

ASMP enabling the digital world

ASMP SMT Solutions



7 Characteristics of a resilient supply chain

01 ASMPT Company Presentation

02 SMT SCM Setup

03 The Volatility Challenge

04 7 Characteristics of a resilient supply chain

ASMPT enabling the digital world

ASMP T Company Presentation





Semiconductor Solutions Linie



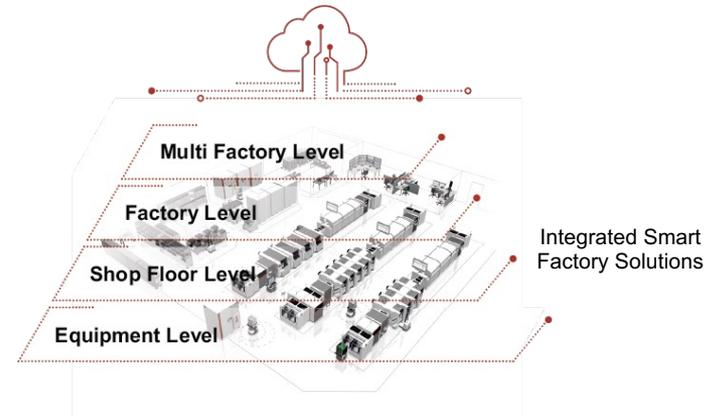
Advanced Packaging Solutions



SMT Solutions Linie

ASMPT: THE COMPANY

ASMPT is the leading global supplier of hardware, software and service solutions for the integrated smart factories of our global customers in the semiconductor and electronics manufacturing industry.



Company Overview

Global high-tech company with solid fundamentals and strong growth prospects

ASMPT at a Glance (Q1 2023)

Number of employees
~ 12k
As of 31 Dec 2022

Global footprint of more than
30
Countries

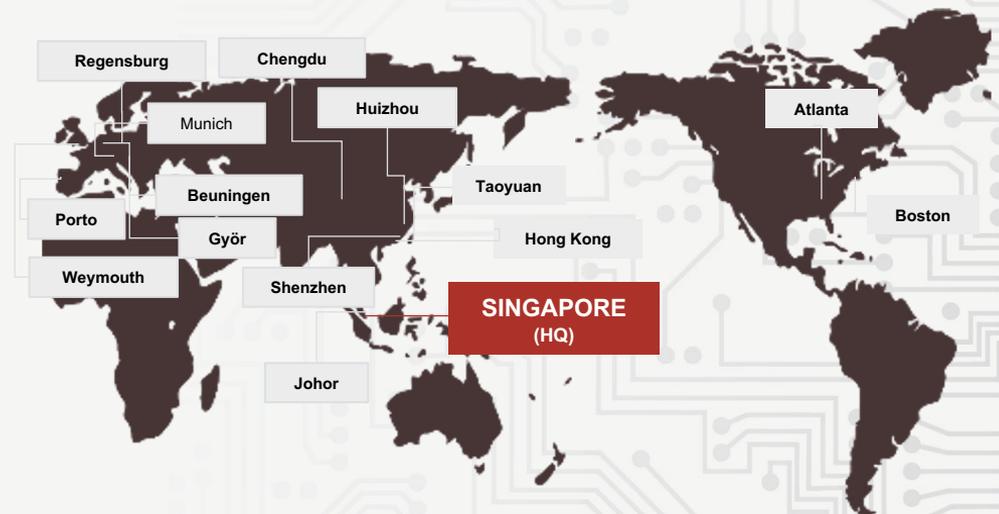
~ HK\$23B
Market Cap
As of 31 Dec 2022

US\$500.2M
Revenue

40.4%
Gross Margin

HK\$3.99B
Cash & Deposits

Business Centres / R&D / Manufacturing Sites



Company Overview



ASMPT Semiconductor Solutions

Die Bonders, Wire Bonders, Flip Chip Bonders, Thermal Compression Bonders, LED Packaging Equipment, Encapsulation, Test Handlers, CMOS Image Sensor Equipment, Laser Singulation

ASMPT SMT Solutions

SIPLACE Placement Solutions, DEK Printing Solutions & Process Support Products, WORKS Shopfloor Management Software Suite, Critical Manufacturing MES, Complete Smart Line and Factory Solutions & Services



We are ASMPT

Customers use our hardware and software to create and build the digital products that anchor modern society.

Headquartered in Singapore, we are the largest provider of semiconductor and electronics manufacturing solutions globally, with R&D and innovation centres around the world, and continually growing.

1975	1989	1990	2002	2005	2011	2013	2014	2018	2020	2021	2022
Founded as the Asian marketing arm of its Netherlands-based parent ASM International N.V.	ASM Pacific Technology Ltd formally listed on the Hong Kong Stock Exchange	Company begins operating in Singapore	ASMPT becomes #1 Semiconductor Assembly and Packaging Equipment Manufacturer in the world	ASMPT achieves a market capitalisation exceeding \$2 billion USD	Singapore becomes the Global Headquarters ASMPT acquires SIPLACE Team from Siemens AG, Germany (SMT Placement)	ASMPT acquires DEK, United Kingdom (SMT Printing)	ASMPT acquires Advanced Laser Separation International B.V. (ALSI), Netherlands (Laser Dicing / Grooving)	ASMPT acquires NEXX, USA (Deposition) ASMPT acquires AMICRA, Germany (Die Bonding) ASMPT acquires Critical Manufacturing, Portugal (MES)	ASMPT acquires SKT Max, PRC (MES)	ASMPT acquires Semiconductor Wet Advanced Technology, PRC (Deposition)	ASMPT acquires Automation Engineering Incorporated (AEI), USA (Automotive CIS)

(↔) = Strategic acquisitions

Note: Entities in which ASMPT has a minority stake are not represented in this timeline.

