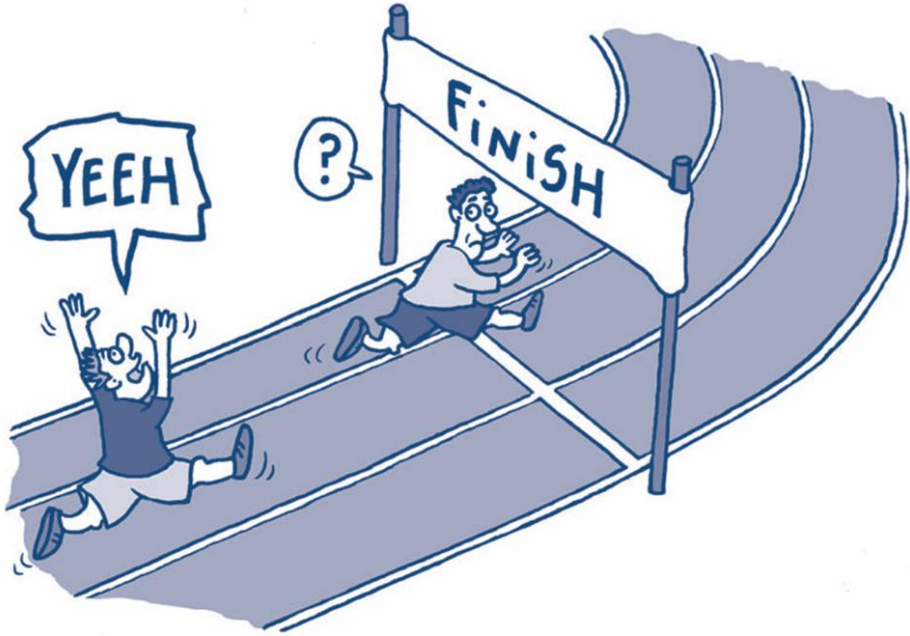
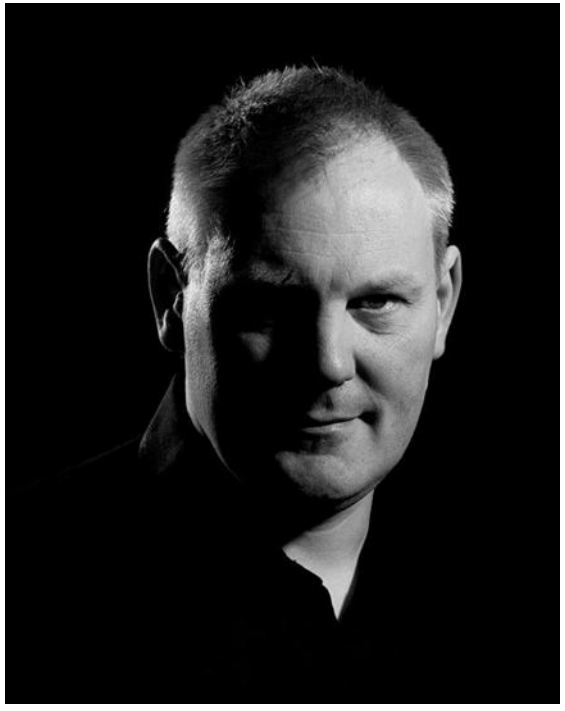


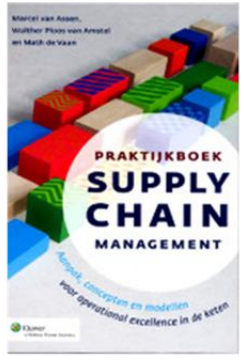
Collins' law: The good is the enemy of great

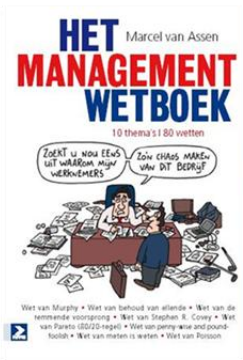
Companies satisfied with good ("good is good enough") will never excel.

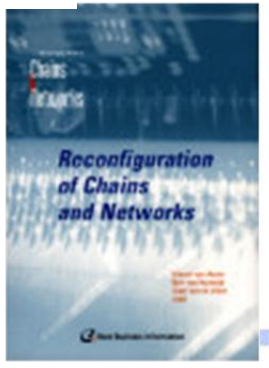
Operational Excellence
A contemporary perspective and approach to resilience

Prof.dr.ir. Marcel van Assen









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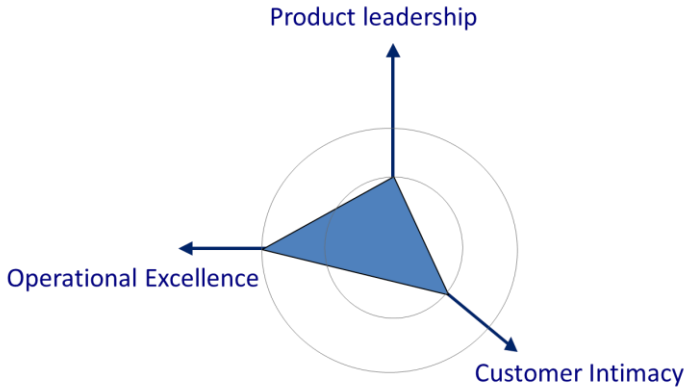
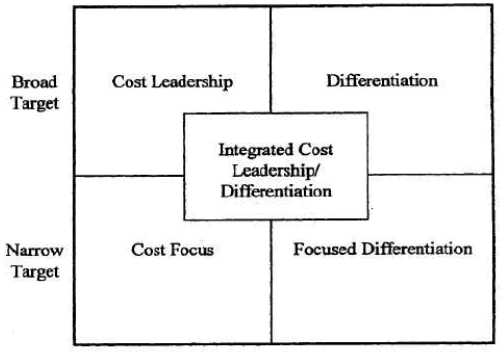
Trade-off thinking: either…or





Strategic market priorities

Efficiency

Quality

Flexibility

Service

Connectivity

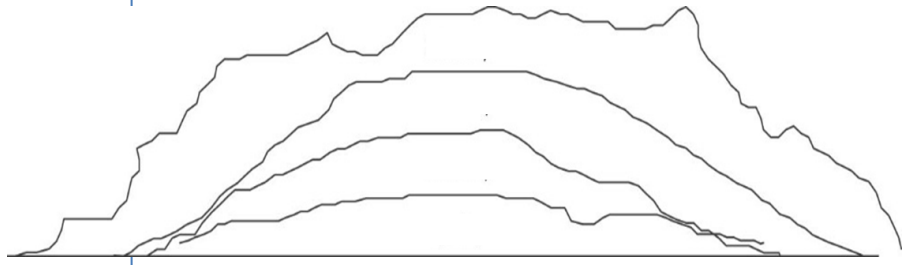
Loyalty

Sustainability

Resilience

Digitalization / AI

Paradox & cumulative thinking: and … and



Time

1960 1970 1980 1990 2000 2005 2010 2015 2020 2025

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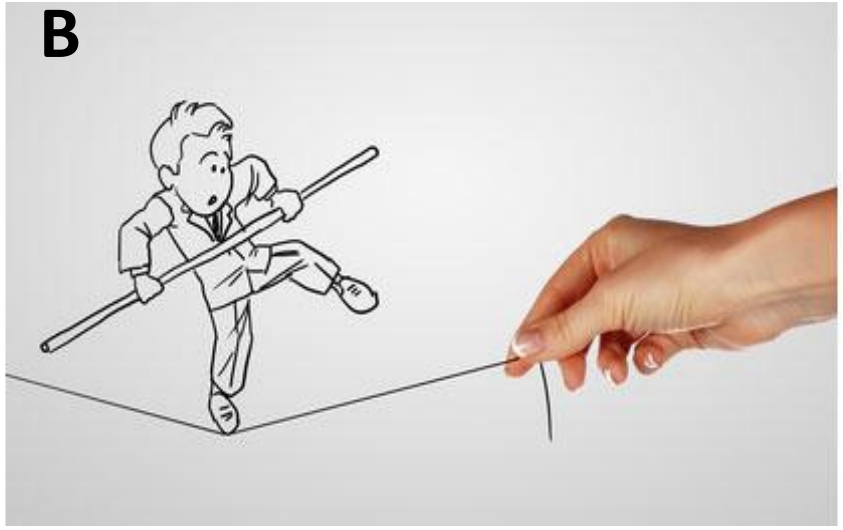
Which image do you associate with Operational Excellence?

