.</li> <li>Total investment: 1,125,000 Euros.</li> <li>R.O.I.: 4 months.</li> <li>State-of-the-art factory design</li> </ul>
Flow Improvement		<ul style="list-style-type: none"> <li>Line Design not Flexible &amp; Isolated Islands</li> <li>Low Frequency Logistics</li> <li>Central Push Planning System</li> </ul>	<ul style="list-style-type: none"> <li>One Piece Flow Shojinka Lines</li> <li>Creation of Flow in Internal Logistics</li> <li>Pull Planning System with Levelling</li> </ul>	<ul style="list-style-type: none"> <li>-52% internal defects rate</li> <li>36% increase in Productivity</li> <li>-40% Total Inventory Coverage</li> </ul>
Factory & Planning Design		<ul style="list-style-type: none"> <li>Functional Layout</li> <li>High lead-time</li> <li>Management difficulties</li> </ul>	<ul style="list-style-type: none"> <li>Flow Layout</li> <li>Stock Reduction</li> <li>Standard Work</li> <li>SMED</li> </ul>	<ul style="list-style-type: none"> <li>50% area reduction</li> <li>40% productivity increase</li> <li>89% lead-time reduction</li> <li>38% Setup Time Reduction</li> <li>8% Service-level improvement</li> </ul>
Factory & Planning Design		<ul style="list-style-type: none"> <li>Low Productivity</li> <li>Push Supply</li> <li>High model changeover time</li> </ul>	<ul style="list-style-type: none"> <li>U shape line with frontal supply</li> <li>Pre-assemblies near point of use</li> <li>Pull Supply (With levelling box)</li> <li>Setup Time = 0</li> <li>Standard Work</li> </ul>	<ul style="list-style-type: none"> <li>26% productivity increase</li> <li>52% area reduction</li> <li>21% to 0% ergonomics' critical stations</li> </ul>



- Get Support from Kaizen Institute (or another Sensei)
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- For more information contact [ecoimbra@kaizen.com](mailto:ecoimbra@kaizen.com)

**Our Brand Promise**

**Authentic**

We introduced the KAIZEN™ methodology to the world in 1985

**Practical**

We make our customers experts in their Gemba

**Holistic**

Our methods touch everyone in the organisation working for the same goal and sharing the same KAIZEN™ Spirit

**Worldwide**

Our expertise, from helping the world's leading organisations, can be applied to any situation

**WE HELP LEADERS TO**

**ACHIEVE DREAMS OF PERFORMANCE IMPROVEMENT**

**IMPLEMENT CONTINUOUS IMPROVEMENT CULTURES**

## LEARNING BY DOING WITH A SUCCESSFUL PILOT PROJECT

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