ASMPT SMT Solutions

- SMT Line Solutions
- DEK Printing Solutions
- Process Support Products
- SIPLACE Placement Solutions
- Works Shopfloor Management Software Suite
- Critical Manufacturing MES
- Smart Factory Solutions & Services

ASMPT Semiconductor Solutions

- Die Bonders
- Wire Bonders
- Flip Chip Bonders
- Thermal Compression Bonders (TCB)
- LED Packaging Equipment
- CMOS Imaging Sensors (CIS) Equipment
- Encapsulation & Post Encapsulation Solutions
- Turret Test Equipment (Test Handlers)
- Laser Singulation

60.7 %
SMT SOLUTIONS



Integrated Smart SMT Factory Solutions



**ASMPT
GROUP REVENUE
Q1 2023
500.2 M US\$**

39.3 %
**SEMICONDUCTOR
SOLUTIONS**



ICD



Opto



CIS



Market Leading Technologies & Solutions

Pioneering Technology & Solutions for Superior Customer Value



Top 100

Global Technology Leaders
Recognised by Thomson Reuters (2018)



~2,000

Patents & Pending Patents on
Leading Edge Technology

17

R&D Centres
Worldwide



~2,500

Global R&D Staff





directly supported by two key Pillars:
Differentiation & Markets
that can be product, business unit, or industry specific

DIFFERENTIATION

ASMPT is truly distinctive from the competition.

MARKETS

ASMPT is the leader in its businesses, its technologies, and as a partner.

The three Enablers of our success are aligned across the *entire* organisation

QUALITY

ASMPT's quality is a part of the company's DNA.

PEOPLE

ASMPT values its people & strives to create a future-ready organisation. Its high-performance people culture embraces diversity & inclusion, and provides great opportunities, making it the best place to work.

INNOVATION

ASMPT creates success through innovation and consistently invests in advanced technologies.

POWER

PASSION – to be the #1 “Go to Partner”

OWNERSHIP – of actions and behaviours

WIN – with our customers

EXCELLENCE – in all that we do

RESPECT – for one and all



ASMPT: THE COMMITMENT

We have committed to reduce our internal emissions to net-zero by 2035. The impact of our ecological footprint continues to guide our decisions as a responsible business.



SMT SCM Setup



SCM SETUP

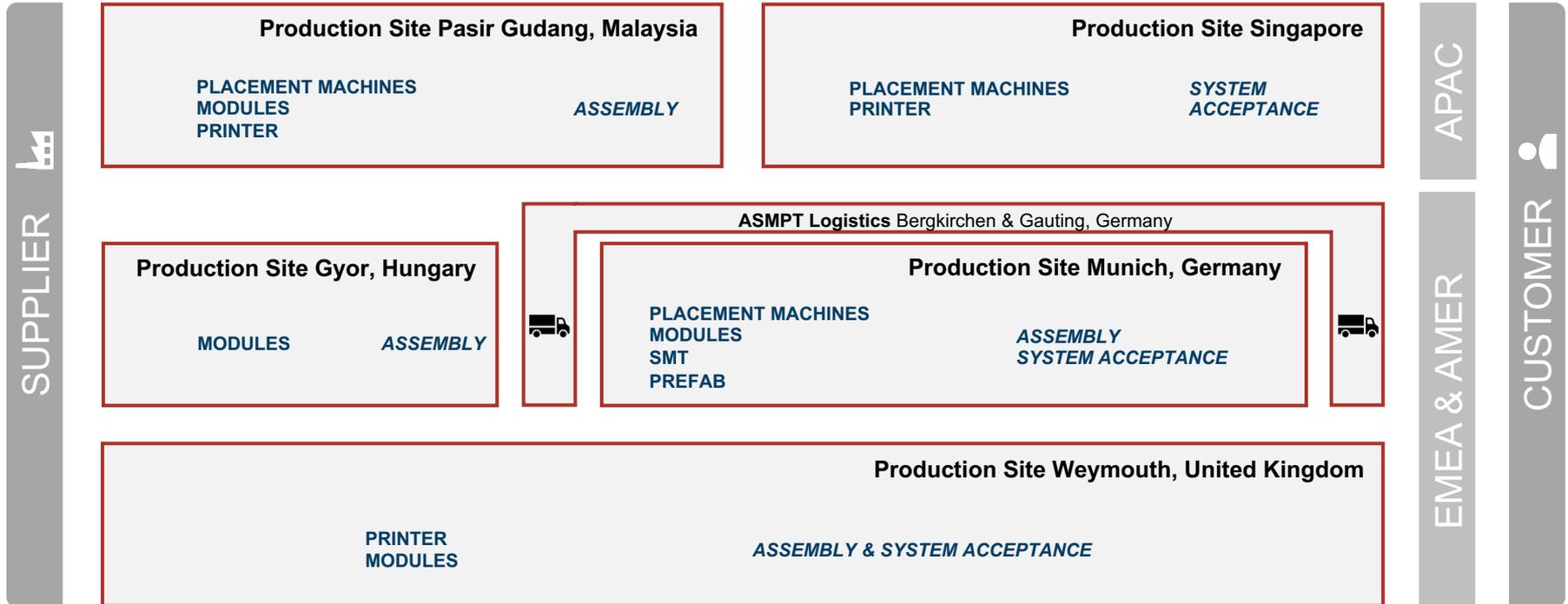
SMT SCM setup detail (2003)



