20 years of Internet
20 months of AI:
Are you ready for exponential industry?

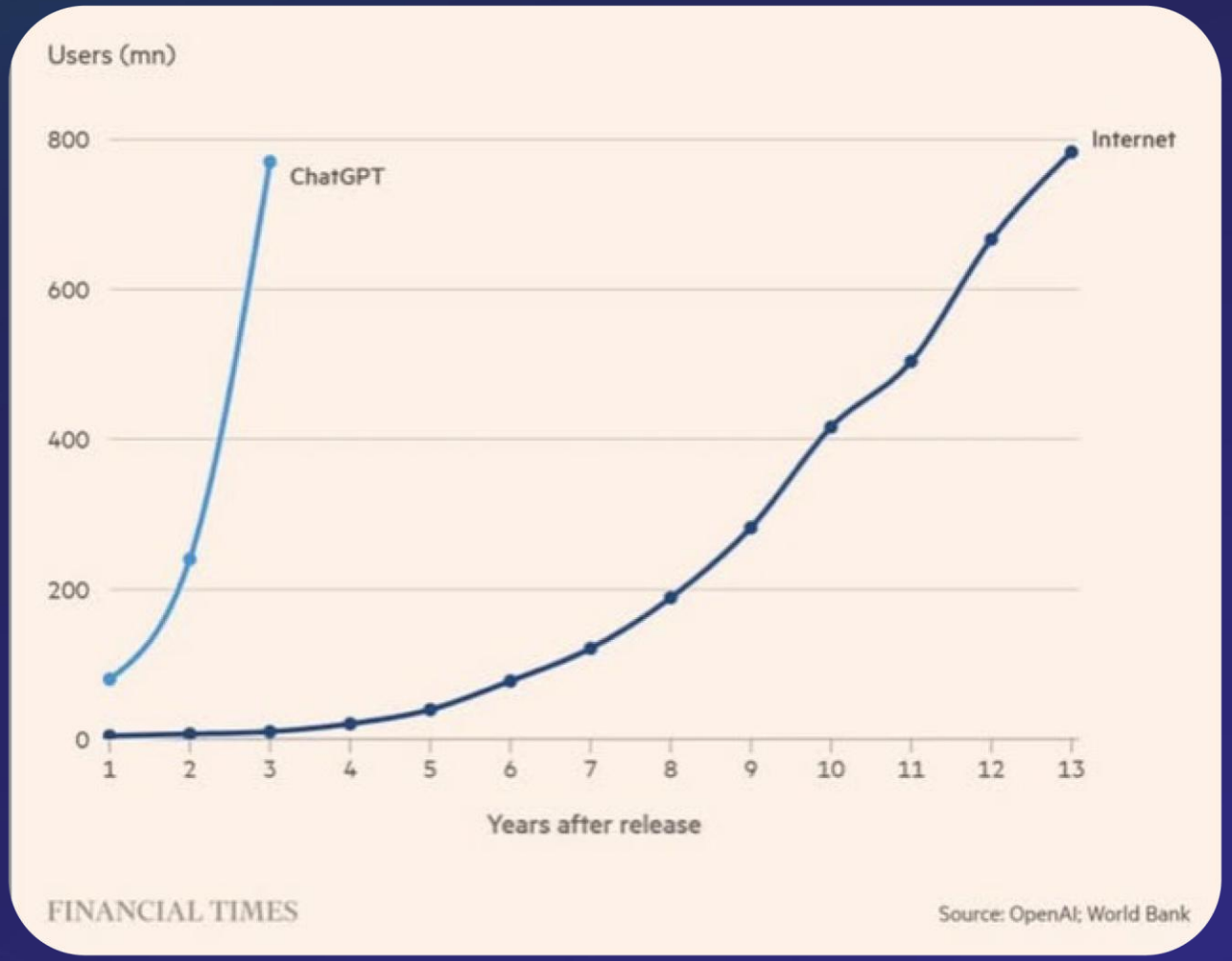
IndustryXTalk - Keynote Presentation

António de Oliveira e Silva
Business Development

21/11/2025

Real-Life Lessons From Industry

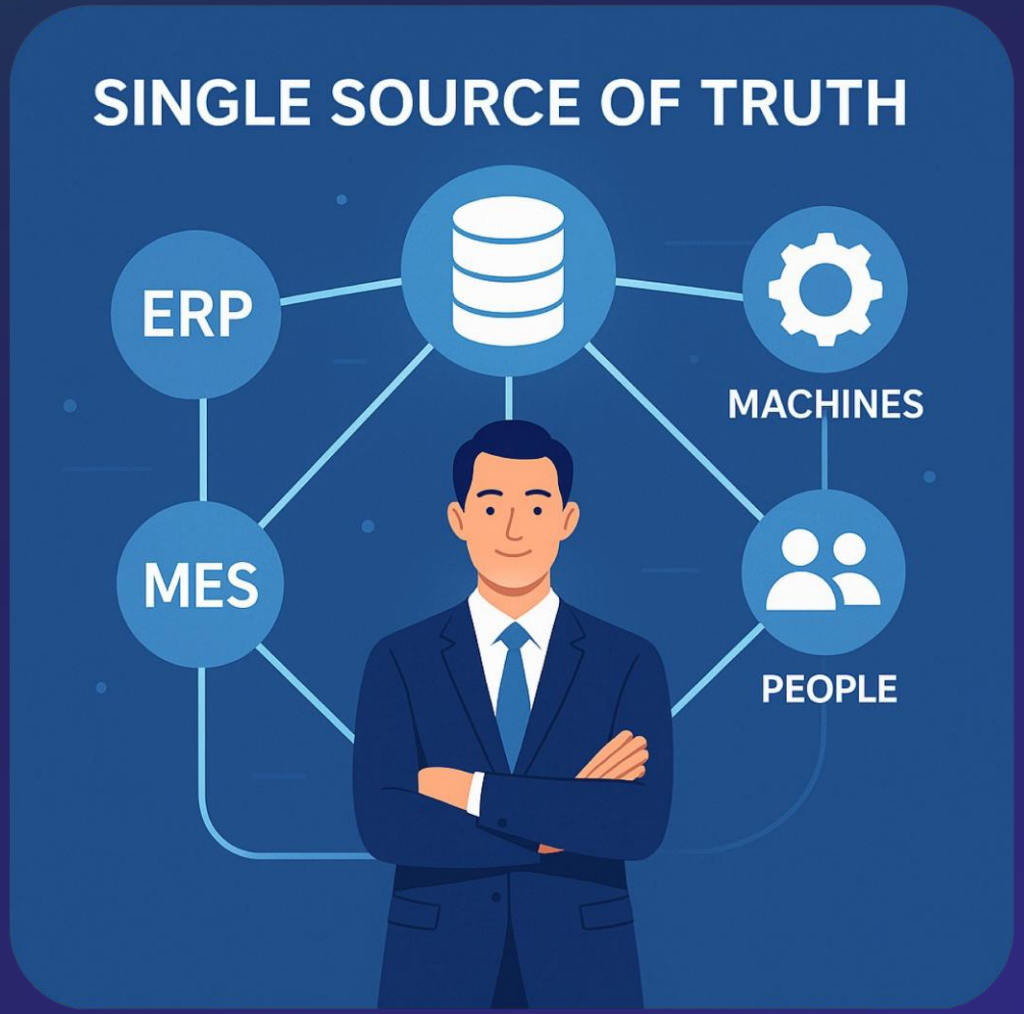
20 years of Internet, 20 months of AI



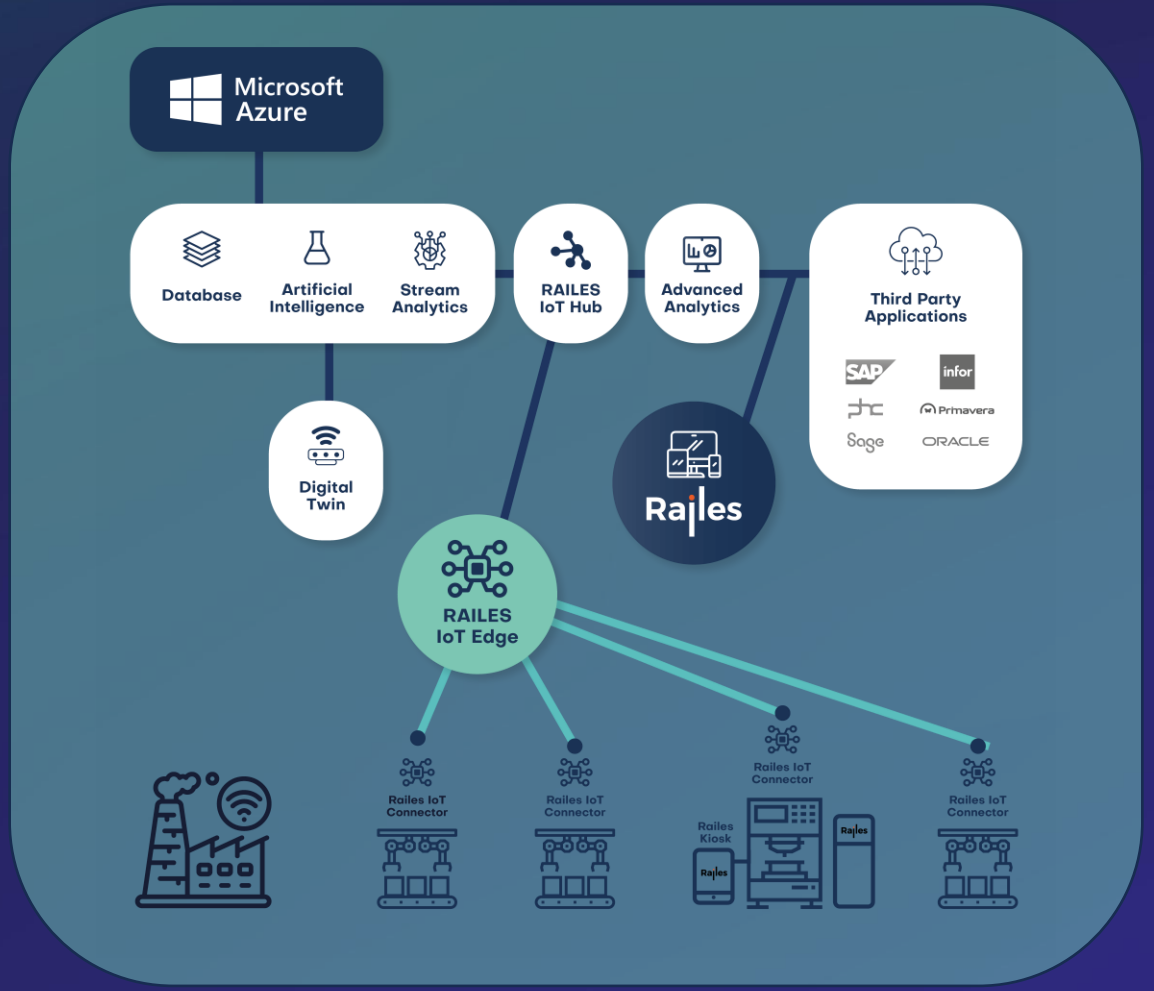
MUVU TECHNOLOGIES

Digital Frankenstein:
ERP + MES + Excel + Machines + Papers

Building a single source of truth



RAILES as unified platform



Real Use Cases

TEKEVER

MUVU TECHNOLOGIES

Aerospace Defense

RAILES MES for End-to-End Production, Quality & Logistics Control

Modules	PM QM WMS MM RM PIM A&I M&DT
Implementation	12 months
Objetives	The production, quality and logistics processes were fragmented, with limited real-time visibility and several manual steps creating operational bottlenecks. Ensuring a seamless integration between RAILES and Microsoft Business Central was also a key challenge, requiring consistent synchronization of manufacturing, inventory and quality data. The objective was to centralize operations, improve traceability, eliminate manual workflows and align all production and logistics events with the ERP in real time.
