

Industrial Services

From Value Added Product(ion) to Life-Cycle Orientation

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Outline

- Background
 - State and Challenges
 - Response (*MANUFUTURE*)
- Topic:
 - Industrial Services and Life-Cycle Oriented Value Creation
 - Implications

Attempting an distinction:

20 + heterogeneous industrial Sectors! No-X-Fits-All (X:Size, Need,...)

Industrial services vs. P/P services vs. products:

- Services for industry and/or by industry connected to products(ion)
- Has its „roots in“, or is centered around, or communicate with products(ion):
 - distinction may not be sharp (extending Products ..)

Industrial vs. general PSS:

- Professional is user trained, < risk misuse/accidents (insurance!)
- Less units reversability!
- Value Creation/unit higher price/unit -> „surf the HW wave“
- User = decision maker! Serving one client! (!= health care oligopol)

Life cycle oriented vs. production oriented value creation:

- Creating also after sale revenues – post production value creation
- Earning over full life-time of a product, ... binding the customer
 - Examples: „Mobile PSS“ / IPOD / “Navi“ / NESPRESSO / printers / cars..

Background

- **Manufacturing Industry:** Eurostat Yearbook 2005:
 - 41.5% (=€1535 Billion) Value Creation
 - 30.4% (=34 Million) Jobs
- FTI'06 FEEI + FMS/FMW (Austria):
 - “Ohne Produktion keine Forschung und umgekehrt”
 - Translation: No Production => No Research - and vice versa”
- Much more background information: www.manufuture.org