SCM SETUP 2021 - 2030

SMT SCM Setup Overview

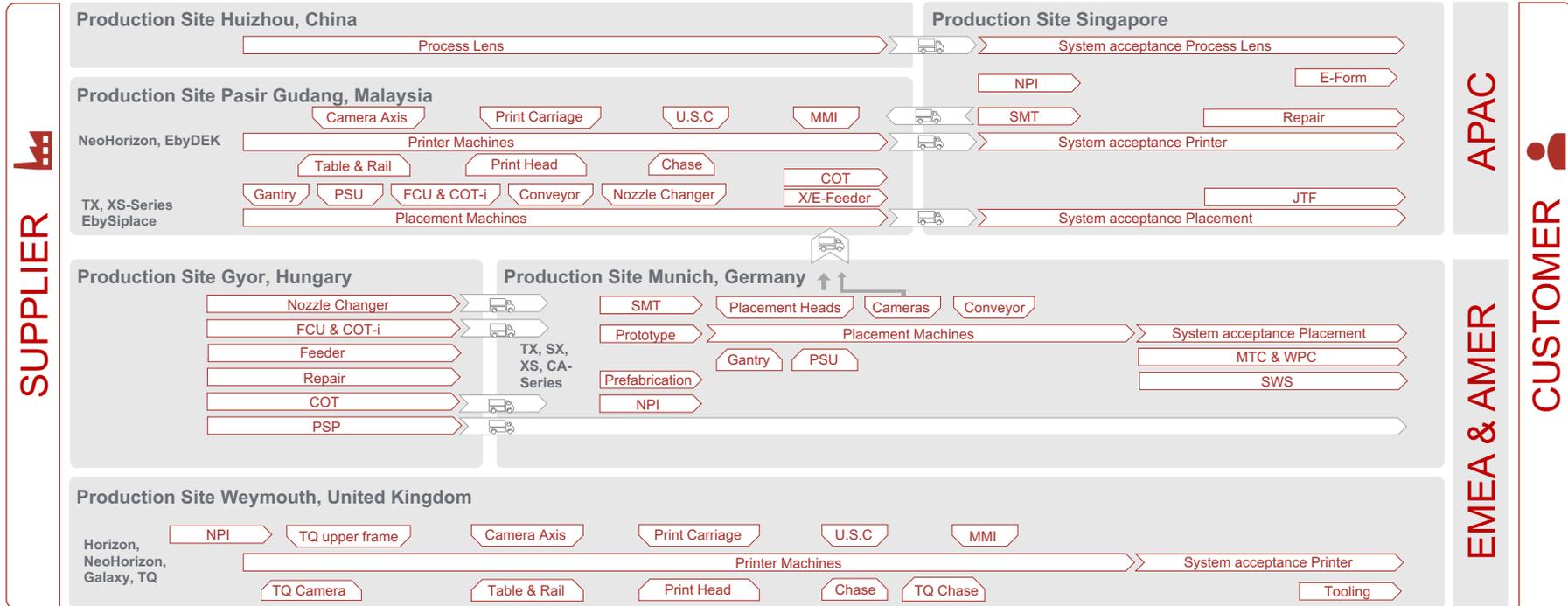
STRICTLY CONFIDENTIAL



Zebra supplier network and production is standard for series (with sufficient quantity).
NPI and EOL only in 1 location.

SCM SETUP

SMT SCM setup detail (2022)

