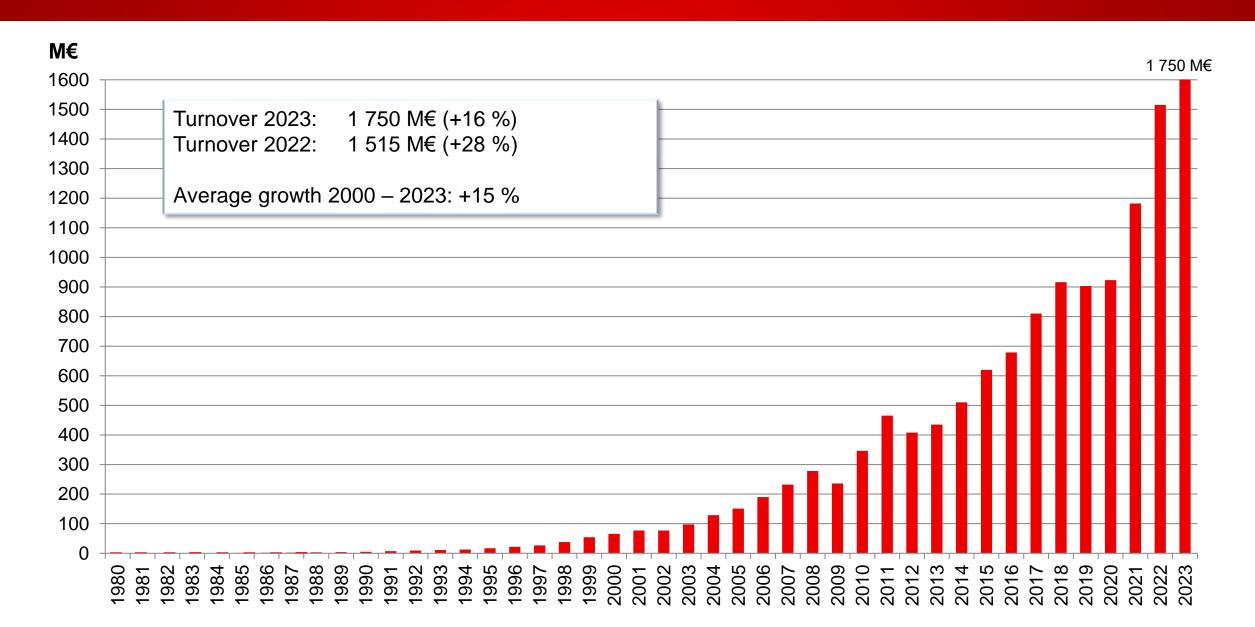
Novel business models enables new technology integration

Mikko Uuskoski

Managing Director, Beckhoff Automation (Finland, Baltics)



Turnover 1980 – 2023





Technology related opportunities and challenges



Computing power increase

- Increased automation level
- In robotics and motion control
- AI/ML
- Machine vision

>

How mechanics, electrics, automation and IT are and will be merged together? How this impacts machine building and manufacturers using machines?

>

Novel business models accelerating development towards higher performance machines, productions lines and factoring. How business model can be catalytic in this process?

>

Machine performance improvements over the machine lifetime?

>

How can we improve resilience and competitiveness (in Europe) with these technologies?



