

Product-as-a-Service for long term profitability for industrial companies

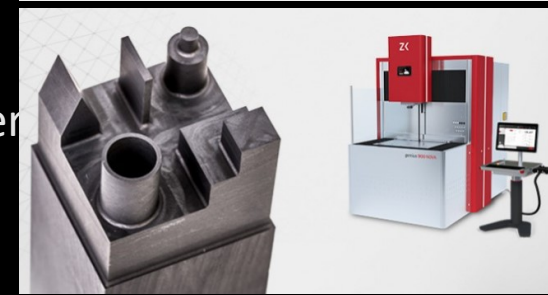
How to improve customer acceptance of new technologies



Olli Kuusmanen, Upheat Solutions Ltd

Trend: Industrial equipment vendors turning to PaaS

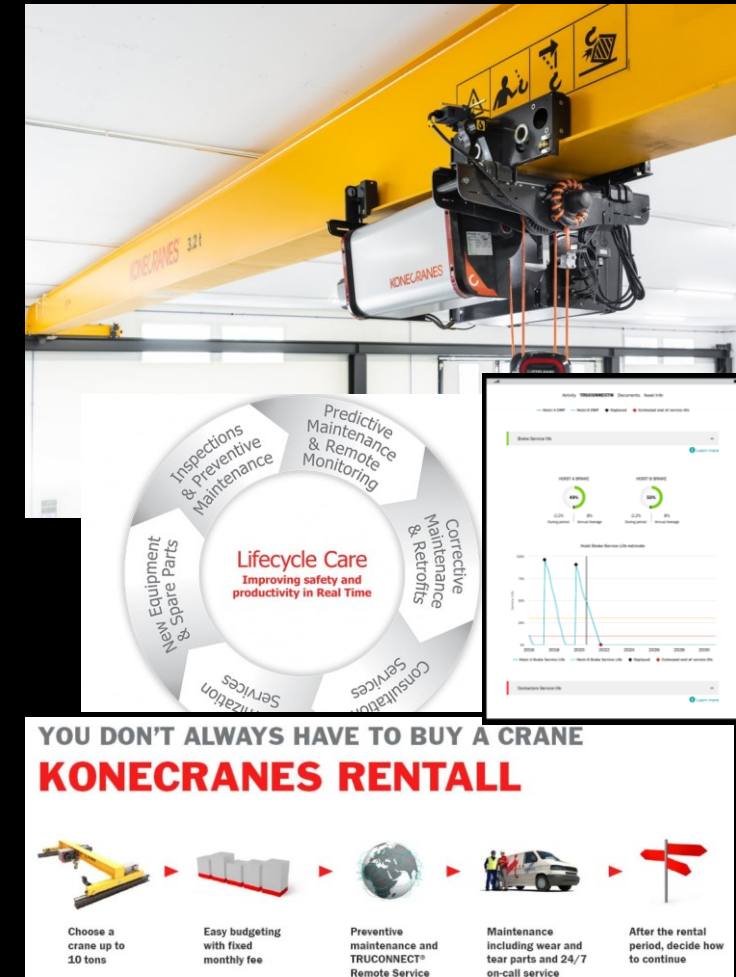
- **ENGEL**: Injection molding machines
- **EHRT**: Bending and punching machines for electronics production
- **DMG Mori**: machine tools
- **ZK-Systems**: Die-sinking machines
- **WashTec**: car washing machinery
- ...
- Standardized, common, connected products
- Availability of machines critical for customers' business, utilization directly linked to customer
 - **Pay-per-use (h) or Pay-per-output** (units produced) business models
 - Flexibility for customer's production
- **Third party financing** to cover the utilization risk
- (**Purchase option** at the end of PaaS contract term)



Example: Konecranes

- Market leader in industrial cranes
- Extensive IoT investments since 2001
 - 10000+ cranes in remote monitoring
 - Limited # customers paying for remote monitoring
 - Data used mostly for R&D
- Service presence
- Long product lifetime (decades)
- Very light usage → annual inspection as main service revenue
- Heavy cost competition in selling standard industrial cranes

→ RENTALL was able to attract **new customer segments** (those who would otherwise select the lowest cost product) with **higher-than-average profitability**



1. Differentiation
2. Price pressure in sales
3. Customers not able to invest
4. Untapped service capabilities
 - Physical service presence
 - Remote monitoring and service
5. Technology ("too good" products)
 - Reliability
 - Standardization or modularity
 - IoT monetization
 - Cost
6. +1 3

Example: Tamturbo

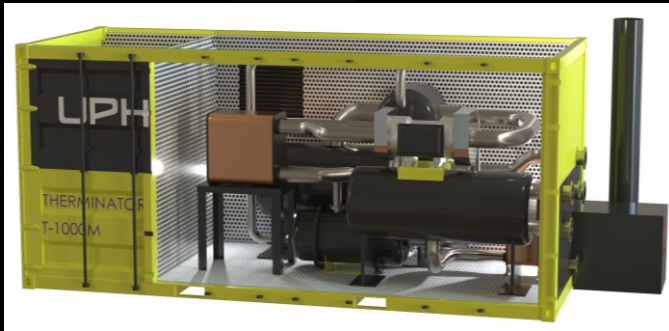
- Market entrant in industrial compressors
 - Market leader has >60% market share, indoctrinated customers
- New transformative technology, life cycle savings
 - Production cost multiples to legacy products, low profitability in traditional sales
- Remote monitoring and service (optimization)
- Long product lifetime (decades)
- Practically no aftersales potential (maintenance-free technology)
 - Legacy technologies business model based on service profit
- Value proposition around **energy and cost savings**
- Touch-Free Air started in 2017 as first customers didn't dare take the **technology risk**. Continued as a way to **sell life cycle savings** (in proportions). **Energy crisis** enables selling waste heat back to customers.
- Third party financing



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UPHEAT GO-TO-MARKET & BUSINESS MODEL

UPHEAT OWN DIRECT SALES



Global food and beverage, pulp and paper and chemical giants want to buy from the source, so our own sales efforts are targeted to global key accounts. Projects will be implemented with local partners or specific industry OEMs.

OEM PARTNERS



Existing large OEMs in all of our target markets are searching for a sustainable energy solution to bundle into their production line offering to replace natural gas in drying processes. Discussions have been active with multiple.

OTHER PARTNERS AND INTEGRATORS



Additionally, there are local, usually on a country level, players as heat pump integrators that can serve specific geographical markets. They just need to buy the heat pump product to solve their local customers' energy challenge.

Equipment sales & Heat-as-a-Service to negate customer CAPEX limitations



Hasta la Vista, Waste Heat

More information:

Olli.kuismanen@upheat.com

Mob. +358 40 766 5678

LinkedIn: [linkedin.com/in/ollikuismanen](https://www.linkedin.com/in/ollikuismanen)



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