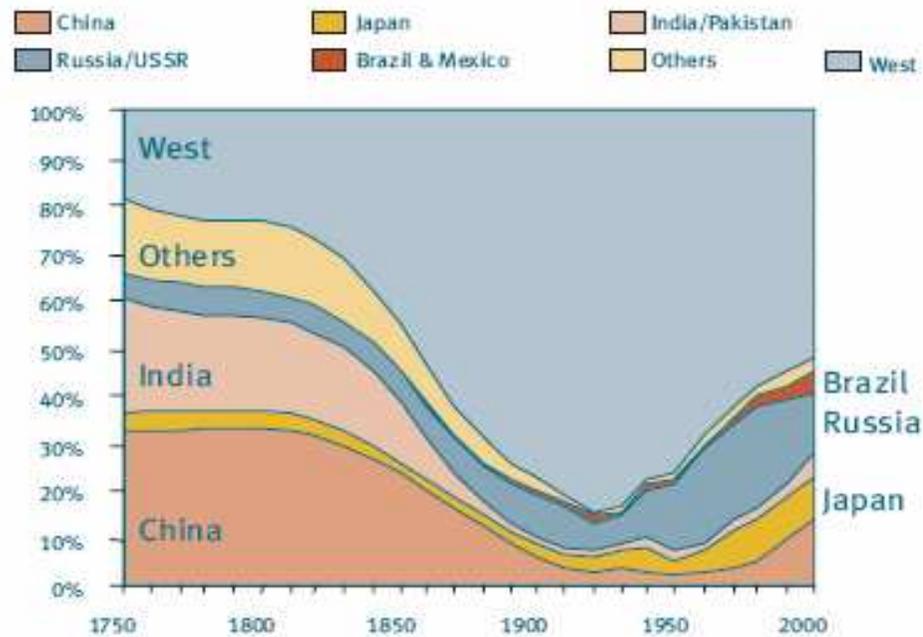


Image by courtesy of ETP MANUFUTURE

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Background

➤ The trend



Tseng Mitchel M., „Industry Development Perspectives“ CIRP, Montreal 2003

Background

- The response strategy

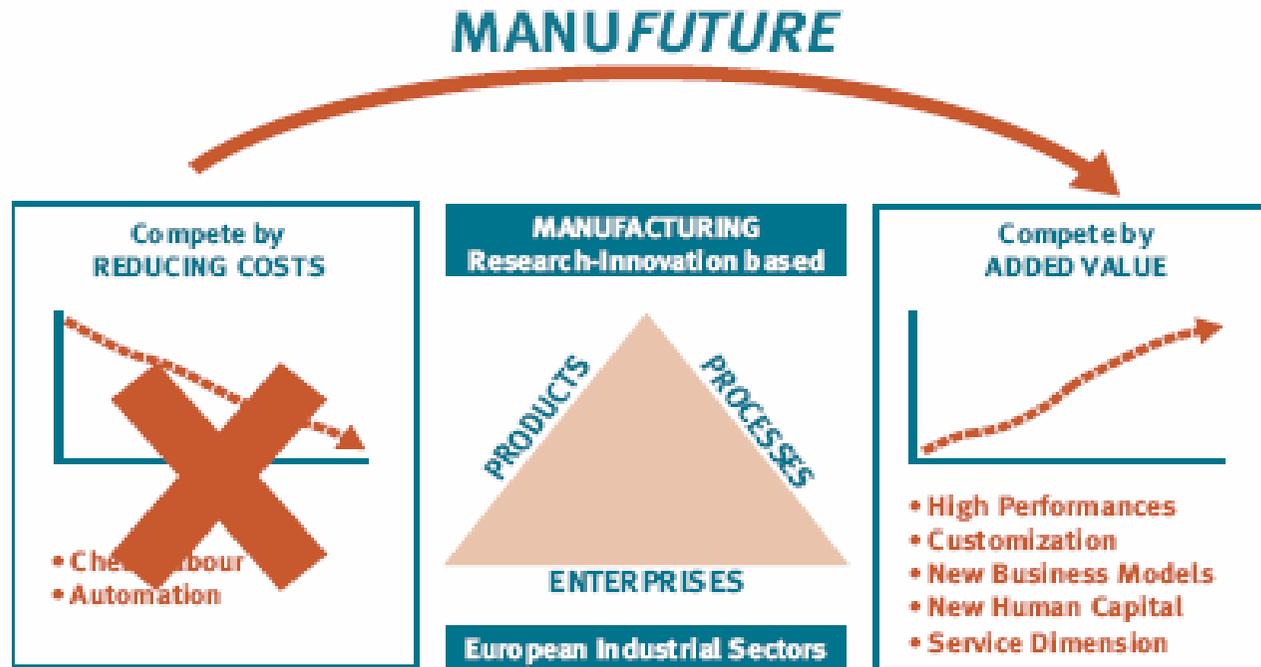


Figure 3: Competition shift – from cost reduction to high added value: *Manufacture*
(Source ITIA-Series 2004)

- ... will change technology, equipment, automation and robotics radically!