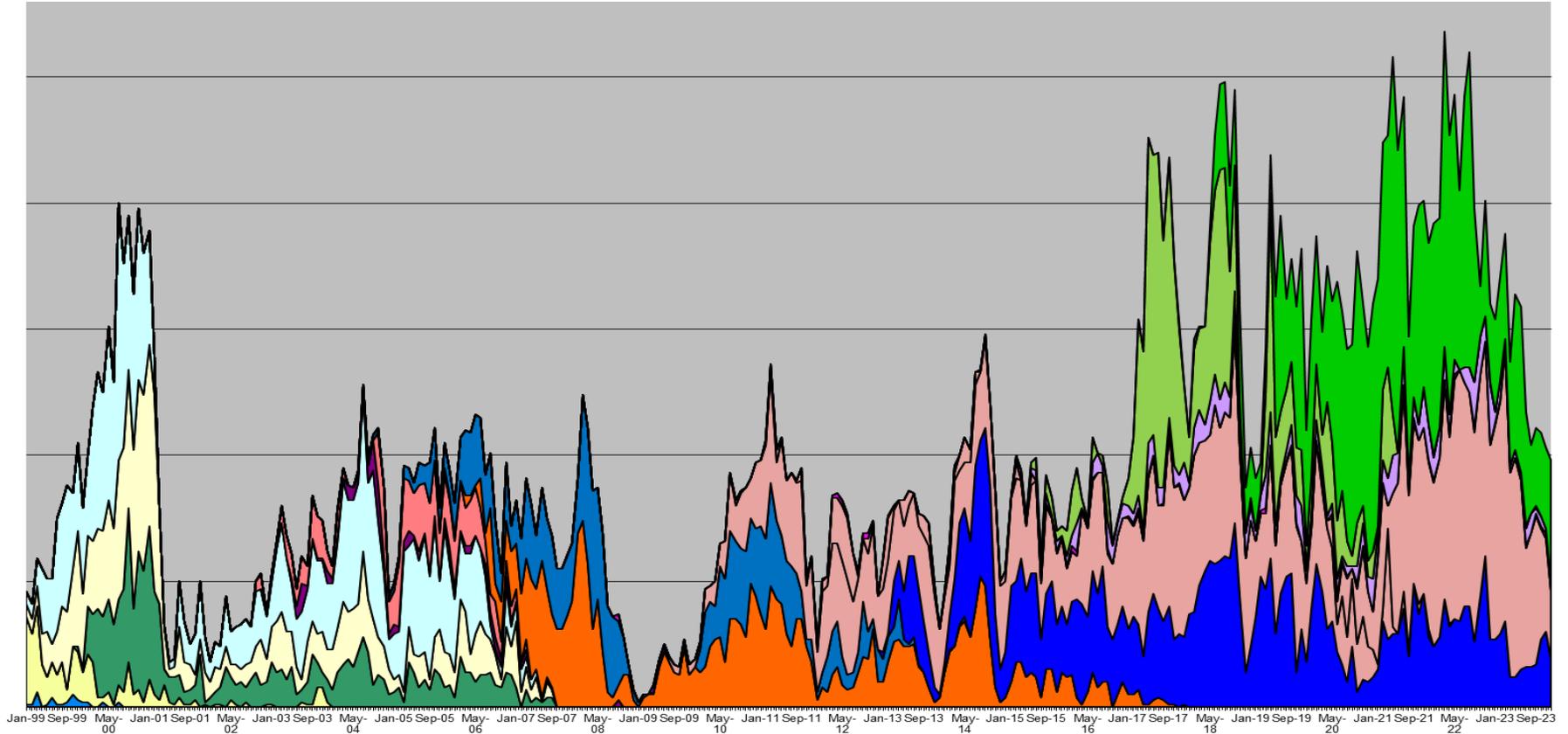


The Volatility Challenge



Our market forces us to change permanently

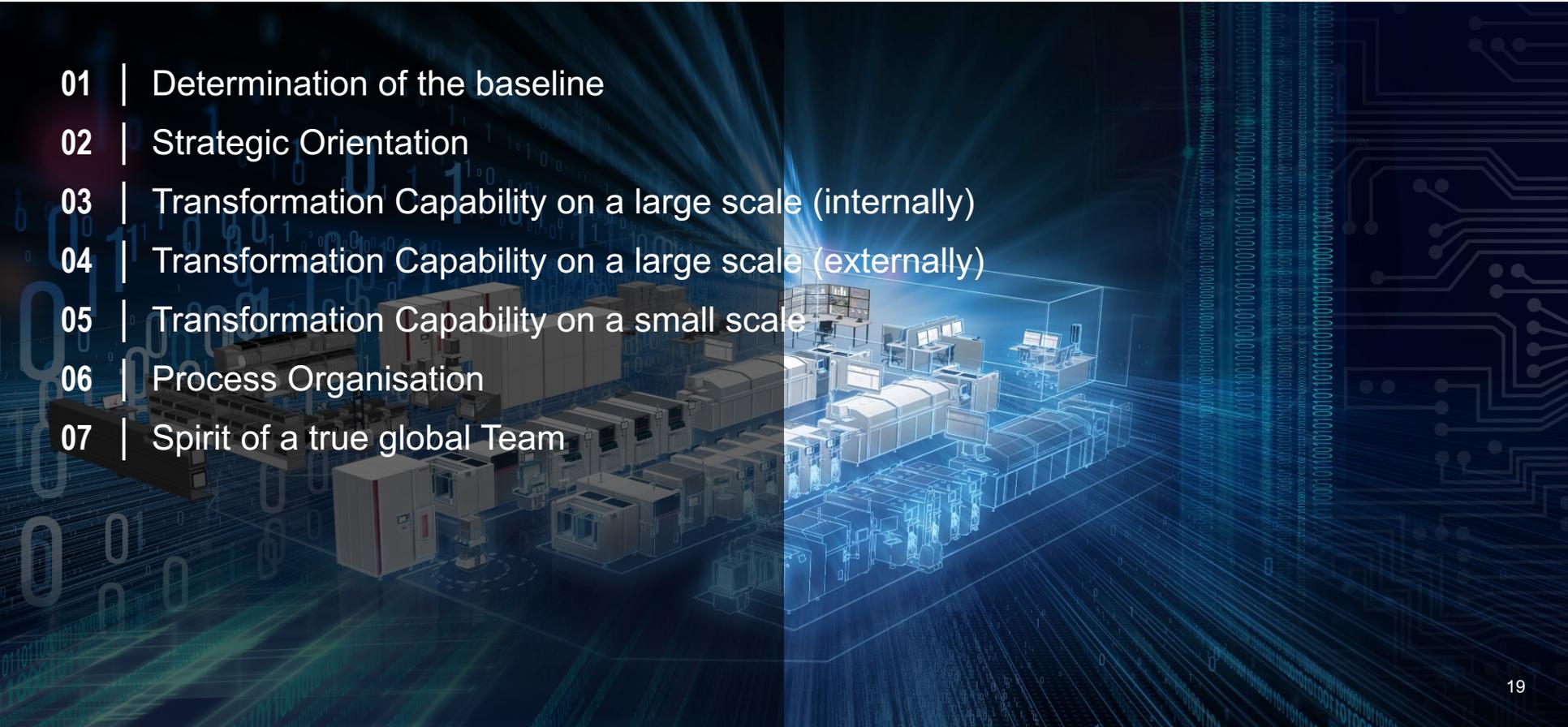
Produced Machines History





7 Characteristics of a resilient supply chain

7 Characteristics of a resilient supply chain

- 
- 01 | Determination of the baseline
 - 02 | Strategic Orientation
 - 03 | Transformation Capability on a large scale (internally)
 - 04 | Transformation Capability on a large scale (externally)
 - 05 | Transformation Capability on a small scale
 - 06 | Process Organisation
 - 07 | Spirit of a true global Team