A

B



C

D

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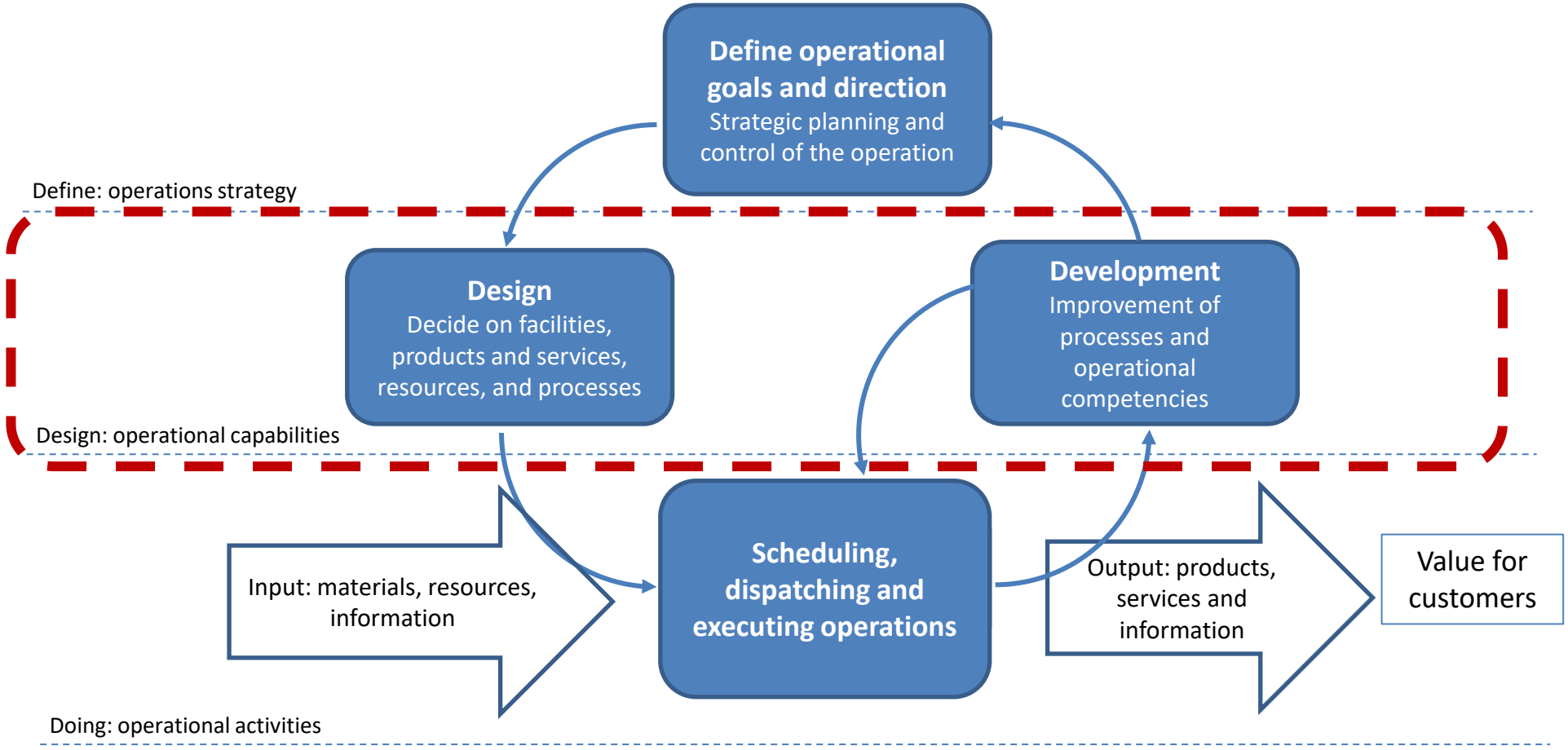
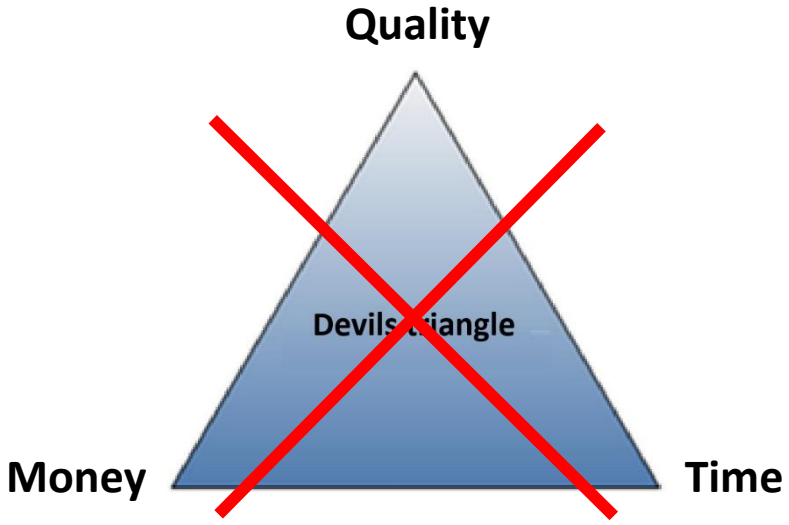
What is operations management?

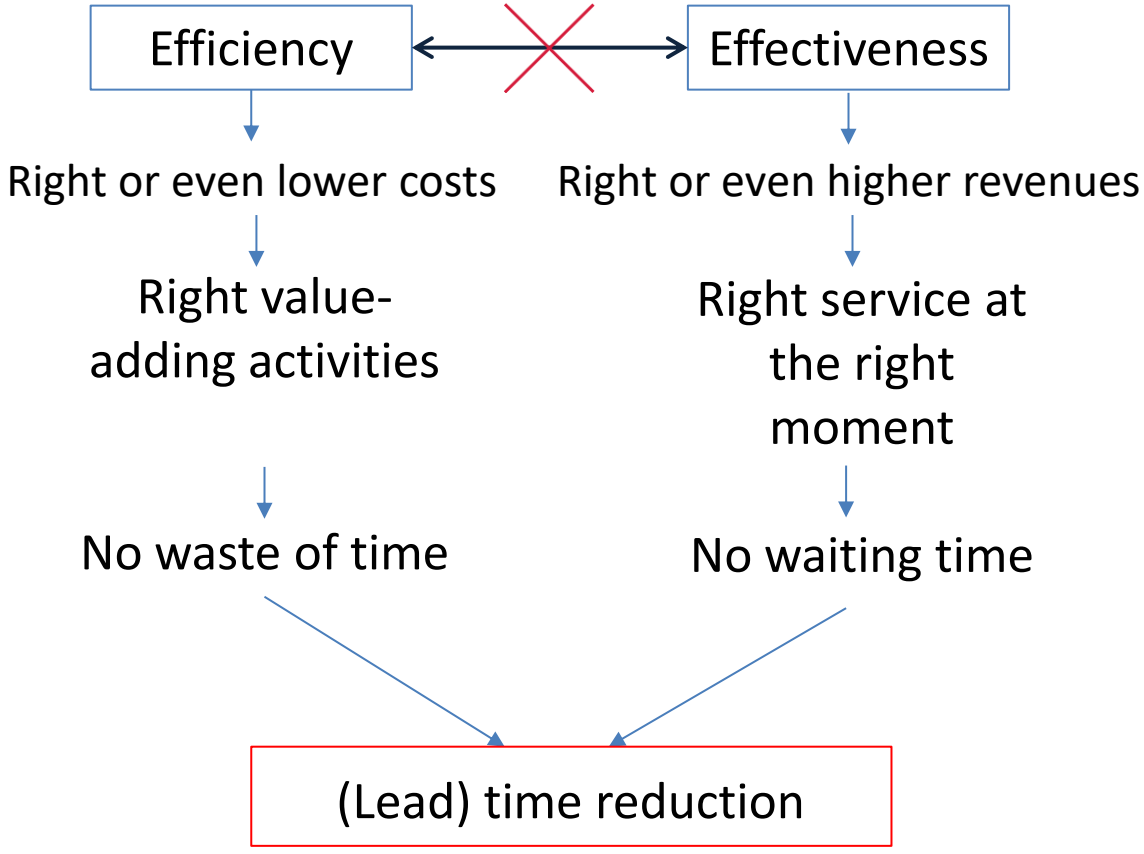


What operationally excellent organizations do

Operationally excellent organizations ……

- Strive to increase revenues and decrease cost
  - Strive to maximize operational profit
  - Focus on efficiency and effectiveness