Ongoing Technology Development Enables New Business Opportunities

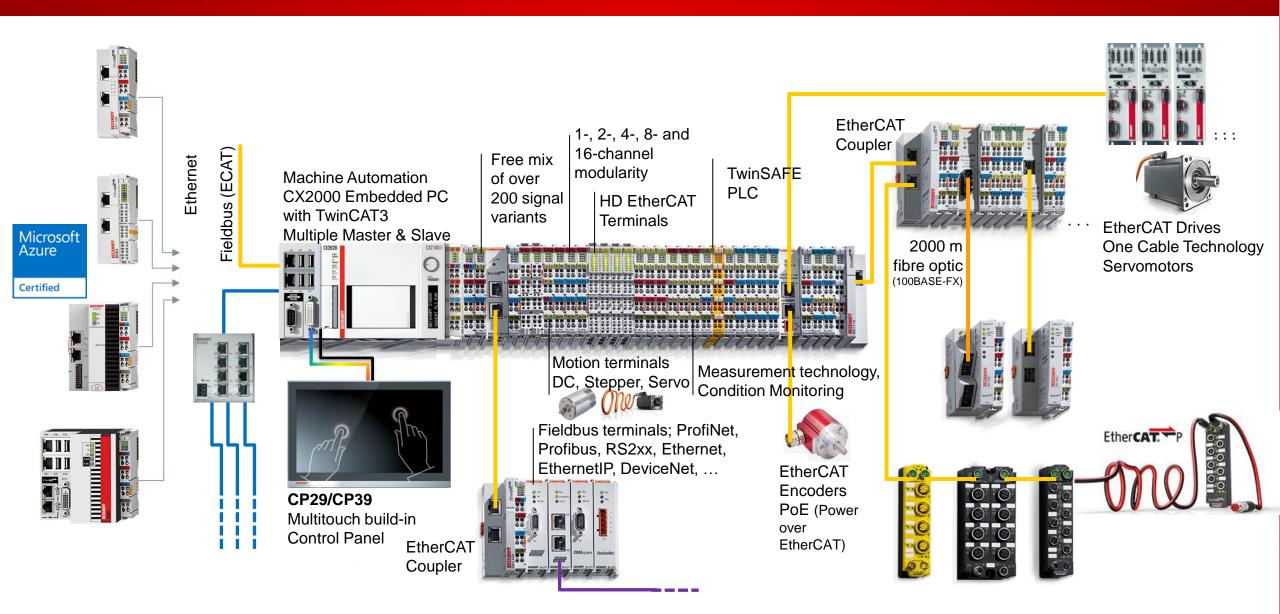
- 1. More processor power
- 2. More connectivity
- 3. More software/Data

More investments for Technology R&D

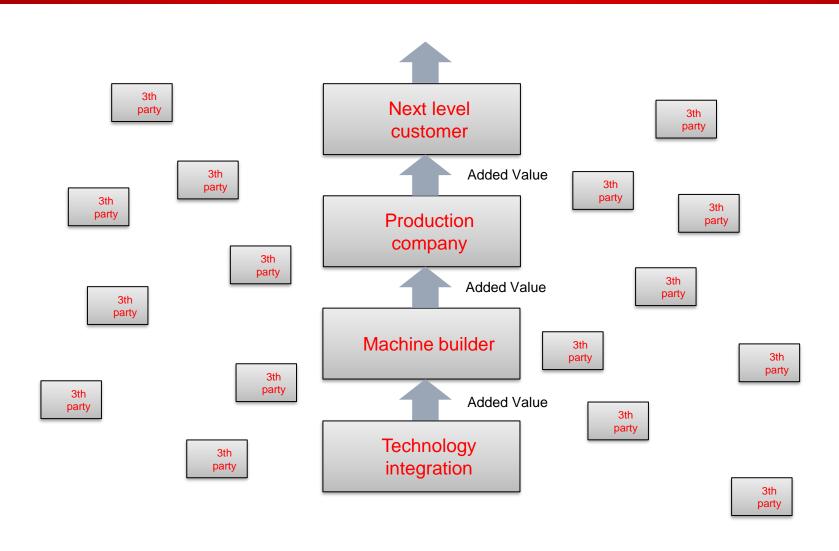
More value to the customer

X

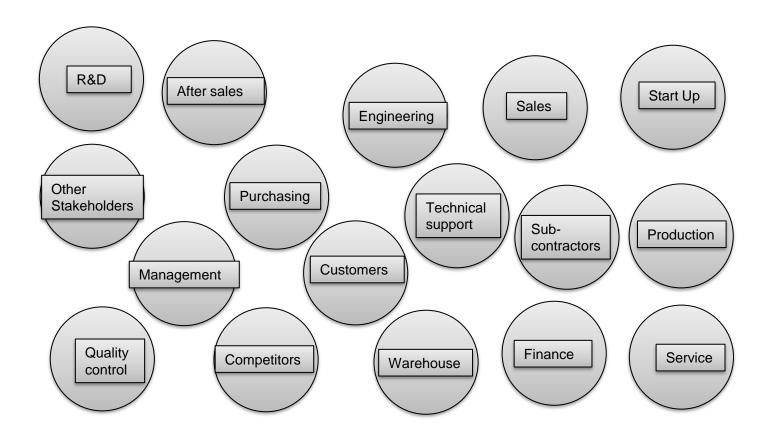
Modularity of the System – Example: Extended Automation System



