

**WE ARE THE
INTRALOGISTICS
PIONEERS.**

**... OF
ENERGY
SOLUTIONS**

Michael von Forstner
Budapest, September 24th , 2026





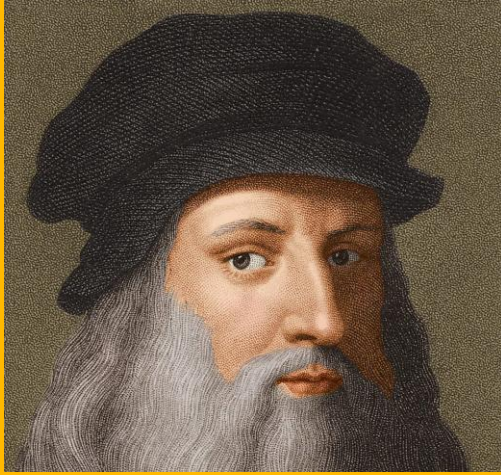
Michael von Forstner

Mechanical Engineer

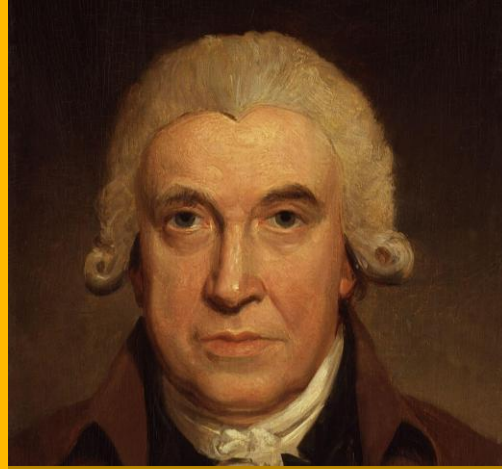
Global Portfolio Program Lead

JUNGHEINRICH AG, Hamburg

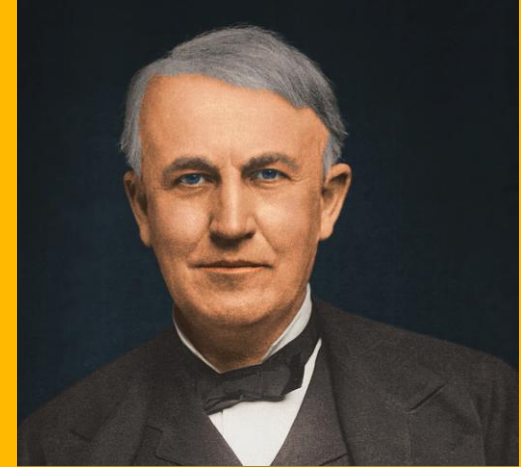
WHAT ARE YOUR PIONEERS OF TECHNOLOGY?