Change always requires a determination of the baseline

Runner up
Manufacturer
of the Year
2021



Industry 4WRD
Excellence Award
2020



Factory of the Year
Excellence in
Production Network 2018



Lean and Green
Award
2017



Factory of the Year
Overall Winner
2016

Global Excellence
In Operations Award
2012



top+ Award
2006
Global
Competitiveness

IBFA
2010
Top 3

Supply Chain
Management
Award
2006



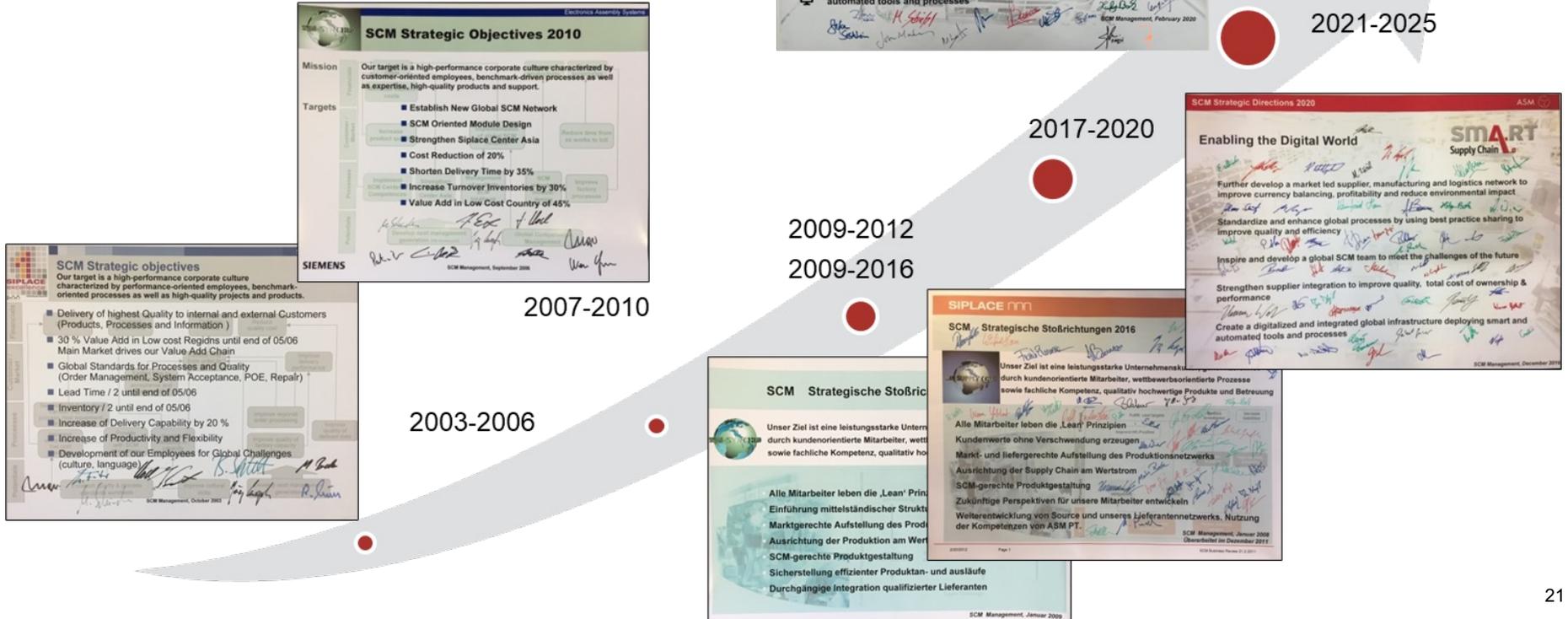
Industrial
Excellence
Award 2006
Best Factory



Manufacturing
Excellence
Award
2005



Change needs a strategic orientation



SCM Strategic objectives
Our target is a high-performance corporate culture characterized by performance-oriented employees, benchmark-oriented processes as well as high-quality projects and products.

- Delivery of highest Quality to internal and external Customers (Products, Processes and Information)
- 30 % Value Add in Low cost Regions until end of 05/06
Main Market drives our Value Add Chain
- Global Standards for Processes and Quality (Order Management, System Acceptance, POE, Repair)
- Lead Time / 2 until end of 05/06
- Inventory / 2 until end of 05/06
- Increase of Delivery Capability by 20 %
- Increase of Productivity and Flexibility
- Development of our Employees for Global Challenges (culture, language)

SCM Management, October 2003

SCM Strategic Objectives 2010

Mission
Our target is a high-performance corporate culture characterized by customer-oriented employees, benchmark-driven processes as well as expertise, high-quality products and support.

Targets

- Establish New Global SCM Network
- SCM Oriented Module Design
- Strengthen Siplace Center Asia
- Cost Reduction of 20%
- Shorten Delivery Time by 35%
- Increase Turnover Inventories by 30%
- Value Add in Low Cost Country of 45%

SCM Management, September 2006

SCM Strategische Stoßrichtungen

Unser Ziel ist eine leistungsstarke Unternehmung durch kundenorientierte Mitarbeiter, wettbewerbsorientierte Prozesse sowie fachliche Kompetenz, qualitativ hochwertige Produkte und Betreuung

- Alle Mitarbeiter leben die „Lean“ Prinzipien
- Kundenwerte ohne Verschwendung erzeugen
- Markt- und liefergerechte Aufstellung des Produktionsnetzwerks
- Ausrichtung der Supply Chain am Wertstrom
- SCM-gerechte Produktgestaltung
- Zukünftige Perspektiven für unsere Mitarbeiter entwickeln
- Weiterentwicklung von Source und unseres Lieferantennetzwerks, Nutzung der Kompetenzen von ASM PT.

SCM Management, Januar 2009

SIPLACE ITT

SCM, Strategische Stoßrichtungen 2016

Unser Ziel ist eine leistungsstarke Unternehmenskultur durch kundenorientierte Mitarbeiter, wettbewerbsorientierte Prozesse sowie fachliche Kompetenz, qualitativ hochwertige Produkte und Betreuung

- Alle Mitarbeiter leben die „Lean“ Prinzipien
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- SCM-gerechte Produktgestaltung
- Zukünftige Perspektiven für unsere Mitarbeiter entwickeln
- Weiterentwicklung von Source und unseres Lieferantennetzwerks, Nutzung der Kompetenzen von ASM PT.