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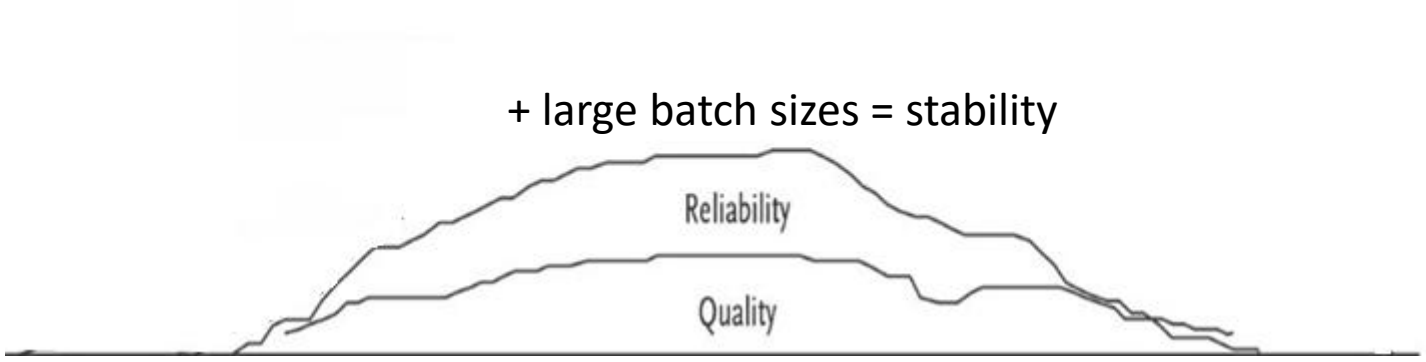

