

Spare Parts Management:

Scientific research or hands-on improvements?



ROTTERDAM MAINPORT INSTITUTE



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Brief personal introduction



*Senior Consultant at Gordian
Logistic Experts BV (2007-2019)*



*PhD at Eindhoven University of
Technology (2018)*

Gordian Logistic Experts BV



Characteristics

- Service logistics
- Spare Parts Management
- Result driven; no reports
- Innovative
- Hard & soft approach
- 25 men employed;
2 partners
- Many Young Professionals
- Department in South-Africa



Consultancy



Solutions



Innovation



UNITED NATIONS



ERICSSON



Koninklijke Luchtmacht



Koninklijke Marine



Royal Dutch Airlines



1. Trends & developments



CONDITION MONITORING AND DATA SCIENCE

Enables preventive replacements of parts before they fail, and to CODP shifts upstream in the supply chain. *Status: able to detect when a part fails a few hours up to at most a few days in advance.*



ADDITIVE MANUFACTURING

Enables to print spare parts on demand. The number of third party service providers increases. *Status: restricted to single components*



INTERNET OF THINGS AND CONTROL TOWERS

Enables to continuously share updates on spare parts demand and supply, and to (proactively) intervene if needed. *Status: focus was on transportation and physical distribution. Service control towers are currently being evaluated.*



SERVITIZATION

Enables focus on Total Cost of Ownership and aligned interests of OEMs and asset users. Market driven, both successes as well as failures*. *Status: OEMs offer service contracts and more and more take over service activities from users.*