SCM Management, Dezember 2009

SCM Strategic Directions 2020

Enabling the Digital World

SMART Supply Chain

- Further develop a market led supplier, manufacturing and logistics network to improve currency balancing, profitability and reduce environmental impact
- Improve quality and efficiency through best practice sharing, standardization and lean processes
- Inspire and develop a global SCM team to meet the challenges of the future
- Strengthen supplier integration to improve quality, total cost of ownership & performance
- Embrace a digitalized and connected global network by deploying smart and automated tools and processes

SCM Management, February 2020

SCM Strategic Directions 2020

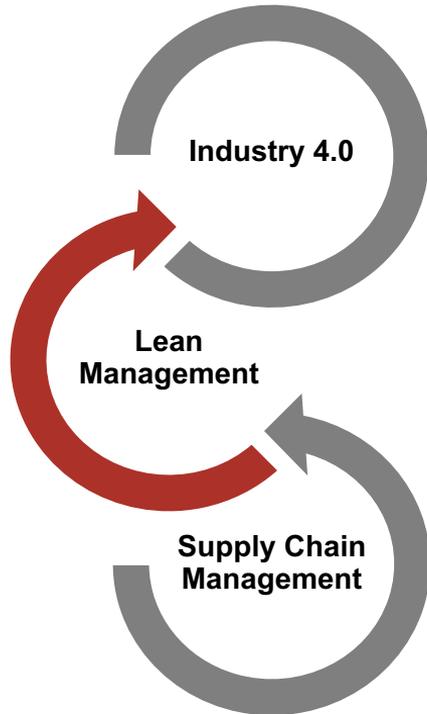
Enabling the Digital World

SMART Supply Chain

- Further develop a market led supplier, manufacturing and logistics network to improve currency balancing, profitability and reduce environmental impact
- Standardize and enhance global processes by using best practice sharing to improve quality and efficiency
- Inspire and develop a global SCM team to meet the challenges of the future
- Strengthen supplier integration to improve quality, total cost of ownership & performance
- Create a digitalized and integrated global infrastructure deploying smart and automated tools and processes

SCM Management, December 2019

Digitalization is preceded by a focus on value creation



Solutions in the **Industry 4.0** environment are further developments to increase productivity, which are reliably effective based on lived LEAN principles.

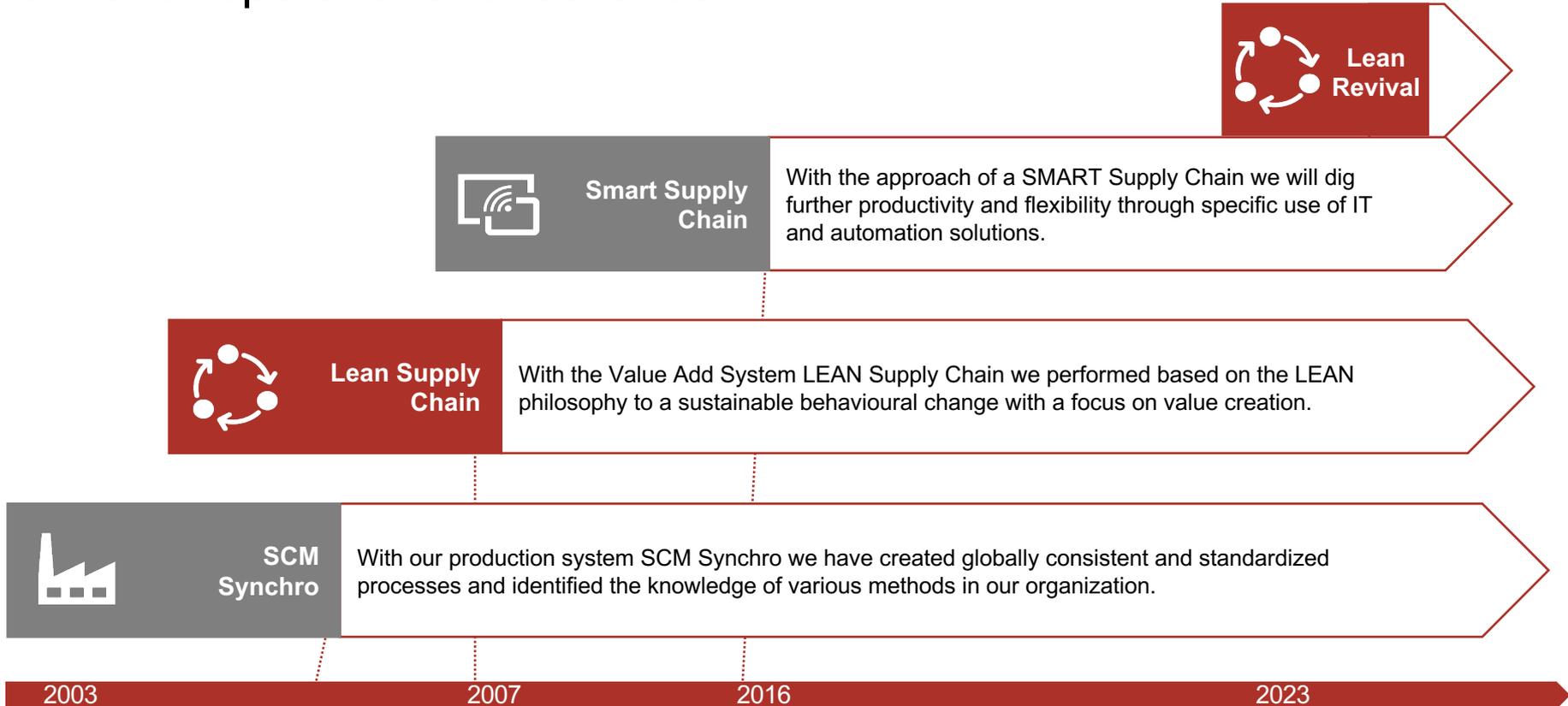


LEAN Management focuses on value creation, processes and waste prevention and ensures sustainable success through fundamental behavior changes.



