BUSINESS meets CRITICAL SPARE PARTS AND ASSETS seminar

Gordian
Logistic Experts

pragma
official partner

BMC Programme

08:30 – 08:45	Welcome by Jan Willem Rustenburg Welcome by Johannes Coetzee
08:45 – 09:15	Johan Alberts
09:15 – 10:00	Françoise Du Preez & Le Clus
10:00 – 10:20	Mid-morning break
10:20 – 12:00	Interactive Supply Chain Criticality Game by Jan Willem Rustenburg & Tycho Lejeune
12:00 – 13:00	Lunch and evaluation

Johan Alberts

Françoise Du Preez & Le Clus

AngloAmerican

Spare Parts Management

New Vaal Colliery

09 November 2016

Real Mining. Real People. Real Difference.

Mid morning break
10:00 – 10:20 hour

TKI DINALOG
Dutch Institute for Advanced Logistics

Gordian
Logistic Experts

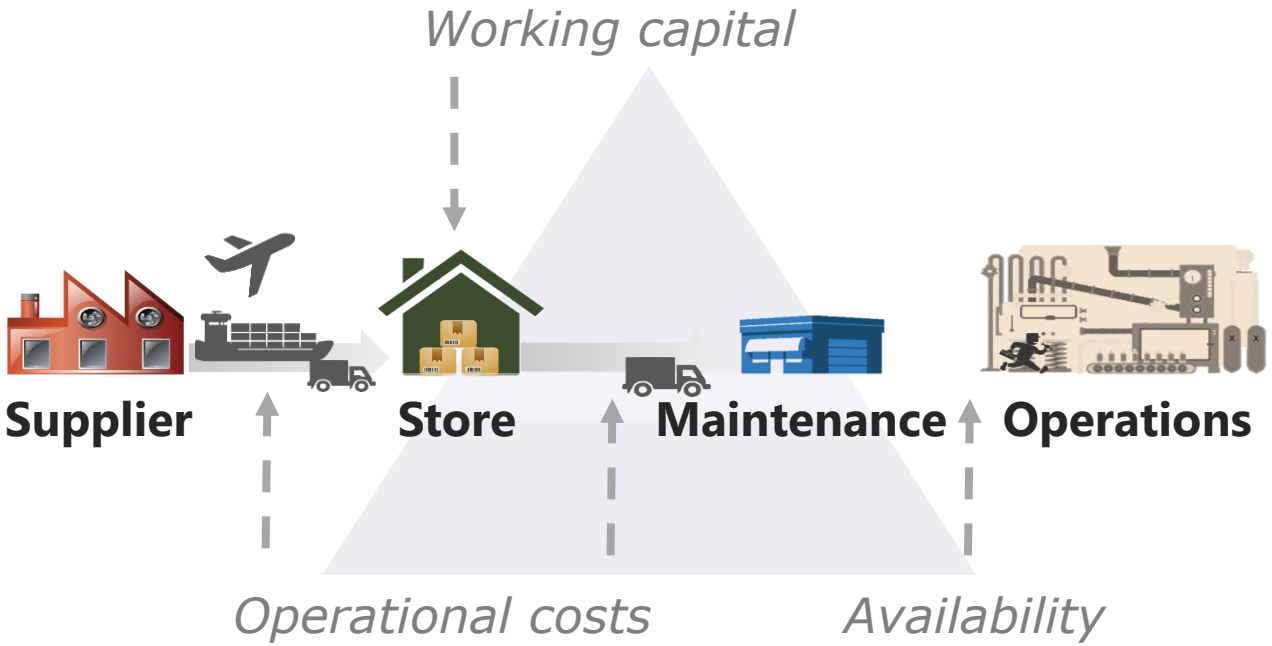
A holistic supply chain view on **SPARE PARTS CRITICALITY**