Impact & Results	• Real-time visibility across all production, quality and logistics processes • Full end-to-end traceability of materials, batches and operations • Centralized execution and standardized process control • Seamless integration with Microsoft Business Central for synchronized production, inventory and quality data • Improved planning accuracy and operational efficiency

Real Use Cases

FUNDAÇÃO Bial
Instituição de utilidade pública

MUVU TECHNOLOGIES

Pharmaceutical

RAILES MES for Digital Batch Records & Production Control

Modules	PM DR MM CM A&I M&DT
Implementation	10 months and 3 months CSV
Objetives	Implement a fully digital and compliant Electronic Batch Record (eBR) process to replace manual and paper-based workflows, ensuring data integrity, traceability and alignment with GMP, GAMP 5 and 21 CFR Part 11 requirements. Standardize production and quality processes across manufacturing areas, improve real-time visibility of batch execution and reduce deviations caused by manual data entry. Enable tighter integration between production and quality ensuring consistent data flow, faster decision-making and higher operational efficiency.
Impact & Results	• Complete digitalization of Batch Records with full traceability and auditability • reduction of manual entries, paper usage and documentation errors • 50% faster batch review through standardized eBR workflows and automated compliance checks • Improved compliance with GMP, GAMP 5 and 21 CFR Part 11 requirements • 30% decrease in deviations caused by incomplete or inconsistent records • Seamless MES and ERP integration ensuring synchronized production