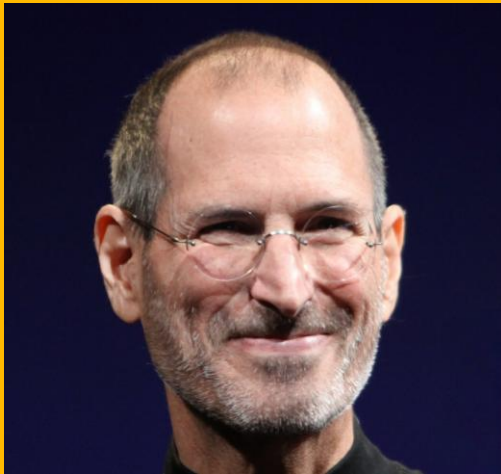
Leonardo da Vinci



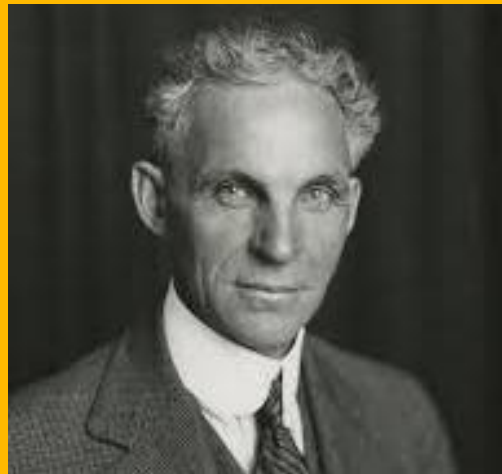
James Watt



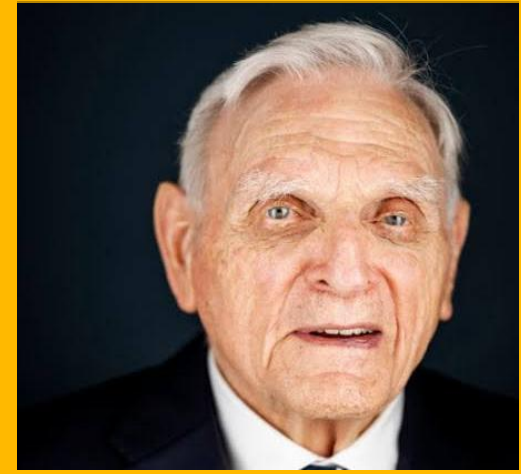
Thomas Edison



Steve Jobs

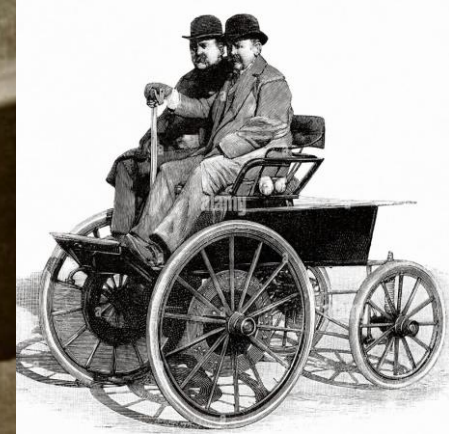


Henry Ford



John B. Goodenough

New York City: First pioneers of E-Mobility



- started 1897
- Henry G. Morris and Pedro G. Salom founded Electric Vehicle Company
- taxis with electric drives and lead-acid batteries
- battery changing system
- >1.000 “Electrobats”

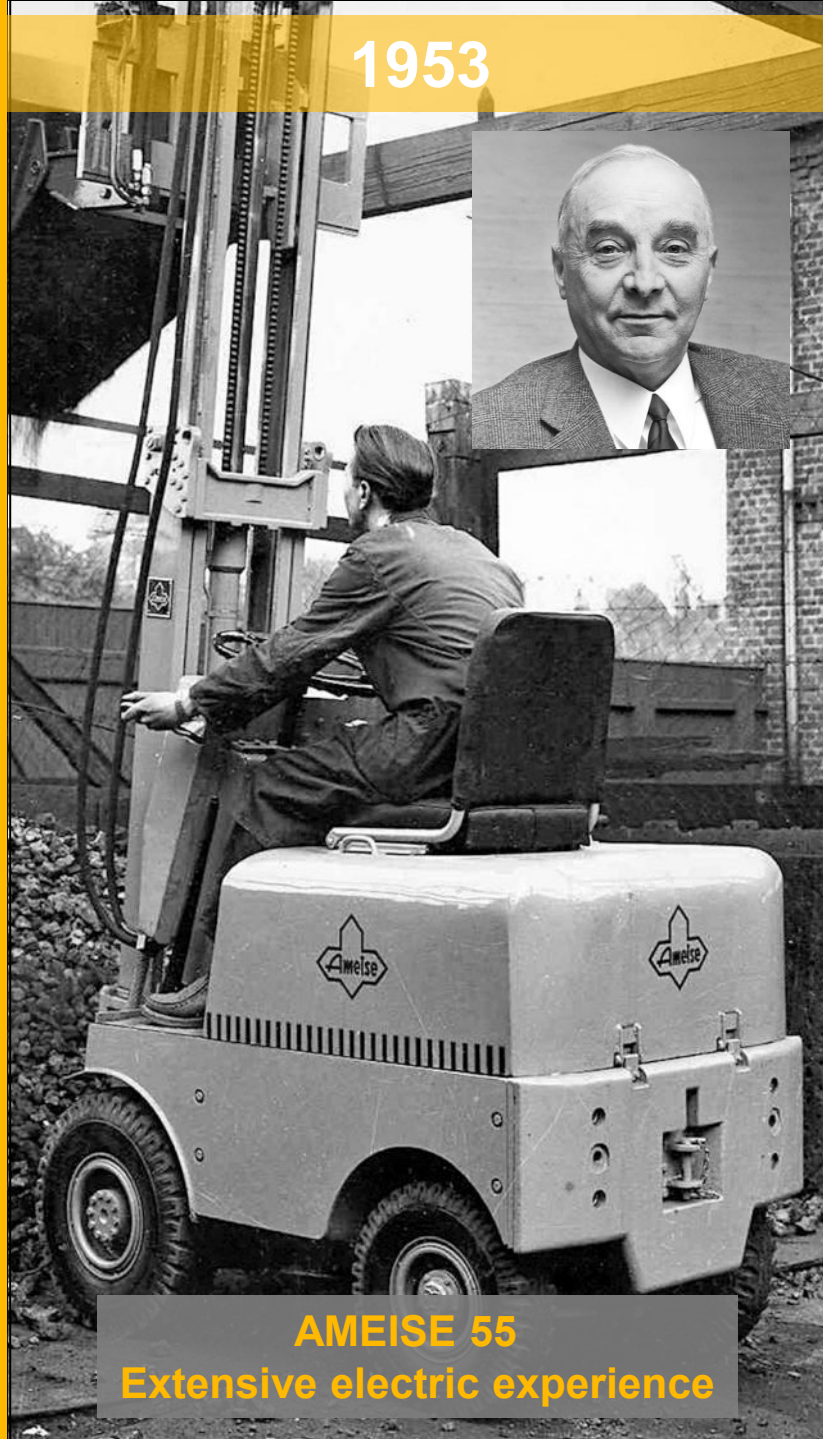
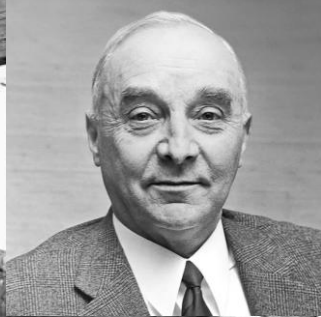