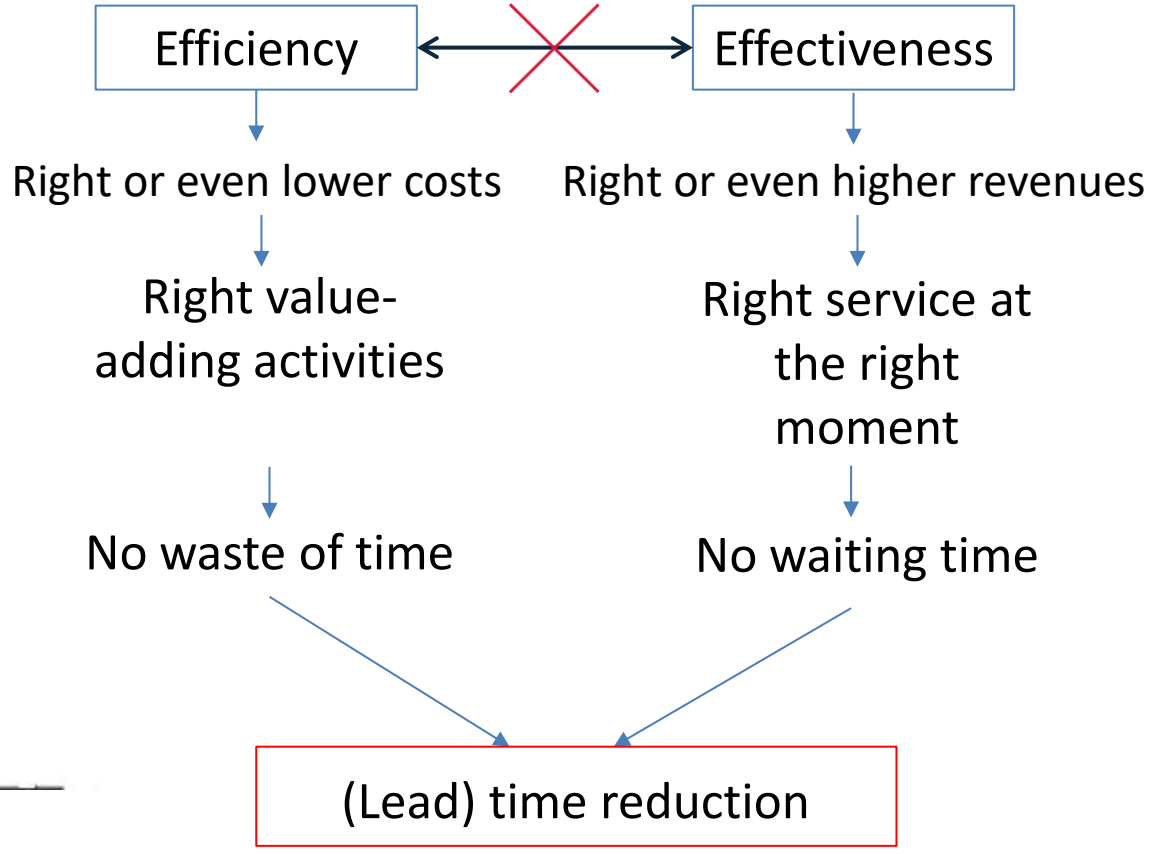

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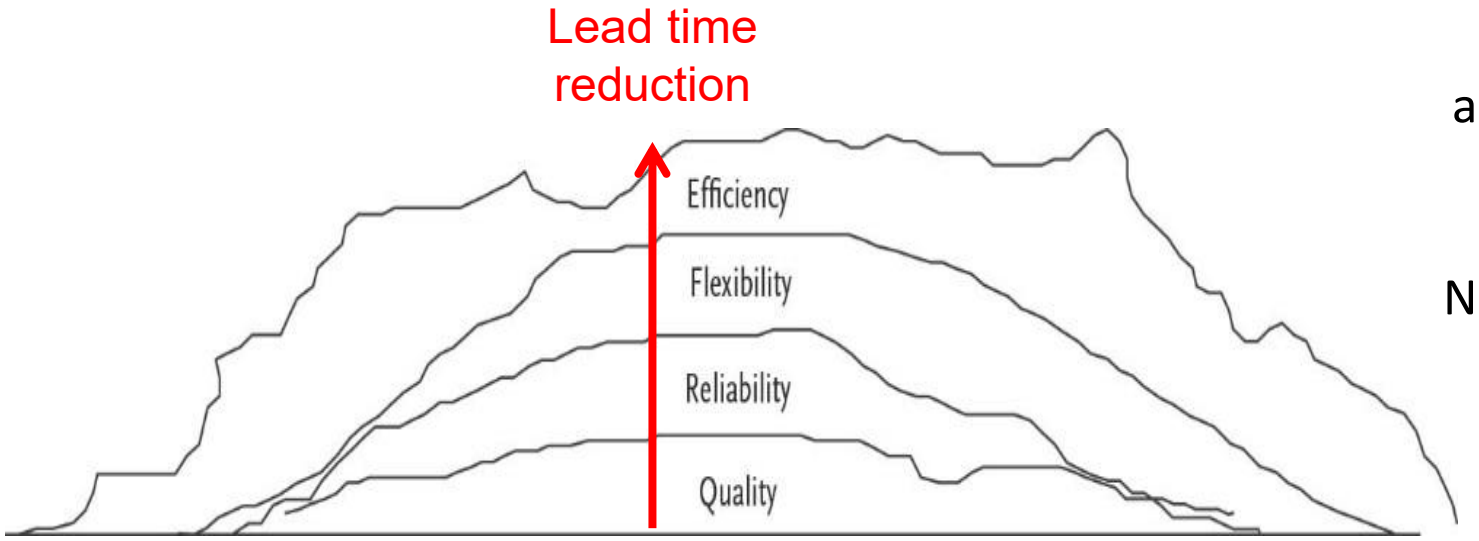
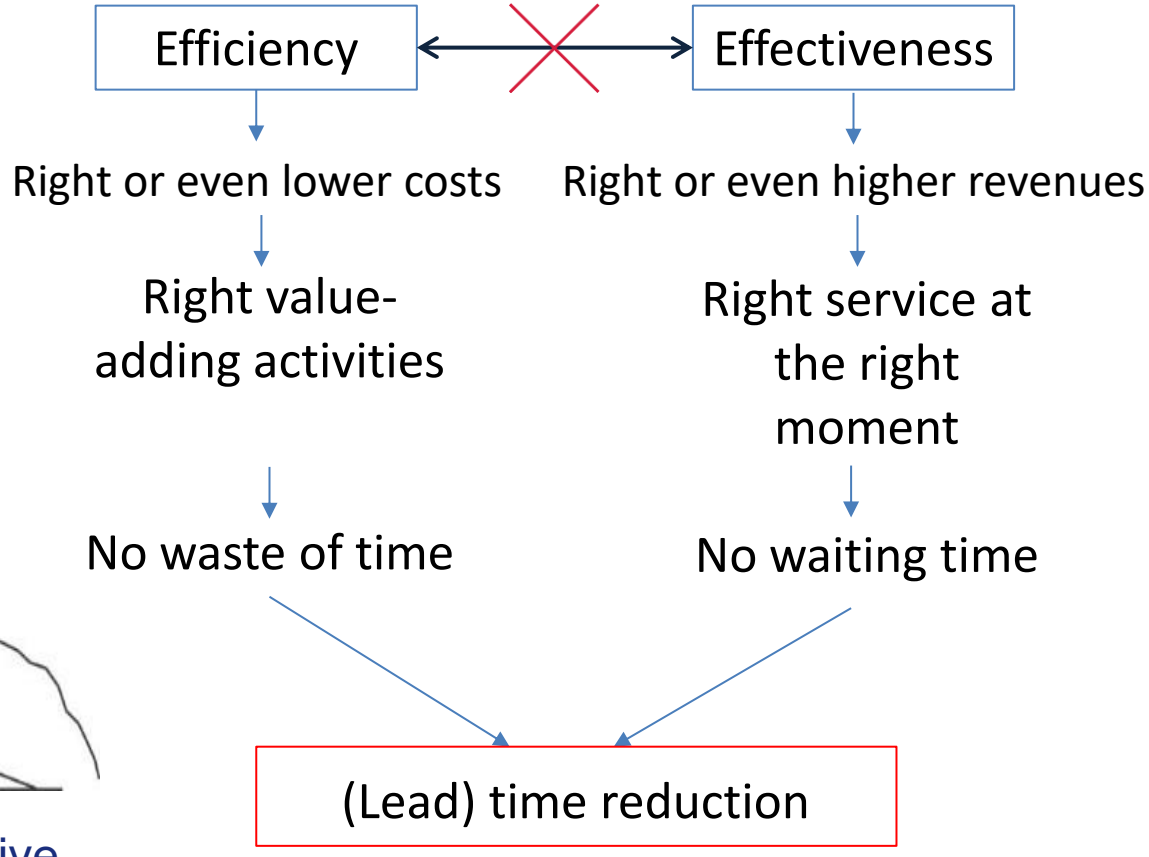
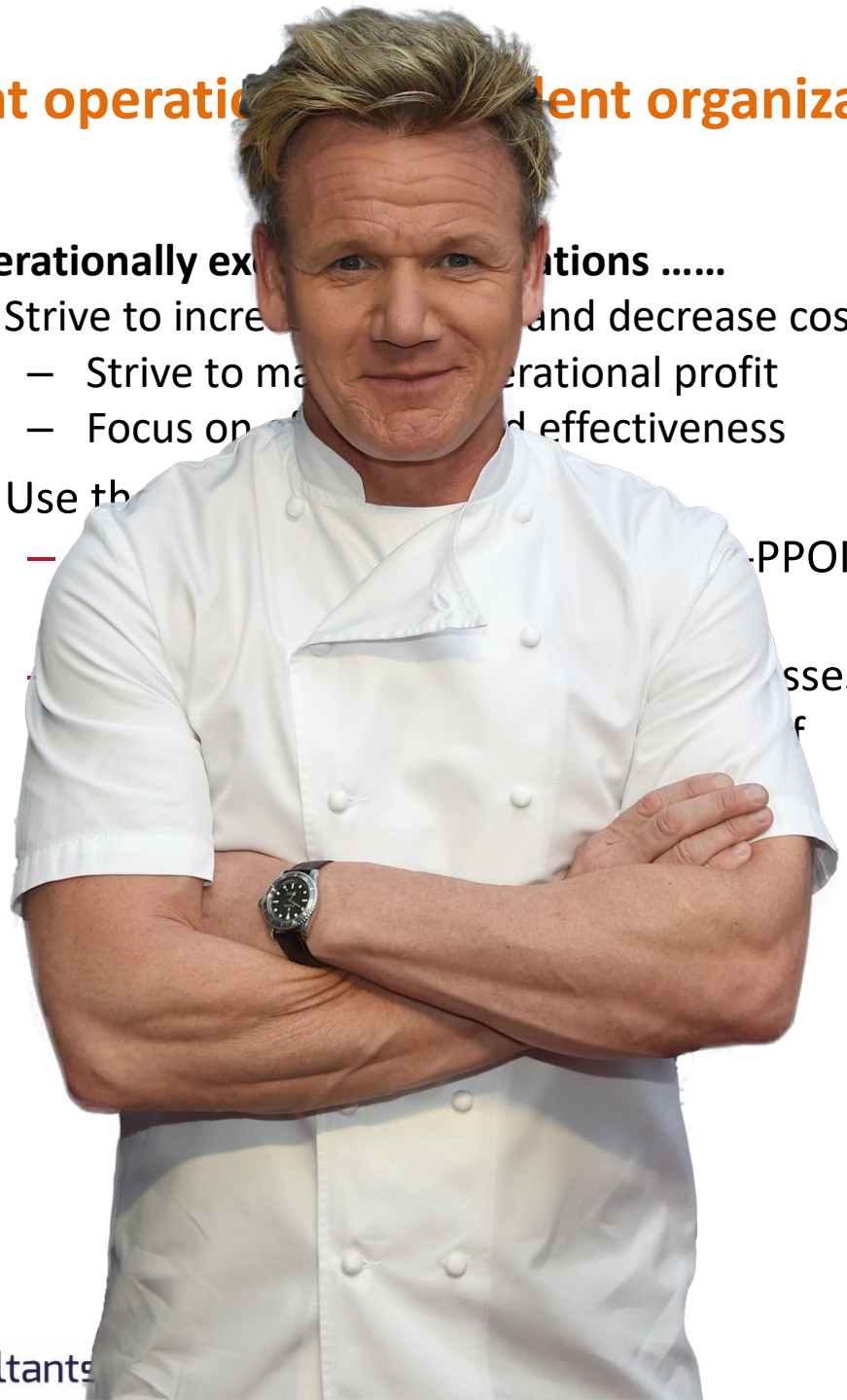




Sustainable improvement can only be gained as a cumulative result of improvements on quality, reliability and flexibility.
AND IN THAT ORDER!