Technology Integration: Value Chain







Traditional Business Model

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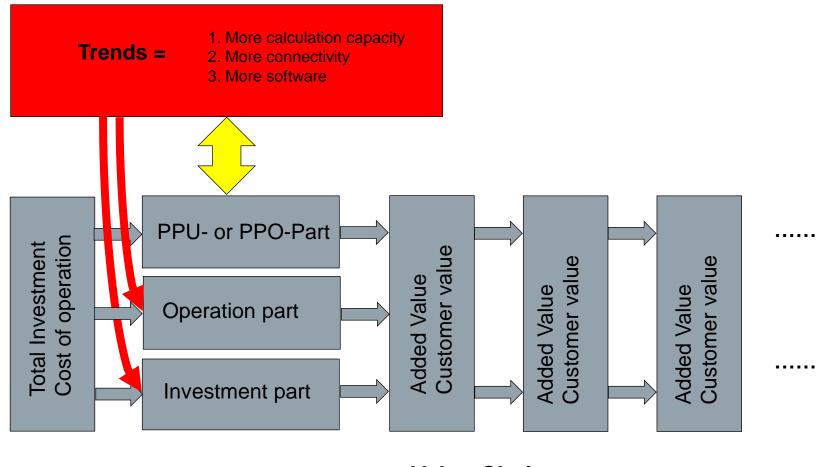


One time payment according to the delivery (Ownership)

Pay-Per-Use Pay-Per-Output Pay-Per- Outcome

Payment

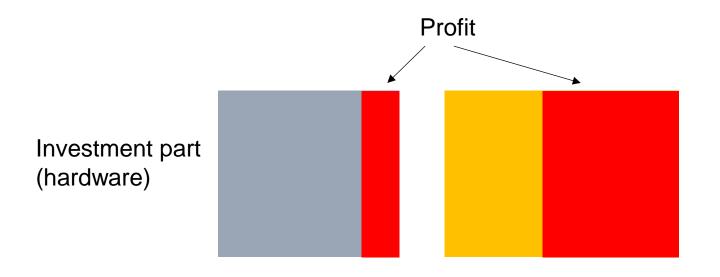
Hybrid Business Model, Expected Components = Way to Full PPX Business Model



Value Chain

New Type of Business Model

BECKHOFF



New service or additional service part enabled by the new technologies

One time payment according to delivery (Ownership)

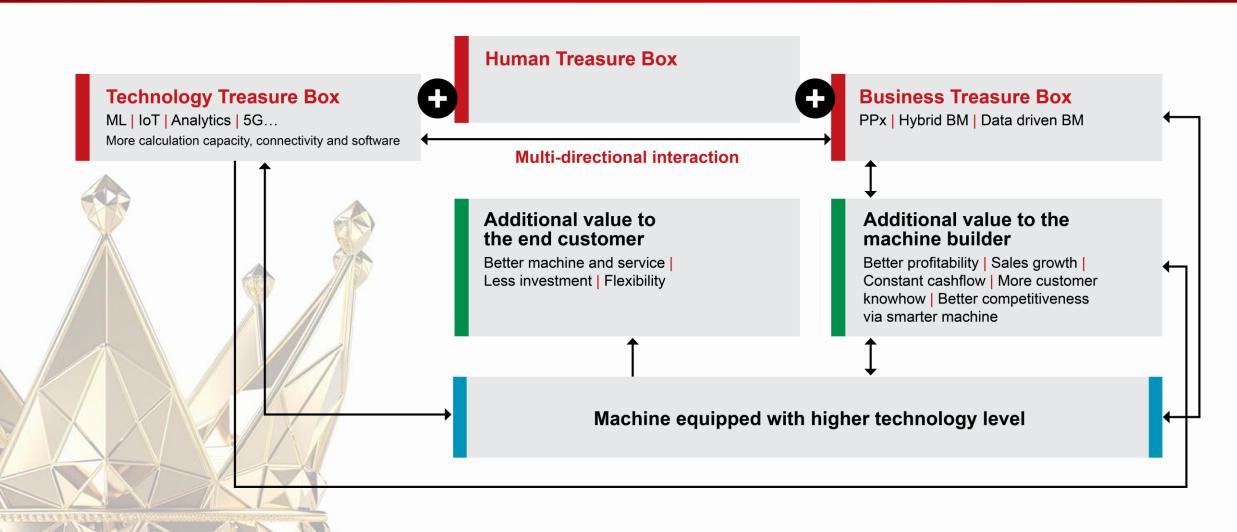
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Payment