* *Thales, Océ, ASML, Philips, Infrasppeed, Prorail, ECT, Toltunnel Terneuzen*

2. Spare parts characteristics and strategies depend on installed base size



Small installed base

Small service network

B2B

High-mission critical

High price

Complex systems

Large installed base

Large service network

B2C

Non-mission critical

Low price

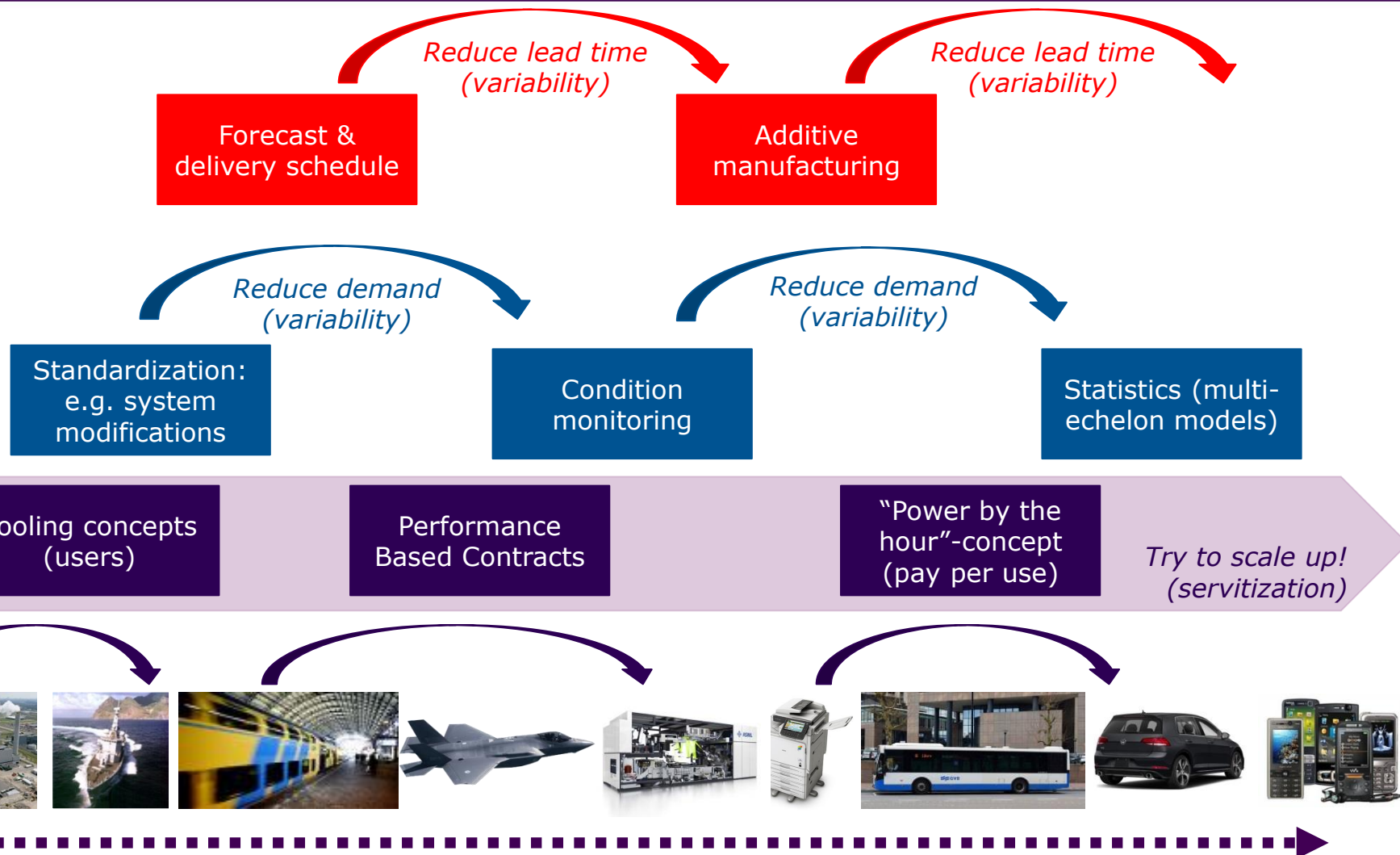
Standardized systems

Focus on spare parts!