Real Use Cases

Automotive Compounding Industry

MUVU TECHNOLOGIES

Automobile

RAILES MES Driving High-Performance Automotive Manufacturing

Modules	PM QM WMS MM A&I M&DT
Implementation	9 months
Objetives	Implement RAILES MES as a unified platform to digitalize and control production, quality and maintenance processes, ensuring full traceability and standardization across operations. Strengthen compliance with ISO 9001 and ISO 27001 by enforcing structured workflows, secure data management and audit-ready records. Improve visibility of manufacturing performance, reduce variability, and support preventive and corrective maintenance with real-time insights that help avoid downtime and ensure continuous compliance.
Impact & Results	• 28% reduction in unplanned downtime, driven by real-time monitoring • 6% improvement in OEE, supported by standardized production workflows and improved data accuracy • Significant increase in MTBF, enabled by better maintenance planning and predictive insights • Enhanced compliance with ISO 9001 and ISO 27001, supported by complete traceability and audit-ready records • Centralized visibility over production, quality and maintenance operations • Reduction of manual work and improved data integrity across all shop-floor processes

MUVU TECHNOLOGIES

“The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency.
— The second is that automation applied to an inefficient operation will magnify the inefficiency”

- Bill Gates

Ready or Not?
The exponential Era has already Begun

- Operational excellence only happens when human expertise and real-time data speak the same language.
- Human intuition is powerful but only becomes reliable when supported by a single source of truth.
- AI accelerates decisions, but culture accelerates adoption. Without trust, AI goes nowhere..
- Industry 5.0 is not about replacing people. It's about making people impossible to replace.
- A factory becomes future-proof the moment humans and machines stop working in parallel and start working in sync.
- Predictive systems only work in organizations that are brave enough to confront their own data.
- The factories that win won't be just automated. They will be human-centered, data-driven and trust-enabled.

MUVU TECHNOLOGIES

MUVU Technologies is a company specialized in developing technological solutions based on Industry 4.0 concepts.

Rajles

MUVU TECHNOLOGIES

High tech solutions for *smart industries*

MUVU TECHNOLOGIES

Thank You!

antonio.silva@muvu.tech

www.muvu.techc

For more questions:

antoniodeoliveiraesilva