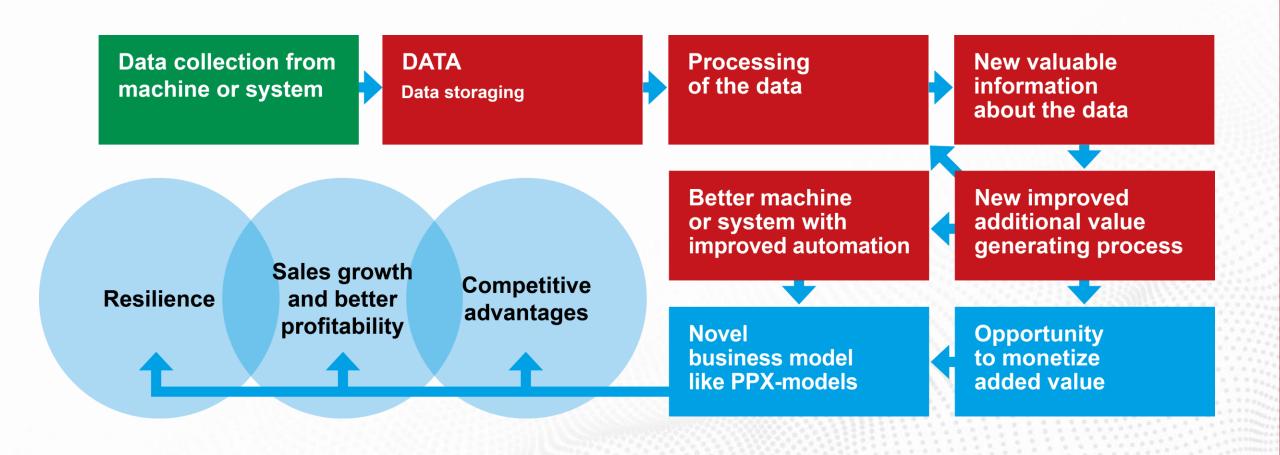


- Market and customer readiness / technical, functional
- Own organization readiness / technical, functional, commercial
- Resistance to change in different levels
- Needed time for data driven systems and BM development is long
- Payback time can be long
- Lack of the needed professionals

Treasure Box Theory



How to get added value from the data and data processing?



Features of technology business model treasure box

BECKHOFF

Additional value to the machine builder

- Better profitability
- Sales growth
- Constant cashflow
- More customer knowhow
- Smarter machine better competitiveness

Additional value to the manufacturing company

- Better machine
- Better service
- Less investment
- Flexibility

Continious development process of machine features and performance level



Machine builder and its supply chain plus manufacturing company are benefitting



Better overall competitiviness in the world market and better resilience

Overall benefits of "doing together" strategy in value chain

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Value chain

Machine builder supplier (example automation, robotics etc.)

Machine builder

Next level manufacturing company

End customer (user of end product)

- Bigger scope of supply
- Better knowhow about customer needs
- Opportunity to development better products

- Bigger scopy of supply
- Better knowhow about customer needs
- Opportunity to development better services and products
- More constant cashflow with novel business models
- Less educated manpower needed for machine production, istallation and service

- Better and more reliable performance of the machines
- More profitable because of multiple reasons
- Ongoing process to develop products and services with the value chain
- More constant cashflow and smaller balance sheet value with novel business models
- Less consuming products (Energy, raw material etc.)
- Less educated manpower needed for operating machines

- Better quality products
- More reliable deliveries
- Less enviromental foot print

Thank you!