



MNP for eOEMs

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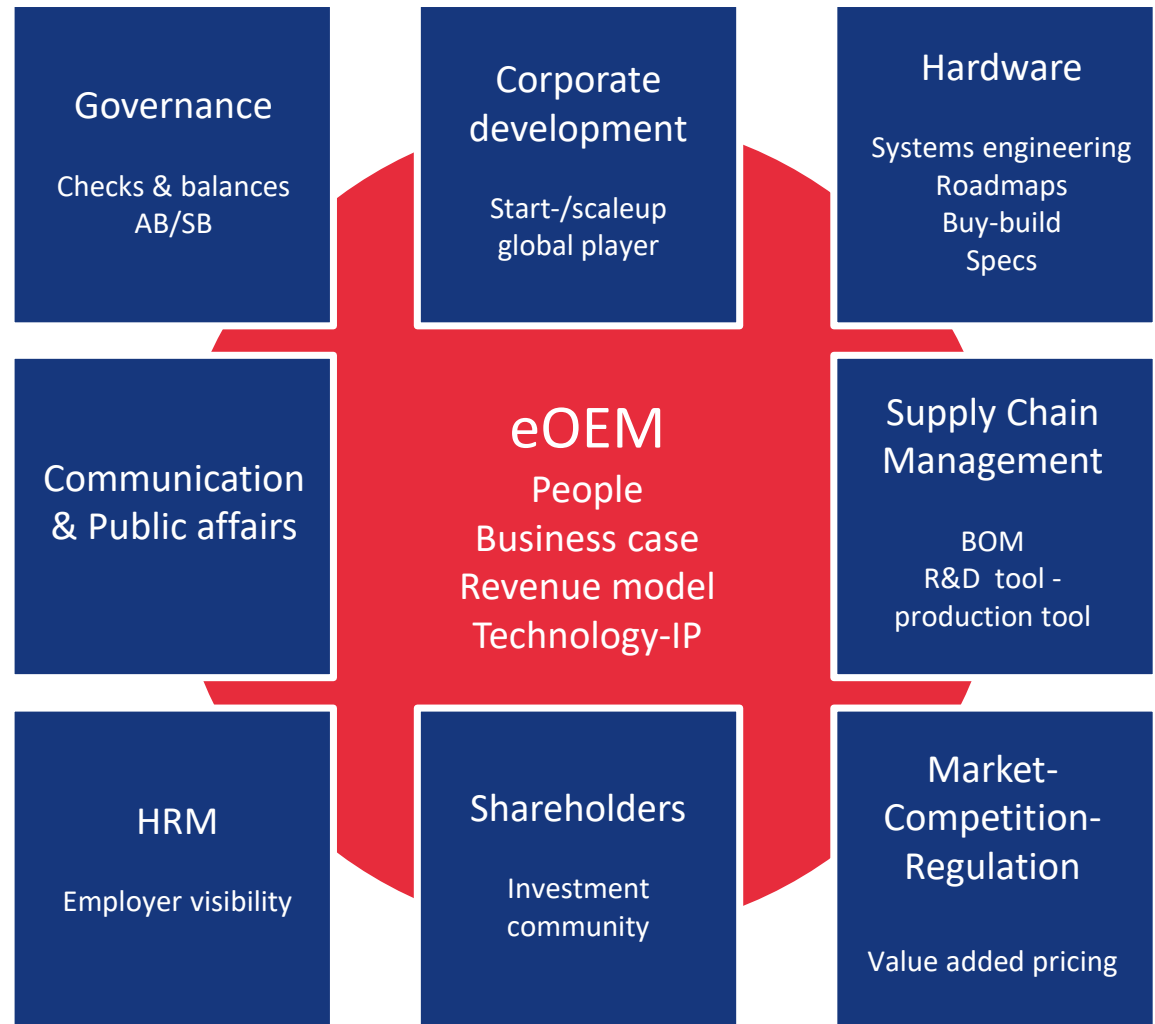
eOEMs bring new life to economies

- Emerging OEMs bring new life to the manufacturing industry.
- Their parents Technology and Entrepreneurship usually have no experience in raising kids; help is needed.
- Making deep tech tools requires specialized skills and perseverance.
- Bringing leading edge technology to market help economies grow their industrial base while keeping ecosystems innovative and resilient.
- This growing industrial base is a solid carrier for the Service and IT economy. They are superfoods for jobs and income growth.
- OEMs ASML, Huisman, Vanderlande, Foundation STR founded MNP in 2016; Thales NL joined in 2019. MNP help **selected** Dutch eOEMs to descend the learning curve faster while supporting them to stay in NL.
- Direct support from vested OEMs to emerging OEMs, and **at no cost** is unique.