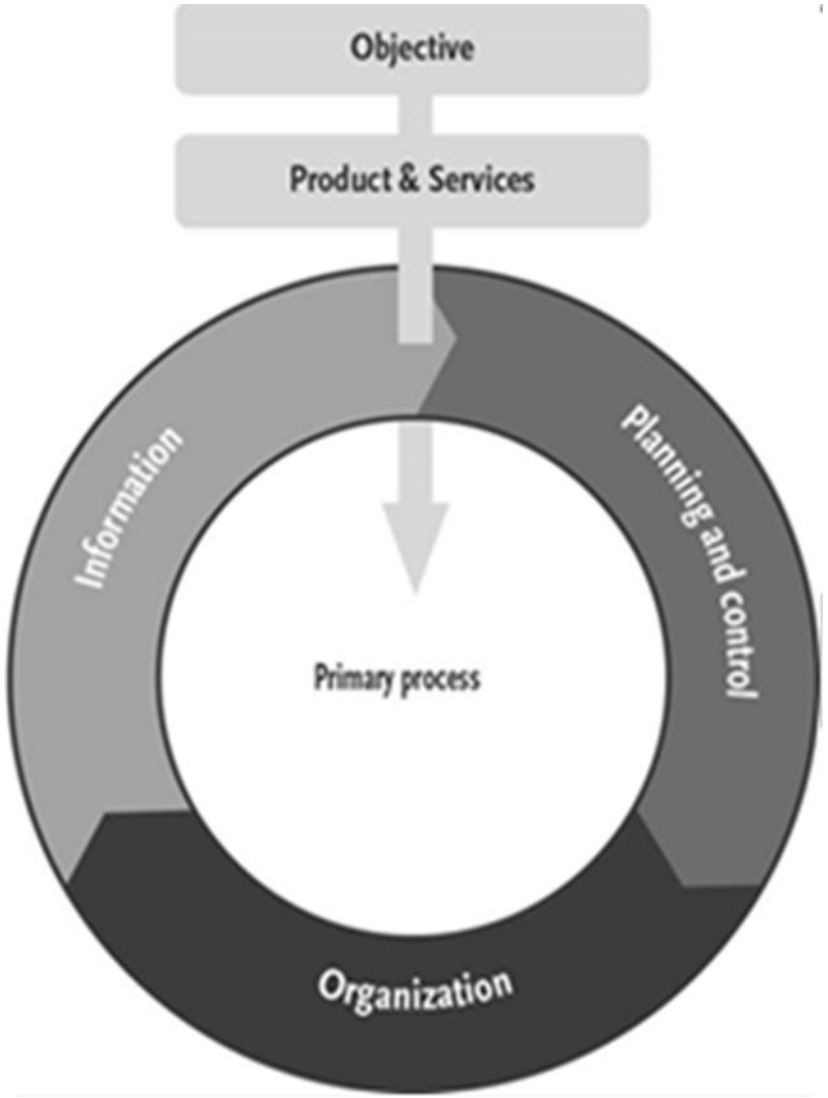
What operati lent organizations do



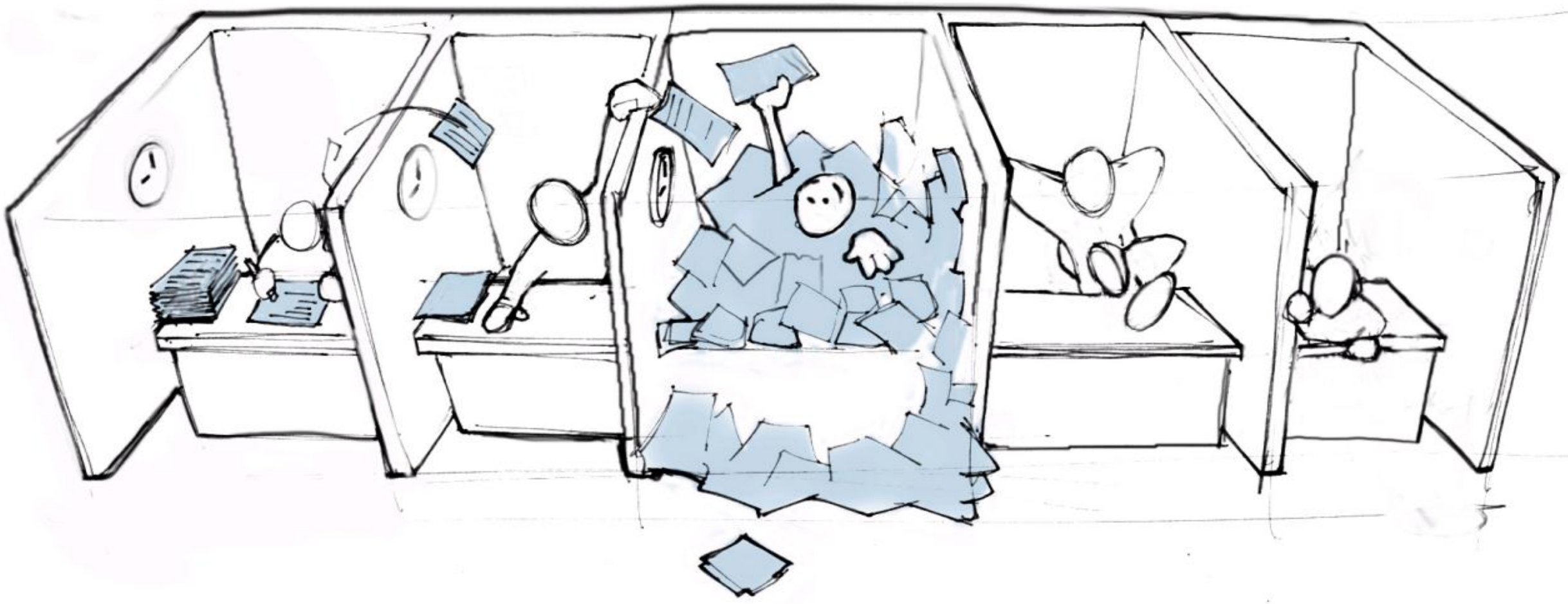
Operationally ex ations ……

- Strive to incre and decrease cost
  - Strive to ma erational profit
  - Focus on d effectiveness
- Use th
  - -PPOI

sses and



Do you recognize this?



Source unknown - internet

What operationally excellent organizations do

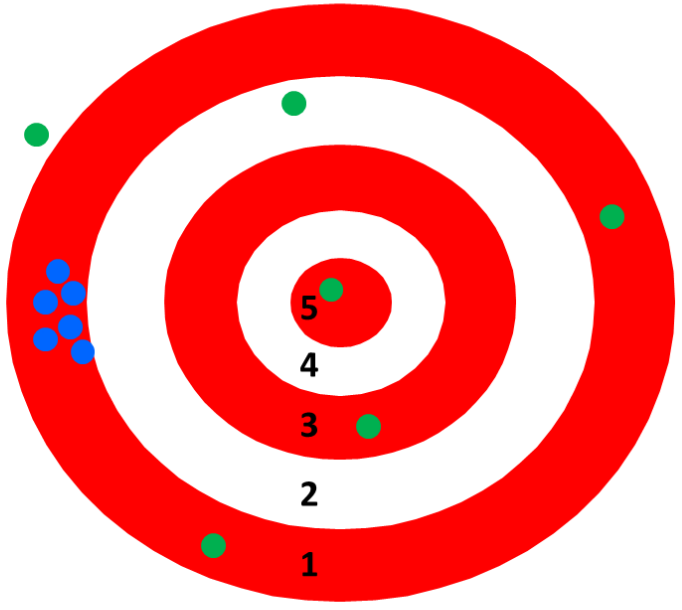
Operationally excellent organizations ……

- Strive to increase revenues and decrease cost
  - Strive to maximize operational profit
  - Focus on efficiency and effectiveness
- Use the O-P-PCOI framework
  - Analyze and redesign via the O-P-PPOI model
  - Align primary and secondary processes and systems, i.e. integral optimization of processes, planning and control and information systems

- **Focus (continuously) on internal lead time reduction in all business processes: effectiveness (do the right activities) and efficiency (execute activities right)**
- **This implies to reduce unnecessary variation (waste) and complexity**

Question: Who is the best shooter?

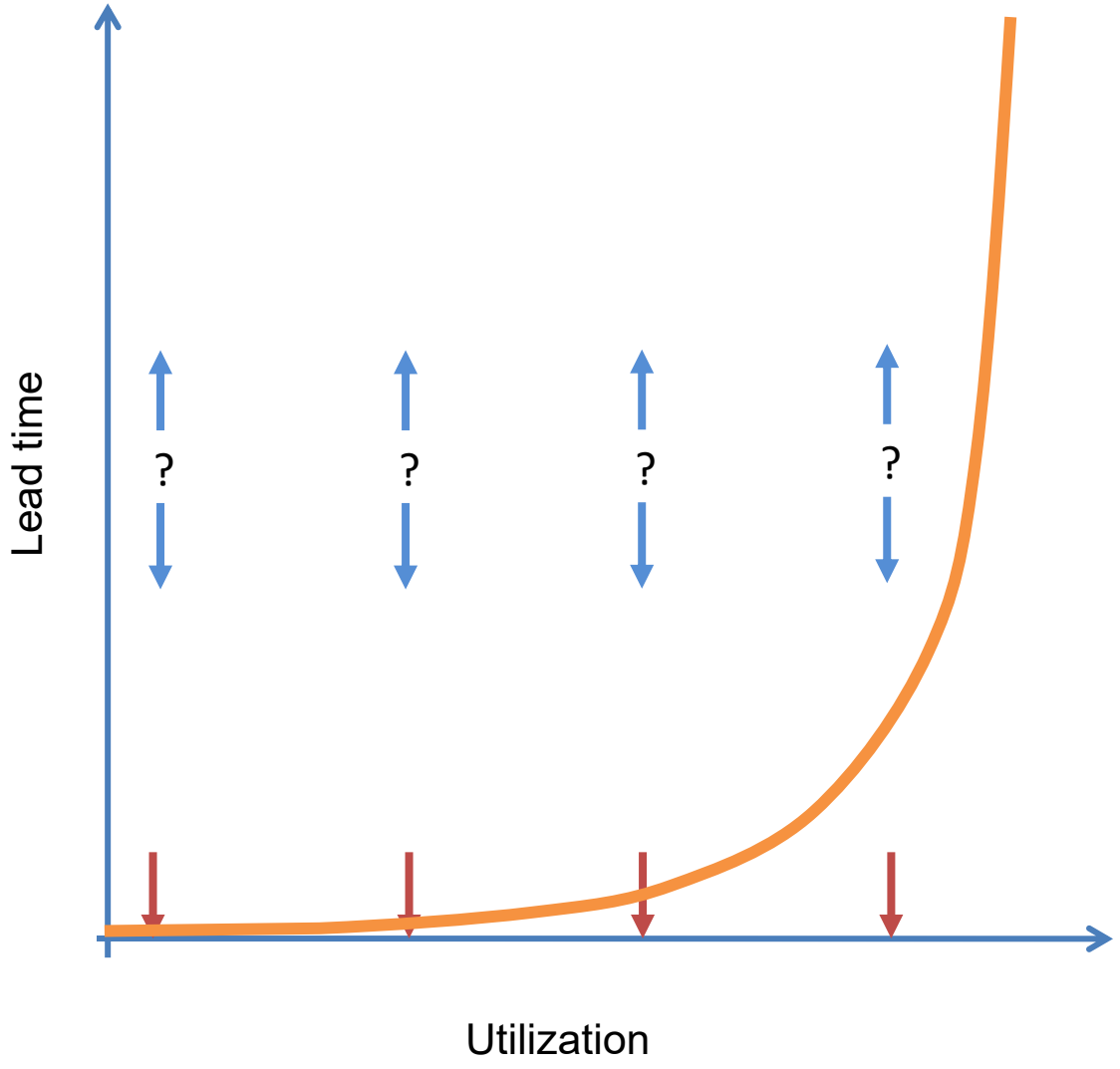
Green: 12 points



Blue : 6 points

Lead time:

How is lead time related to utilization?