BEFORE



AFTER

1953



AMEISE 55
Extensive electric experience

2008 / 2011



CONCEPT08
Innovative technology approach



EJE 112i - Developed in-house
1st in industry

2017 **JUNGHEINRICH**



POWERLINE
innovative holistic approach



ENERGY EXPERT NETWORK
Infrastructure solutions

TODAY: Electric Pedestrian Truck – EJE/EJC/ EJD/ ERD 1i

JUNGHEINRICH

2. Battery Generation



Energy solutions on trucks

- 100% on li-ion technology → **maintenance free**
- high energy density → **less space**
- Modular lithium-ion battery and on-board charger → **more flexibility** with **quick and decentralized charging**





2. Battery Generation

Energy solutions on trucks

- Fully integrated 50 V Li-ion modules 230/460/690 Ah
→ for every application
- New cell generation (e.g. CATL)
→ for best performance
- Active cooling and heating
→ for longer lifetime

2. Battery Generation

Energy solutions on trucks

- Fully integrated 50V battery module
→ **compact + ergonomical**
- Lithium-LFP-technology
→ **safe and long-lasting**
- Battery heating (-28°- +45°C)
→ **always ready to use**
- Comfort charging



Energy solutions for infrastructure

- **Actively controlling power consumption to**
 - avoid peak costs
 - providing fail-safe operation
 - operate larger fleets without costly infrastructure changes



TOP ENERGY TRENDS & DRIVERS

**ARE YOU
READY FOR THE
FUTURE?**



- ➔ **Costs Reduction**
- ➔ **Technology Push**
- ➔ **Sustainability/ regulations**

DEAD-END

NEW

JUNGHEINRICH



Quick charging



Very high costs

Fuel Cell



Less cost



Less capacity

2nd Use
Li-Battery
(refurbished)

**Central Refurbishment Hub
for used Li-batteries**

**State-of-Health (SOH) testing
and evaluation**

**Reuse (As-Is)
Repair
Refurbish
Remanufacture**

Recycling

- **Refurbishment hub with bundled competence**
- **Over 4.000 batteries already tested**
- **State-of-the-art recycling process**

FULL OF LIFE.

Second life, first choice: JUNGSTARS with re-used lithium-ion batteries.

- Fast charging
- Maintenance-free and safe
- No special charging rooms required
- >90% lower production CO₂-footprint
- Extremely lower price
- Reliable with 2-year warranty
- Reduced operation time by max. 25%

ATTRACTIVE &
SUSTAINABLE



Easy handling



More sustainable



More attractive



Sufficient operation time

SUSTAINABLY RECYCLED

JUNGHEINRICH



DEAD-END

NEW

FUTURE

JUNGHEINRICH

>600 Jungheinrich-trucks in the market

↑ Quick charging

↓ High costs

↑ Less cost

↓ Less capacity

↑ Less cost

↓ Less density

Smarter
Chargers

Advanced
Battery
Information
System

Warehouse
Energy
Management
System

↑ quicker charging

↓ higher cost

Fuel Cell

2nd Use LiB-
(refurbished)

SIB
(sodium/ natrium-ion)

New Energy
Solutions

High Voltage

Concept Truck



High-Voltage Technology



- powerful high-voltage system architecture with liquid cooling

→ top performance

Fast Charging



- 150 kW charging power with CCS-2 interface

→ minimal downtime

Performance



- 6 t payload capacity
- 26 km/h speed
- 4.6 s to accelerate 15 m
- 0.6 m/s lifting capacity

→ sets new standards



EVOLUTION OF AMERICAN TAXIS

Years Oldest to Newest



A pioneer recognizes opportunities earlier than others,



evaluates the potential of other technologies,



links technology to customer and business value,



and manages to put new ideas into practice at the right time despite resistance.

LET'S ALL BE PIONEERS.

ANY QUESTIONS?





Thanks for your attention.