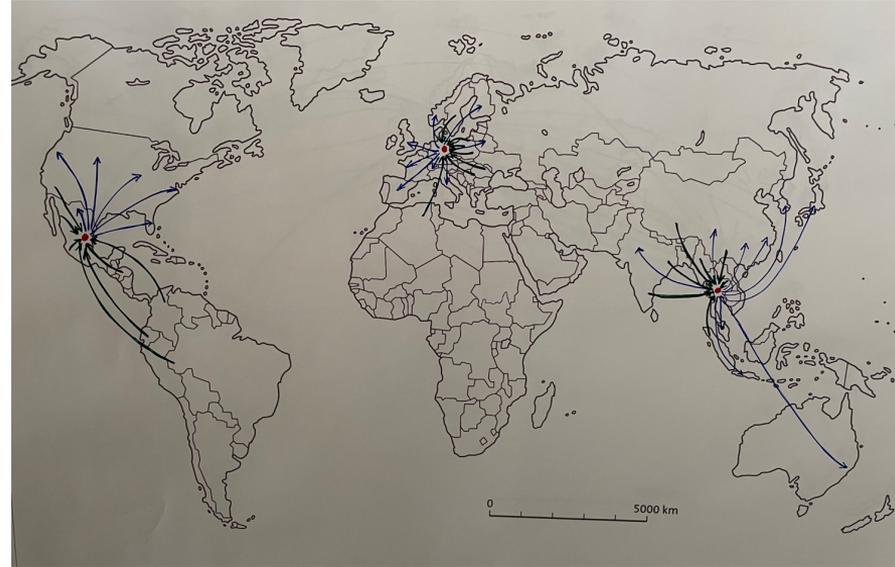
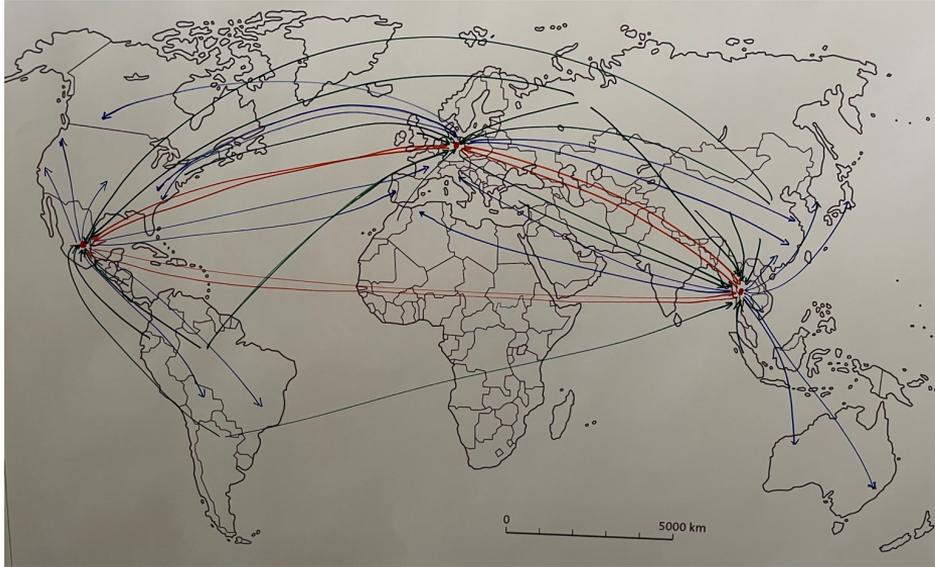
Process orientation ensures holistic and consistent thinking and acting. Supply chain management is therefore the starting point and pioneer for further process innovations.

Lean management remains a key driver of operational excellence



Transformation on a large scale (internally)

- Production sites close to customers
- Optimization of global flows of goods
- Reduction of logistics costs
- Improvement of the CO2 footprint

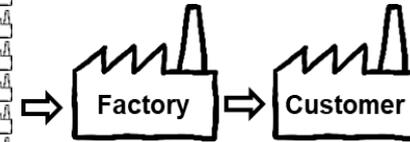


Transformation on a large scale (externally)