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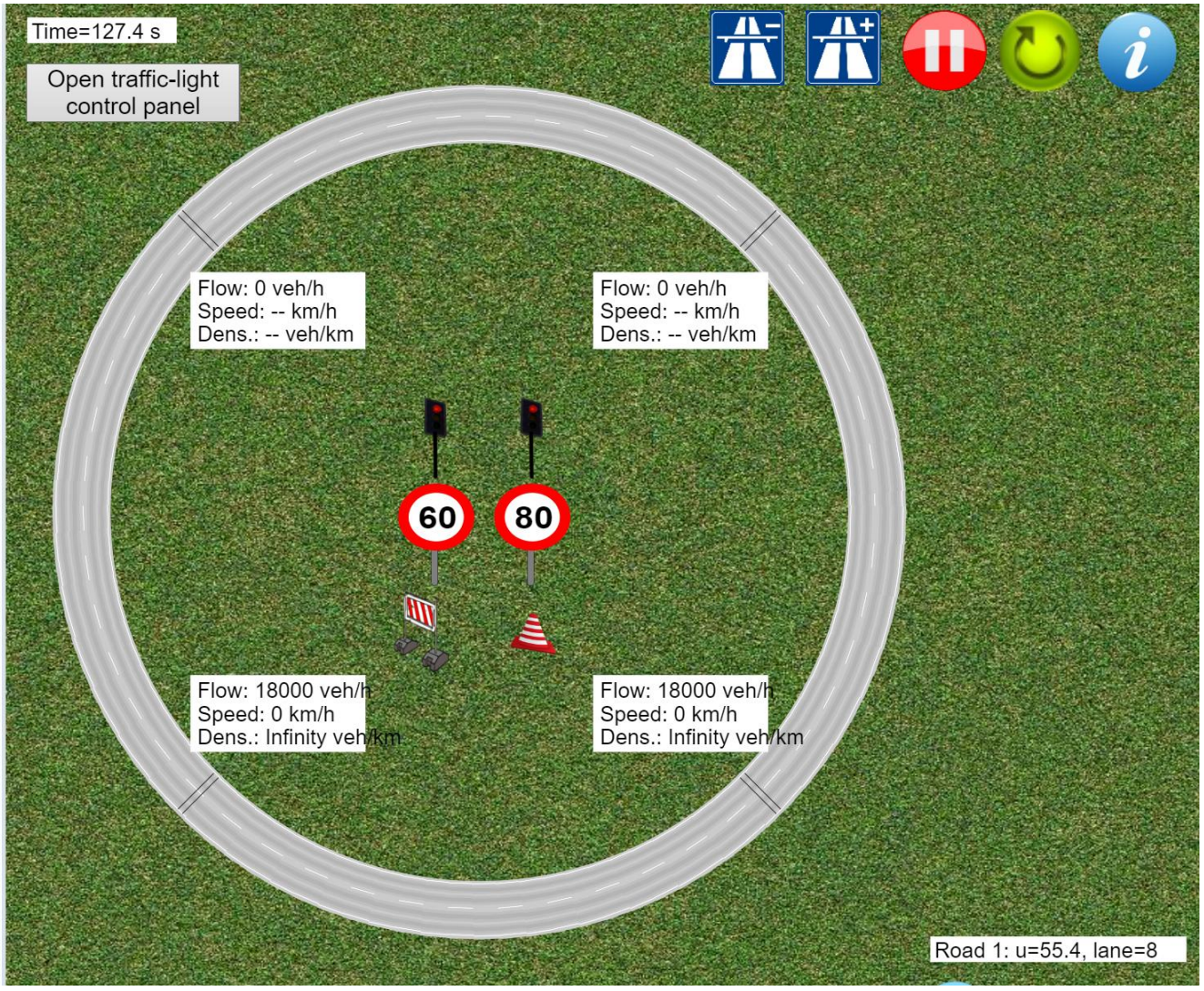
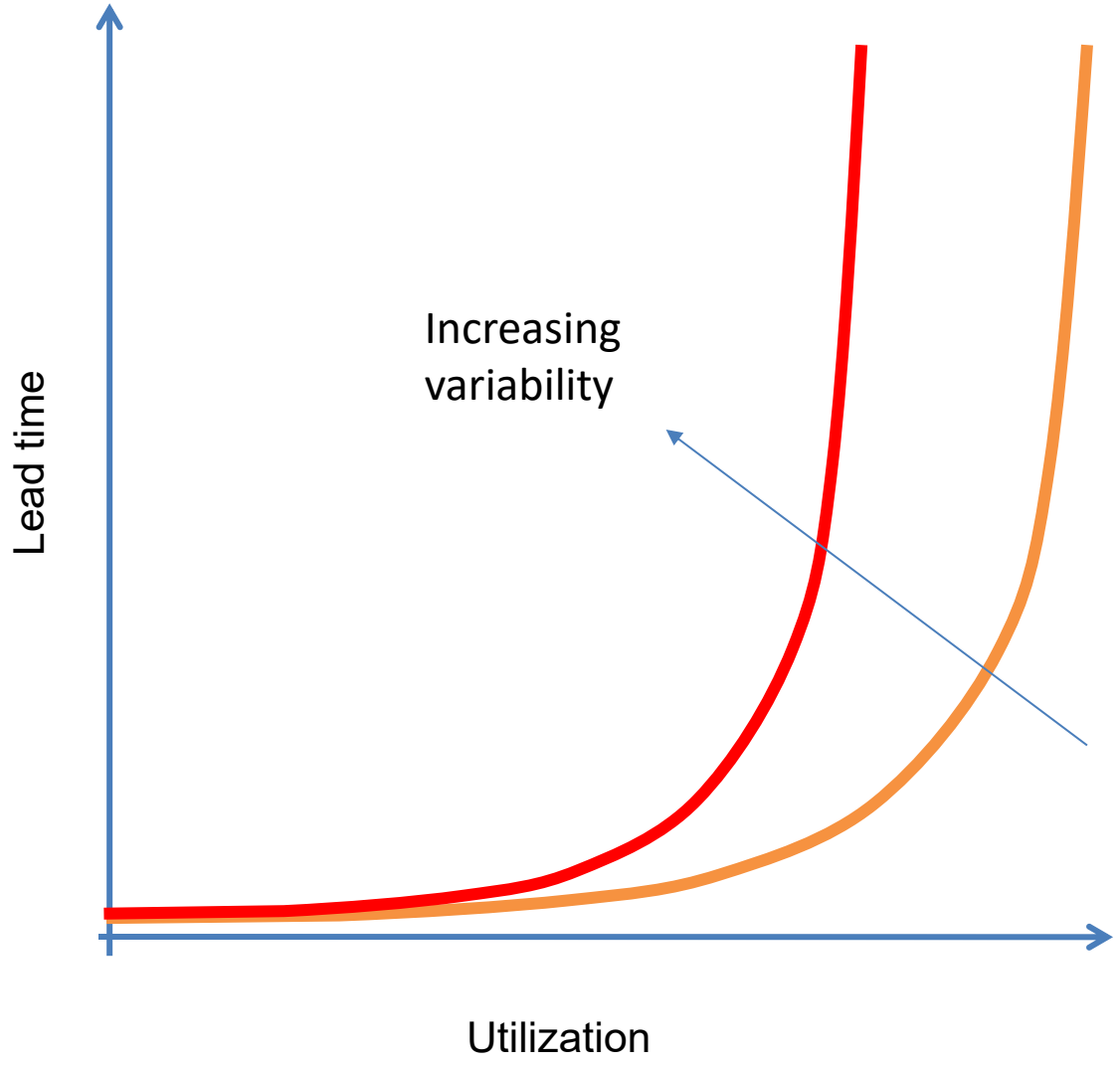
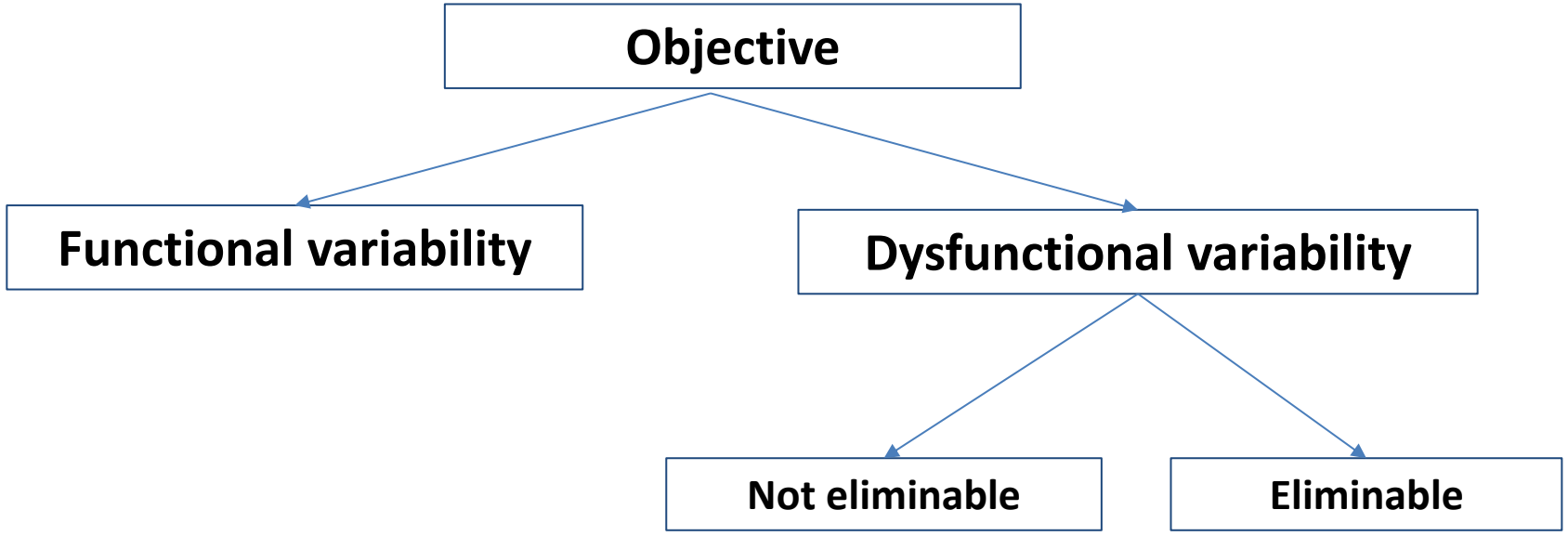