Image by courtesy of ETP MANUFUTURE

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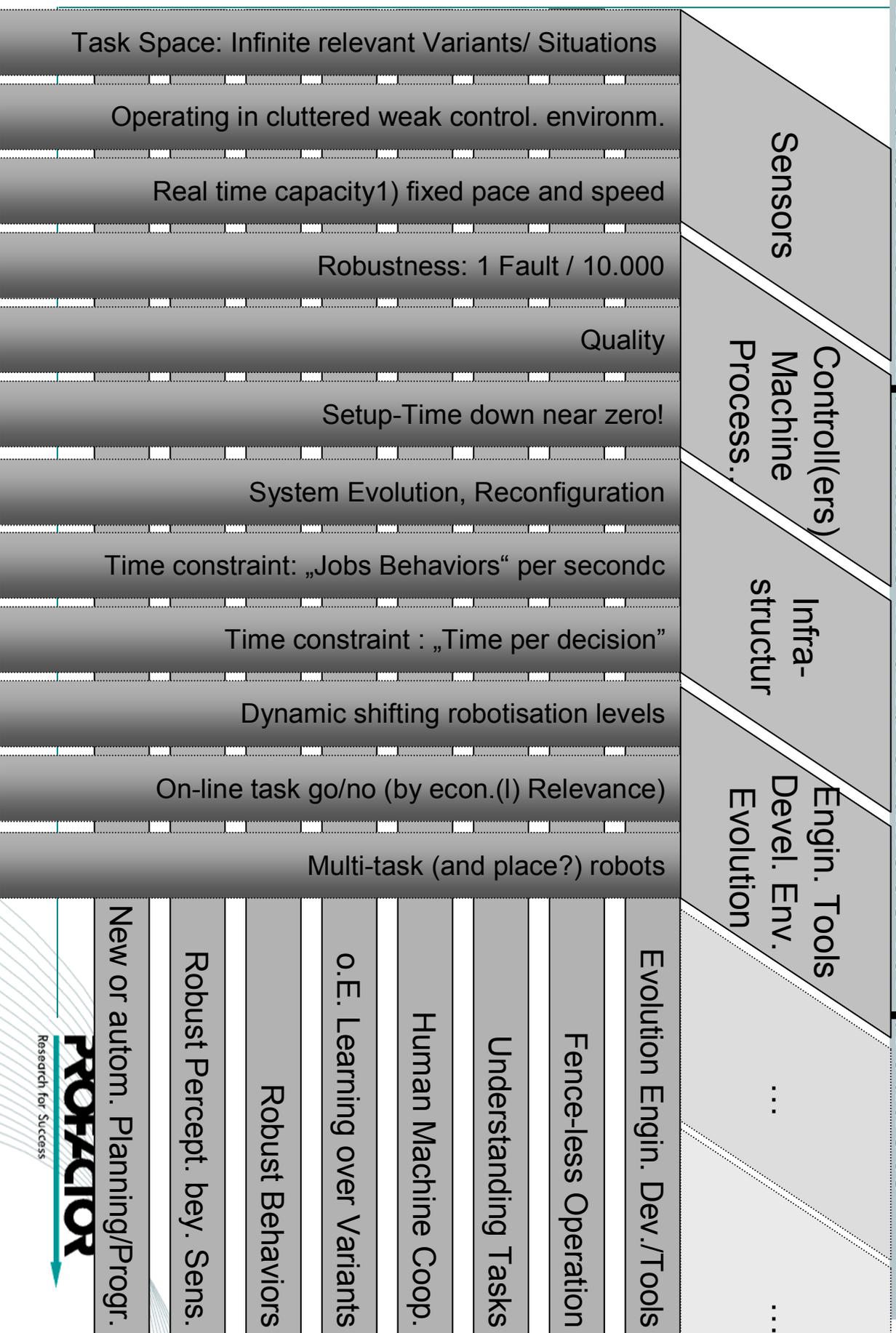
Life cycle oriented Value Creation

A highly incomplete subset of Business Opportunities:

Life cycle oriented value creation	E.o.L	E.o.L Material Mix Recycling
		Re-Use
		Refurbishing
	Product Life Span	Automated / Remote Repair, Upgrade
		Automated/Remote Inspection, Maintenance
		System evolution, Agility
		„Power by the hour ” / Reconfiguration
		„Product <u>S</u> ervice Systems“
	Product(ion) Individualisation	Factories as Products,
„Emotional Products“		
„Customer specified products“ Extreme Customisation!		
„Premium Niches“ Customer specific production		

Life cycle oriented Value Creation

... creates new implications ... and chances for products



Summary ...Market Potential

Technology < Product < Market < Customer

A strong market for Cognitive ENHANCED Systems?

Most likely, BUT...

Will it be our market?

Will we identify the right segment?

Will we offer the right PSS?

Will we lead it?

Will we be efficient enough?

Instrument of Choice?