785 different suppliers
in 28 countries

4.000 estimated
subsuppliers

27.882 different (moving)
parts

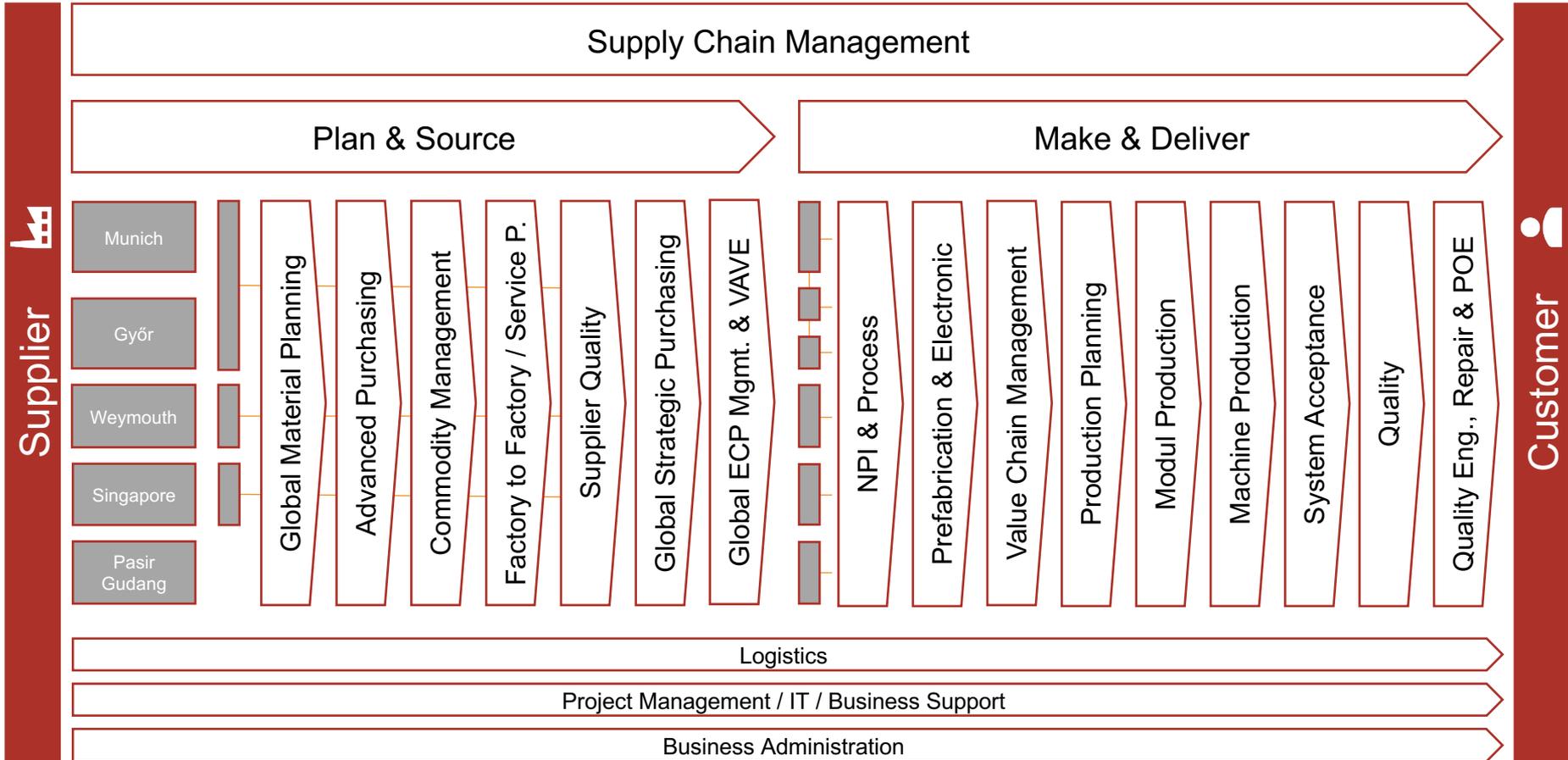


Transformation on a small scale



- Avoidance of immobile constructions
- Culture of experimenting
- Understanding the need for an economical and sustainable solution
- Continuous improvement
- Utilizing the creativity of all employees

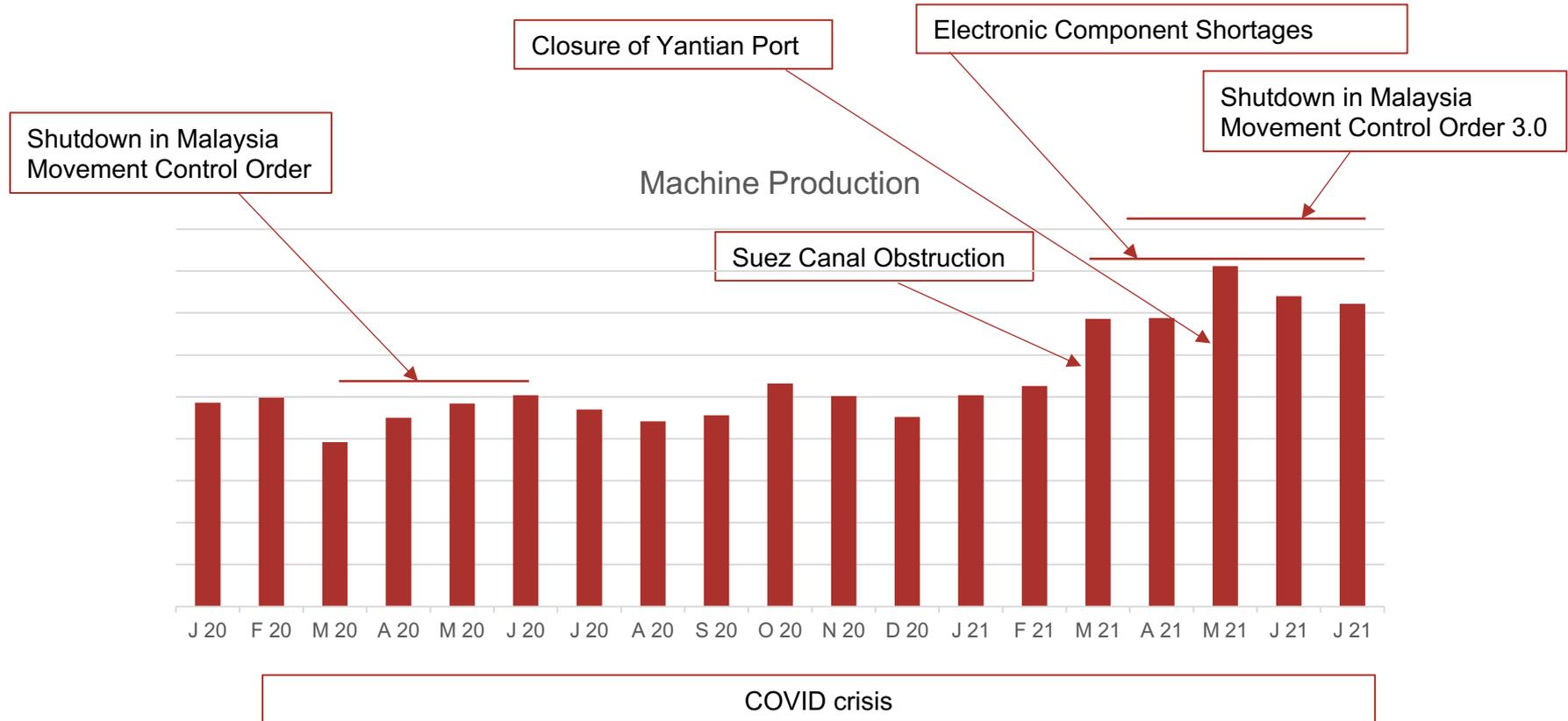
Basic organizational structure and responsibilities



Integration of all employees involved is a key success factor of change



Resilience is reflected in the results.



The background of the slide is a futuristic, blue-toned digital landscape. It features a grid of glowing blue lines, binary code (0s and 1s) floating in the air, and a complex circuit board pattern on the right side. In the center, there is a 3D rendering of a modern SMT (Surface Mount Technology) factory floor. The factory is composed of various pieces of industrial machinery, including conveyor belts, robotic arms, and large processing units, all rendered in a semi-transparent, glowing blue style. The overall atmosphere is high-tech and digital.

ASMP T enabling the digital world

Thank You!

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