https://www.traffic-simulation.de/ring.html

How is lead time related to utilization?



Management of variability



OpX definition of Lean: A system (process) is Lean if…

- all dysfunctional variability is eliminated, and
- all remaining variability is organized and buffered at the lowest buffer cost

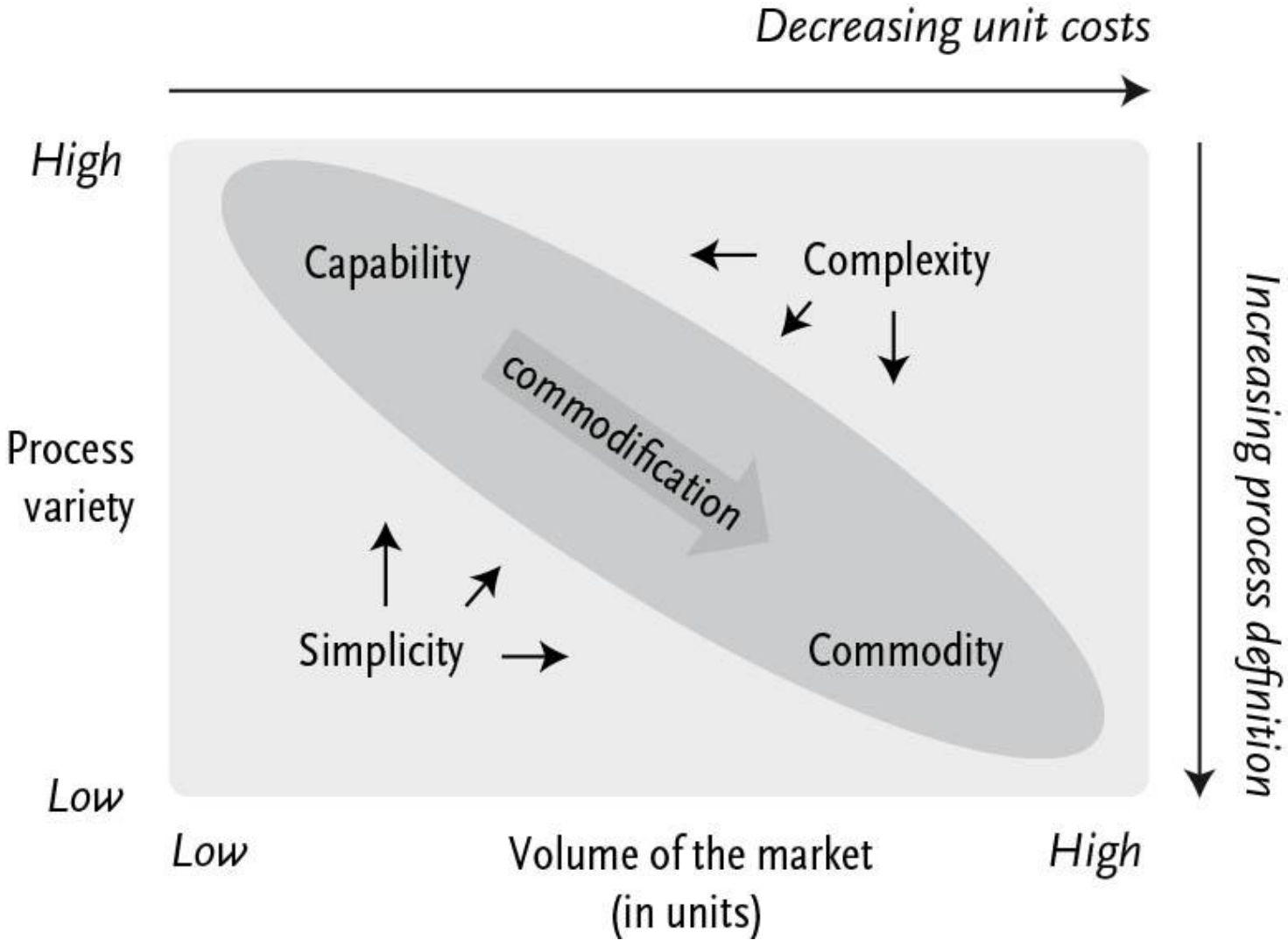
Factory physics laws

- **Variability law**: Increasing variability always degrades the performance of a system.
- **Buffering law**: Systems with variability must be buffered by some combination of
  1. Inventory
  2. Capacity
  3. Time
- **Effectiveness law**: → The reduction of variability leads to stability and efficiency, but may hamper effectiveness

  → **The elimination of dysfunctional variability and the exploitation of functional variability leads to maximum efficiency and effectiveness**
- **Resilience**: Under the terms of the effectiveness law, lead time reduction leads to higher resilience

Capability versus commodity processes

→ Increase of commodification - Price pressure from buyers.