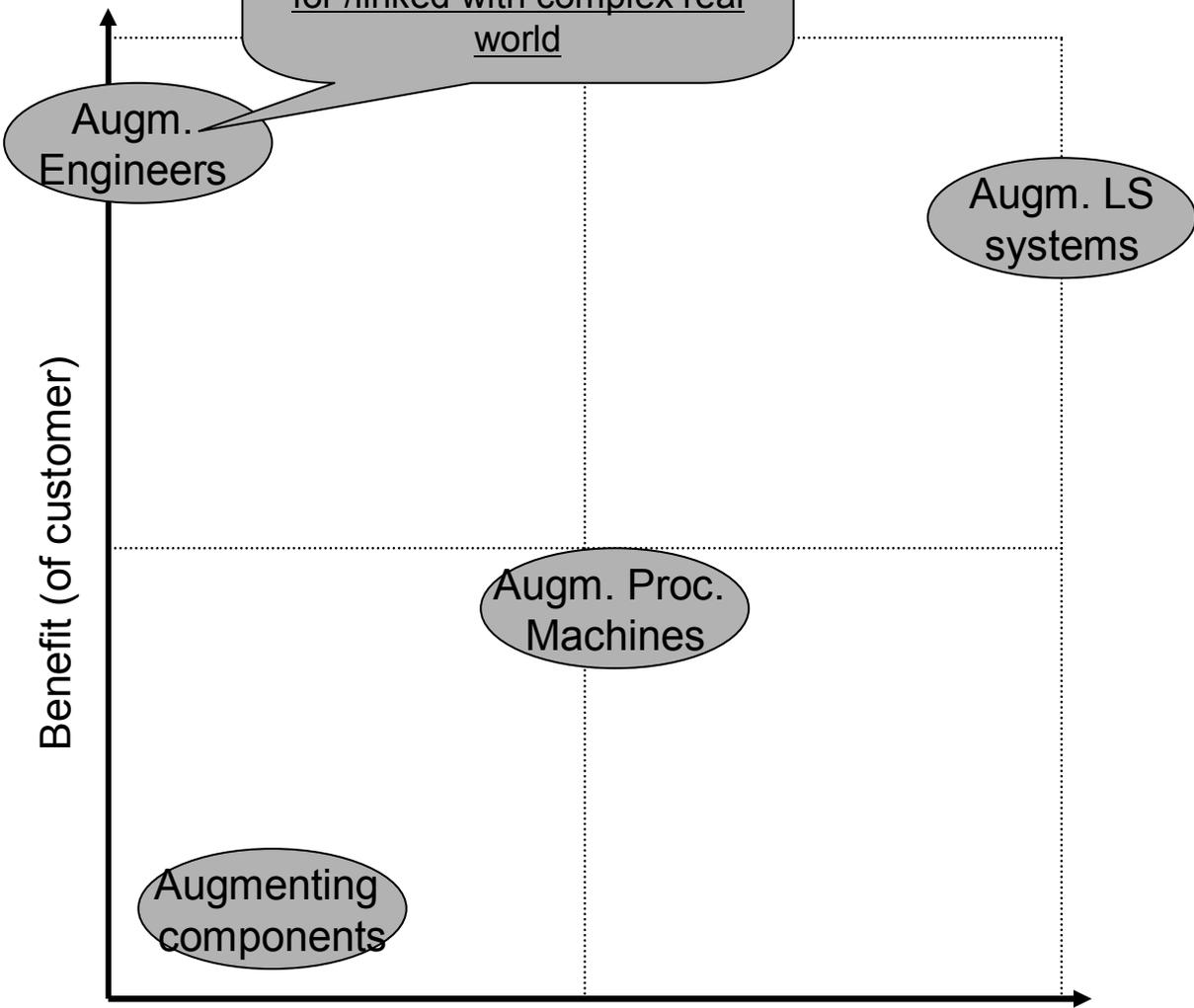
**Not more applied research (by academia), but
(proven) better applicable research**

PPS for IS Perspective

...my personal

IS Usage

..who develop comp. Mach,
process, syst.
SW Tools for professionals
for /linked with complex real
world



Thank you for your attention!

**Good luck in finding your own strong
business cases**



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