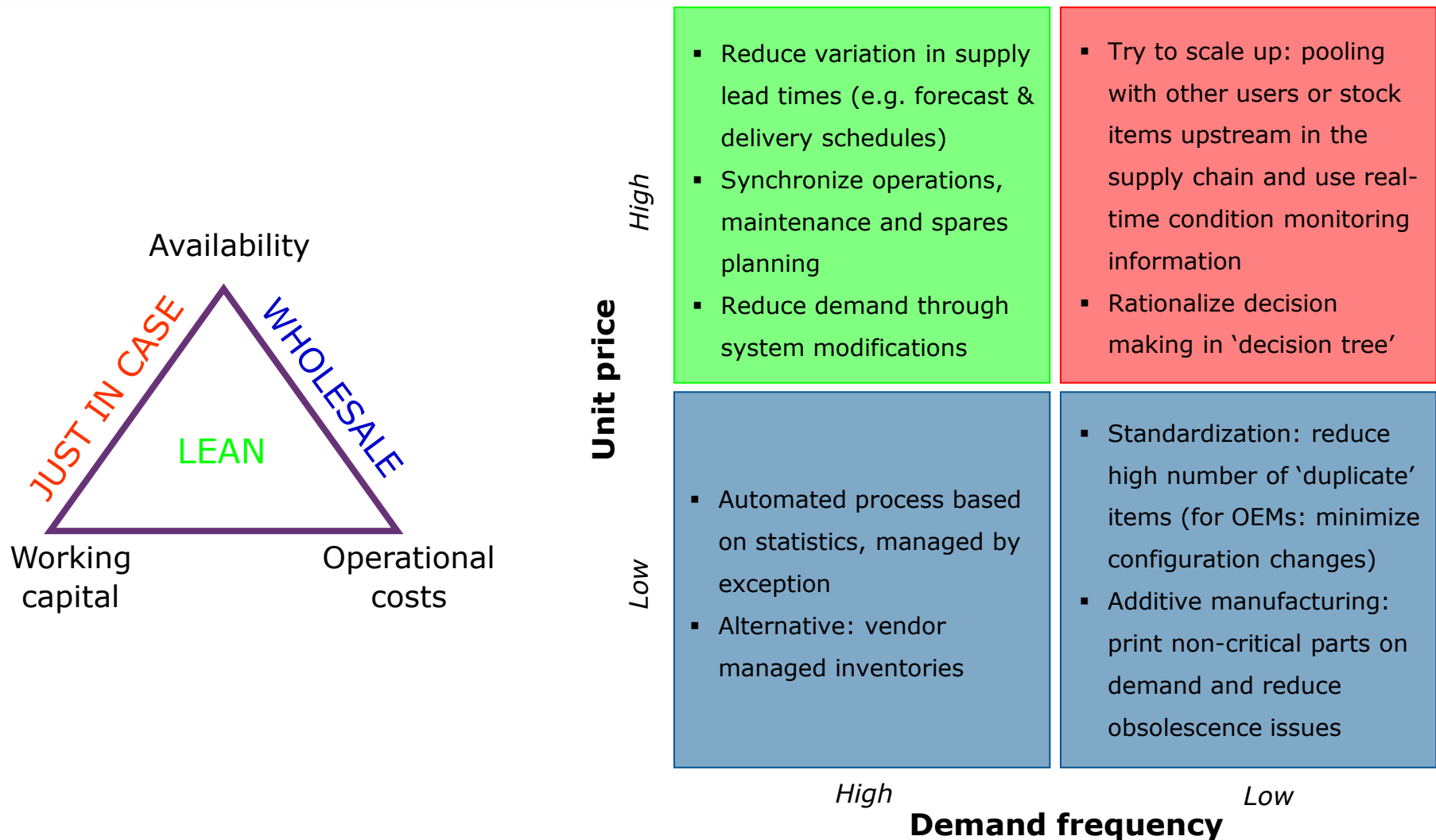


3. Spare parts management strategies





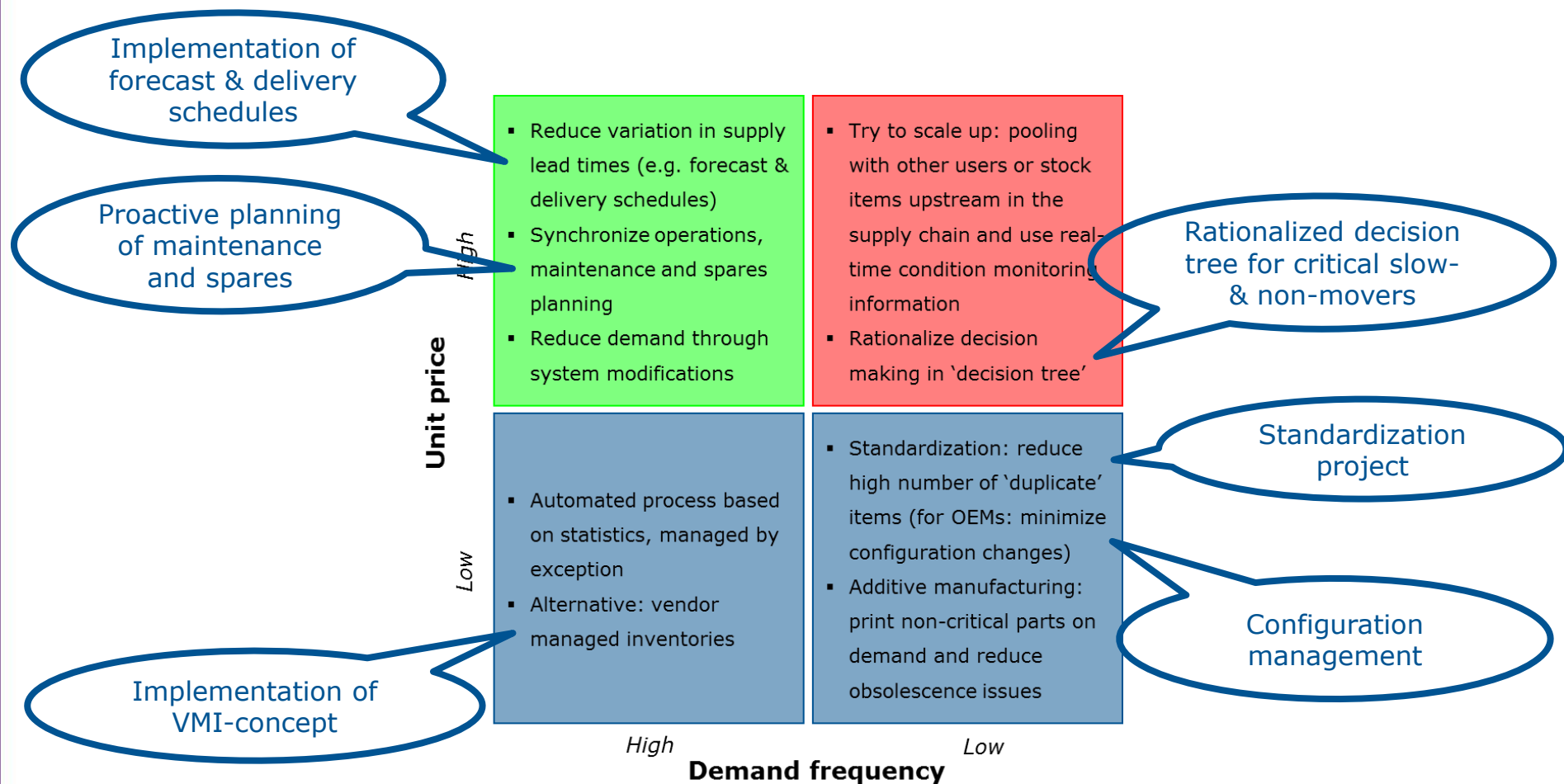
3. Spare parts management strategies





4. Research agenda

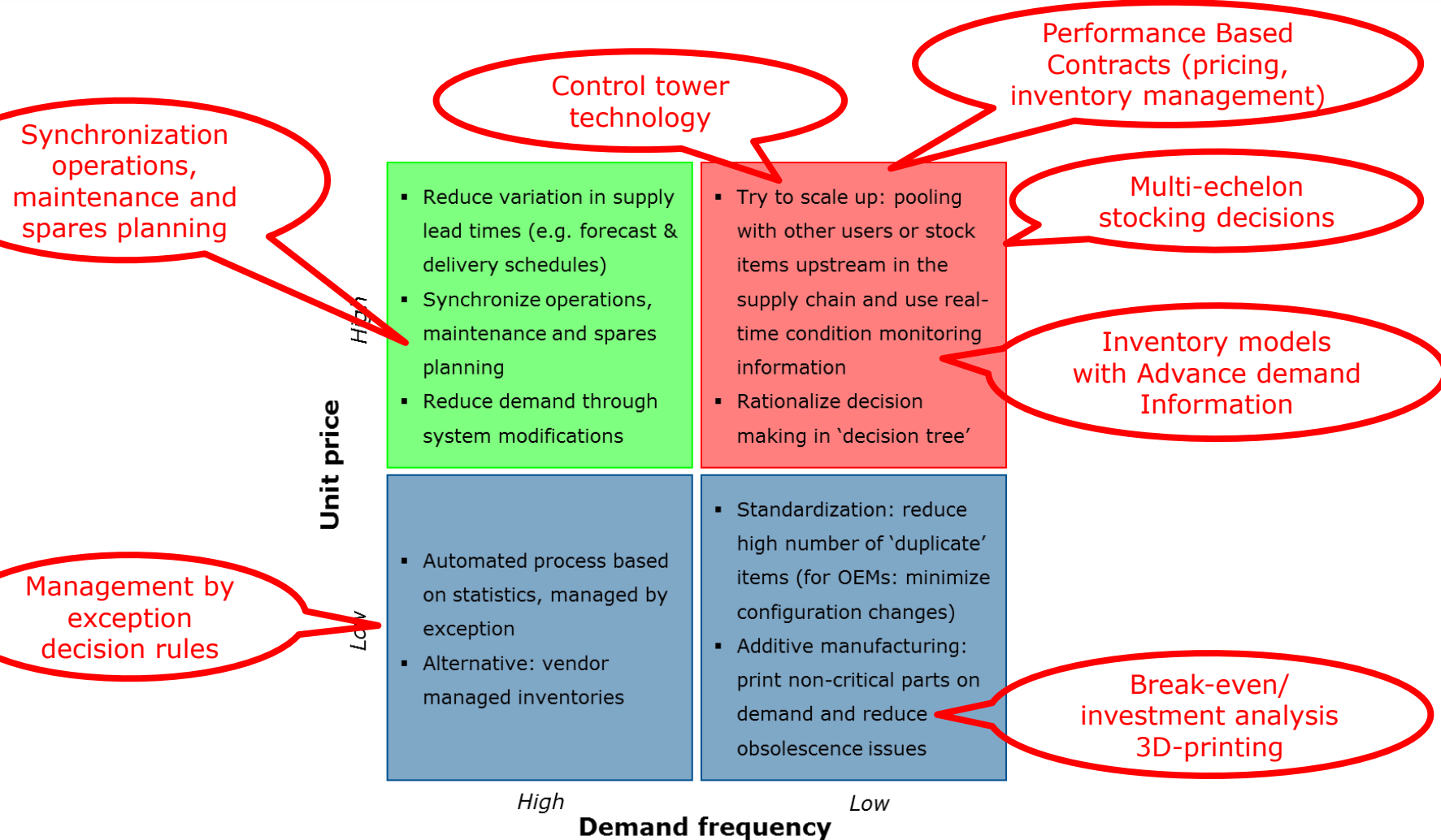
Bachelor projects





4. Research agenda

Master or innovation projects



Contact



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supply chain verbeteraar | deskundig &
doelgericht | aantoonbare expertise in de
servicelogistiek & spare parts planning

📍 Maarssen, Stichtse Vecht

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