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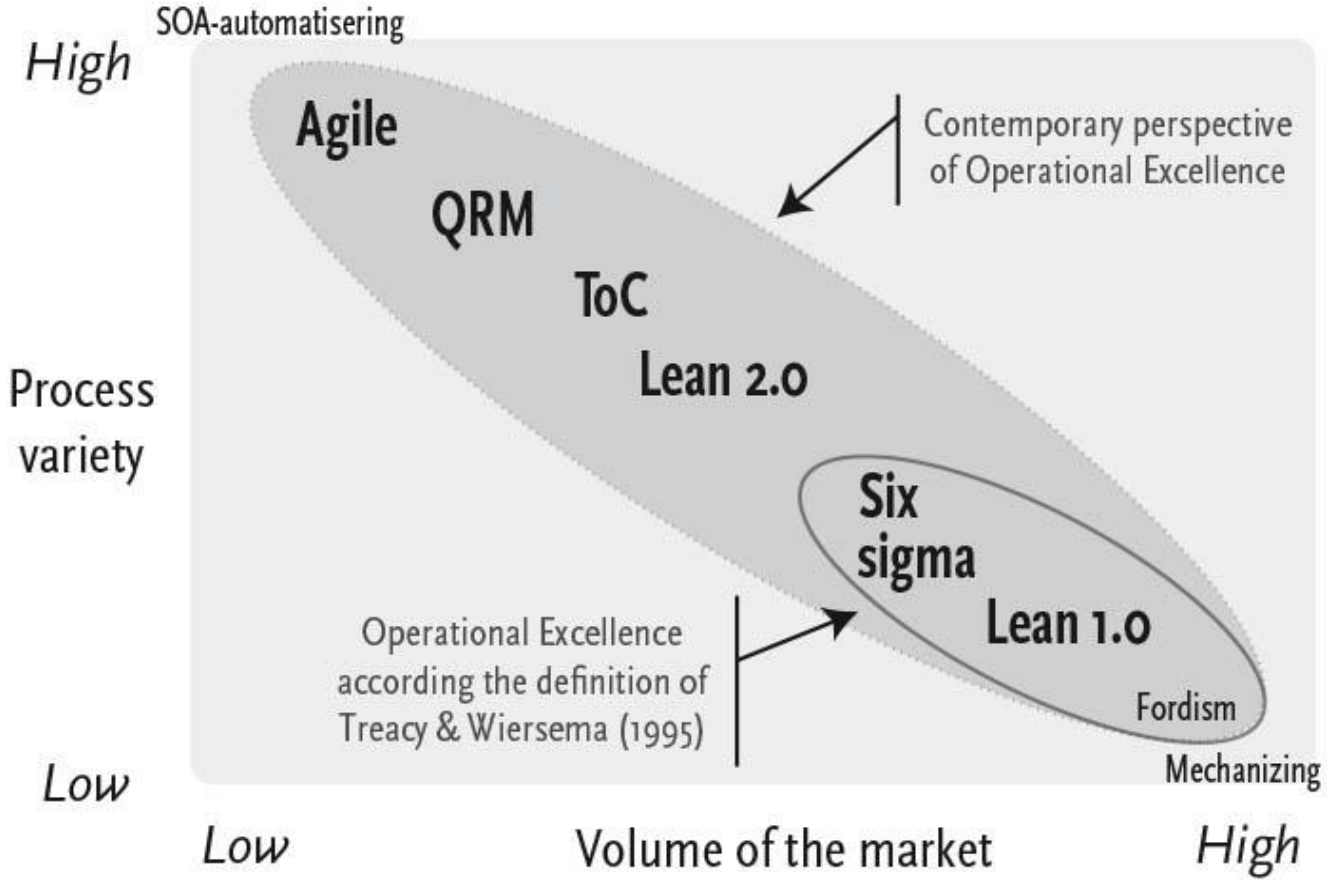
Capability versus commodity



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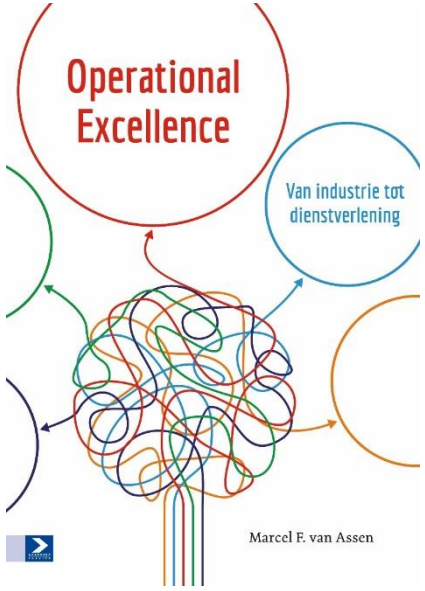
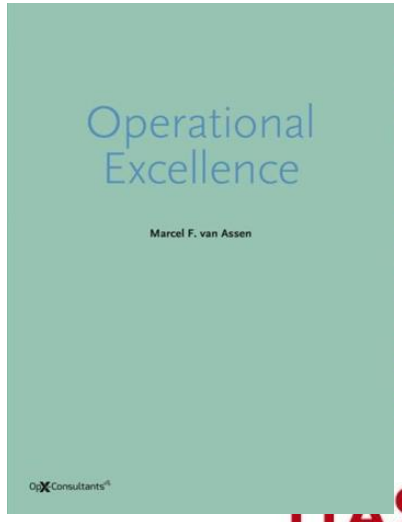
Conclusion / Definition of Operational Excellence



A system is operationally excellent if:

1) the dysfunctional complexity and variation are minimized,
2) the functional variation is buffered at the lowest cost or can be accommodated with flexibility,
3) the operating system is effective but as lean as possible,
4) an efficient and effective (supporting) organization has been established with the correct allocation of tasks, authorities, and responsibilities,
5) and an infrastructure and culture of continuous improvement have been developed that support the pursuit of perfection.

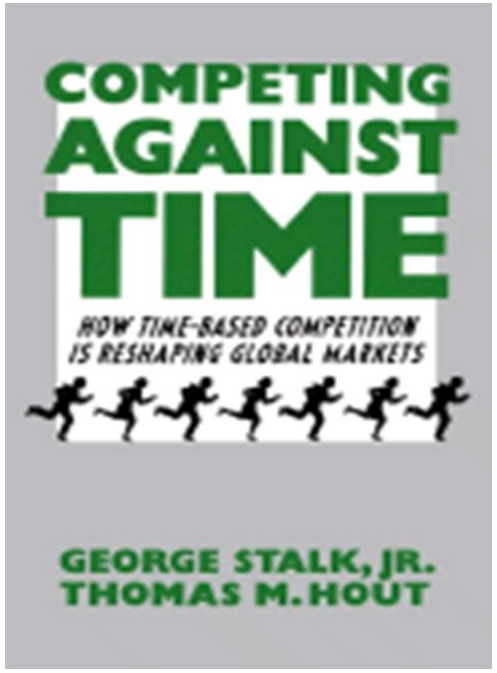
- **Effectiveness law**: → **The elimination of dysfunctional variability and the exploitation of functional variability leads to maximum efficiency and effectiveness**
- **Resilience**: Under the terms of the effectiveness law, lead time reduction leads to higher resilience

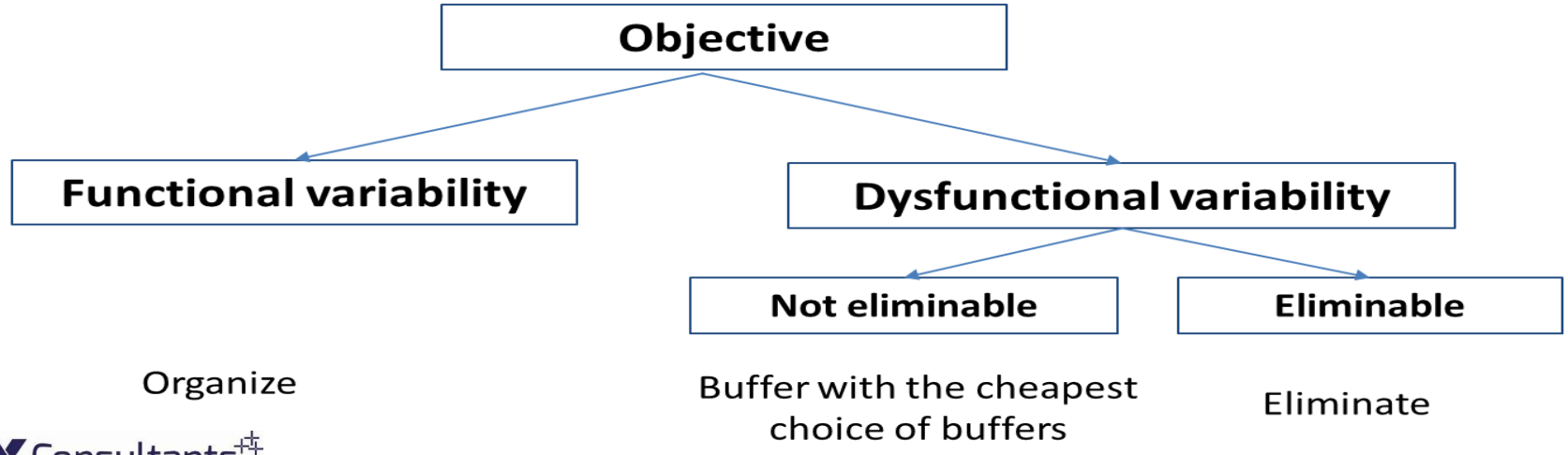


Questions

- What is the impact of lead time reduction in your organization?
- Suppose lead times are reduced with 50%?

- Wat types if variability do you recognize in your production system and/or supply chain?
- Are these functional or dysfunctional?





Prof.dr.ir. Marcel van Assen

Management Consultant

Trainer

Hoogleraar

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Marcel van Assen

Marcel heeft als adviseur jarenlang advieservaring op het gebied van strategieontwikkeling en –implementatie en het optimaliseren en verbeteren van operationele organisaties in diverse sectoren. Daarnaast is hij één dag per week als hoogleraar Operational Excellence for Service verbonden aan TIAS, de business school van Tilburg University.