Admission criteria MNP Virtual Accelerator

- eOEMs in early scaling-up phase.
- Important for manufacturing industry, ecosystem, and talent.
- Prototype: TRL ≥ 7 .
- Well-defined niche market with important potential customers.
- At least 10 staff (including management).
- Board of directors, and preferably a supervisory or advisory board.
- Revenue target mid-term at least M€ 50; long-term M€ 500 – 1,000.
- By invitation only.
- Successful MNP Challenge.

Everyday life of an eOEM is complex



Competencies current MNP Partners

- ASML: Lithography Systems → Precision Engineering
- Huisman: Heavy Equipment Oil-/Gas industry → Integrated Mechatronics
- Vanderlande: Logistic Process Automation → Material Handling Integrator
- Thales NL: (Aero)space, Transport, Defense, Security → Digital Tech/AI
- Foundation STR: Rating Agency → New Technology Based Firms

Companies MNP Virtual Accelerator

Alumnus

Integrated Photonics wafer manufacturing

SMART Photonics

SMART Photonics is an independent photonics foundry, offering production services for mainly Indium Phosphide based integrated photonic circuits for its customers, based on their designs. SMART offers a complete production process from epitaxial growth and re-growth, processing, polishing, and dicing of wafers into chips, supporting customers from the proof of concept phase up to and including full production.

 Founded: 2012

 Joined: 2017

Additive Manufacturing

Bond

Bond provides a breakthrough technology in 3D printing of industrial PEEK (Polyetheretherketone) for high-performance manufacturing to deliver functional parts with isotropic tensile strength using existing high-performance polymers. Client segments are Aerospace, Automotive, Electronics, Energy, Industry and Medical.

 Founded: 2014

 Joined: 2019

Medical Robotics

Eindhoven Medical Robotics

Eindhoven Medical Robotics (EMR) enables surgeons with supervised autonomous high precision surgical robotics. EMR aims to become a world leader in design, development and manufacturing of surgical robots.

 Founded: 2018

 Joined: 2019

In Ovo Gender-typing solution Ella

In Ovo

In Ovo has developed a high-throughput screening machine called Ella which can identify the gender of the egg before it hatches, early in the incubation process. This gives hatcheries the option to only hatch the females, which is better for animal welfare and sustainability. Several technological breakthroughs have laid the groundwork: a novel biomarker for gender, an automated sampling method for tiny amounts of egg fluid, and the application of the fastest mass spectrometer in the world outside a laboratory.

 Founded: 2013

 Joined: 2022

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ASML

Huisman

THALES

VANDERLANDE

STICHTING
TECHNOLOGYRATING

Companies MNP Virtual Accelerator

Kinetic Batteries

QuinteQ Energy

QuinteQ has an exclusive license from The Boeing Company to bring to market a flywheel-based kinetic battery. The functional properties of the battery are comparable to Lithium-ion batteries, i.e., storage, loading and unloading of electrical energy. It has an estimated lifetime of at least 350k cycles (20-25 years), while Li-ion batteries last 3-6k cycles. Energy-losses are less than 0.1%/hour.

 Founded: 2016

 Joined: 2022

Water treatment/Agriculture

VitalFluid

VitalFluid specializes in the development of customer driven Plasma Activated Water (PAW) applications to contribute to the sustainability goals of our customers and society. Through deep knowledge of the physical, chemical and biological properties of PAW and the ability to control and enrich the activation processes, the company develops machines and applications tailored to and outperforming the requirements.

 Founded: 2014

 Joined: 2018

Medical

VIVOLTA

VIVOLTA develops bioresorbable medical devices, tissue engineering products and drug delivery solutions that guide the body to heal itself. Using our cutting-edge MediSpin® production platform, we provide nanofiber-based solutions to address unmet clinical needs and change patients' lives.

 Founded: 2008

 Joined: 2020

Spark ablation tool

VSPARTICLE

VSPARTICLE (VSP) has developed a unique spark ablation tool which generates nanoparticles in a highly controlled manner. Spark ablation is an exciting technology for material scientists who are looking to create new combinations of materials (alloys) or to improve the behaviour of bulk materials like gold and Iridium (Ir) by bringing them on nanoscale. In 2023 VSP will introduce its flagship product, the VSPARTICLE Nanoprinter (VSP-P1). This new product unlocks a new material paradigm by enabling customers to print nanoparticles at the push of a button. The tool can potentially be used for many applications in lots of markets. VSP is eying to become a provider of industrial production tools.

 Founded: 2014

 Joined: 2022

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