Balanced risk identification and effective mitigation

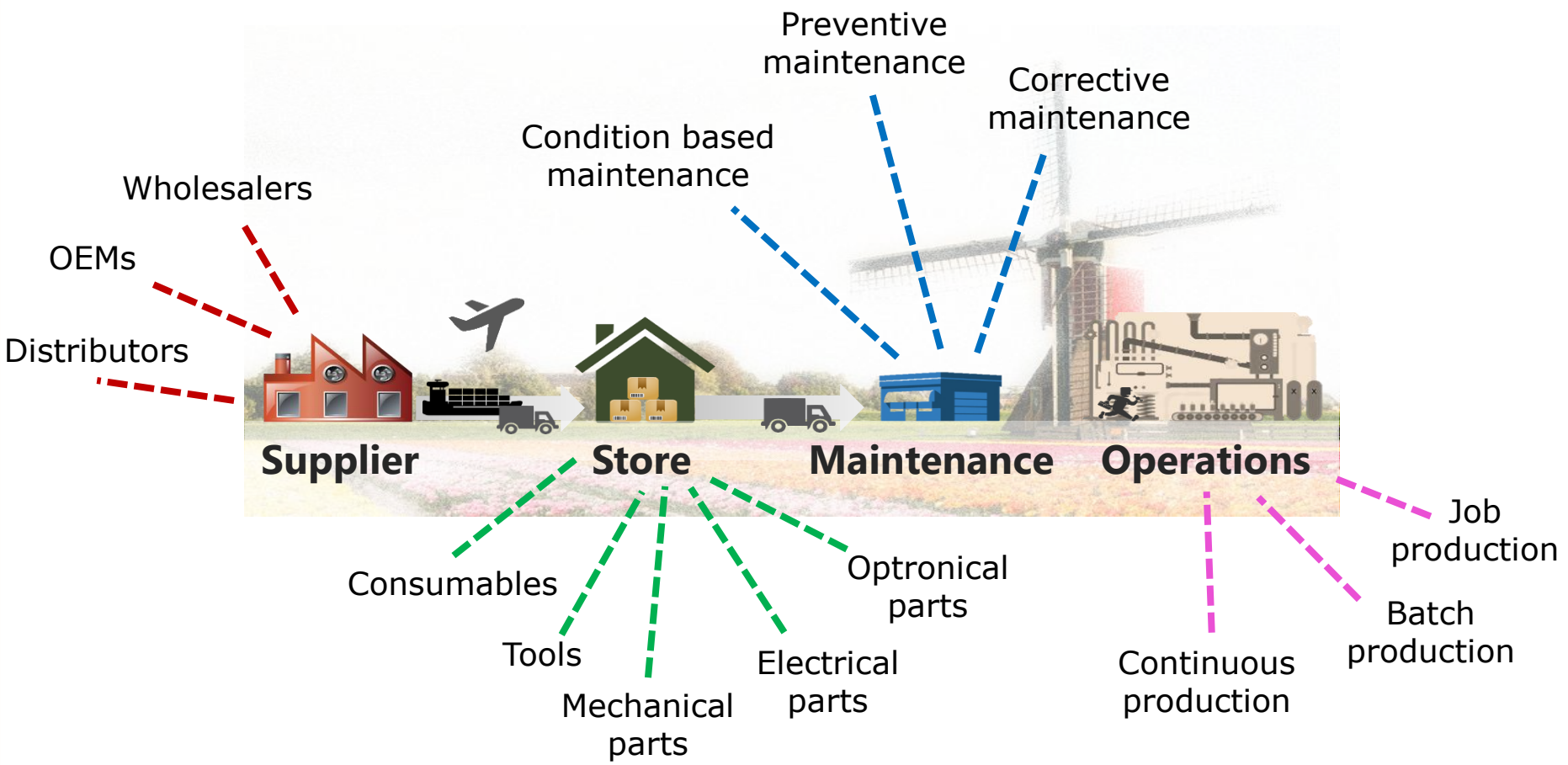
pragma
official partner

The key supply chain challenge for spare parts

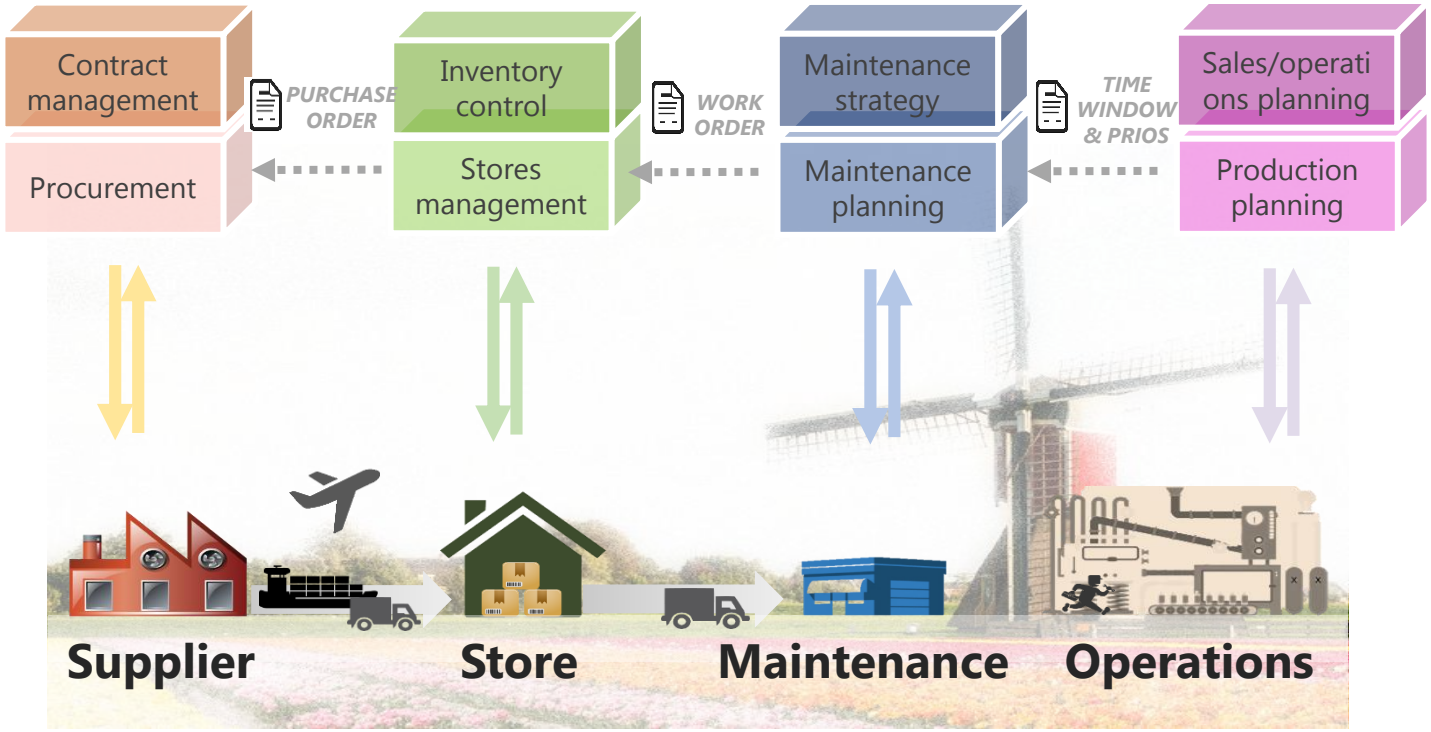
Physical assets *do not to be* ***down*** *due to a* ***shortage of spare parts****… against* ***reasonable costs****!*



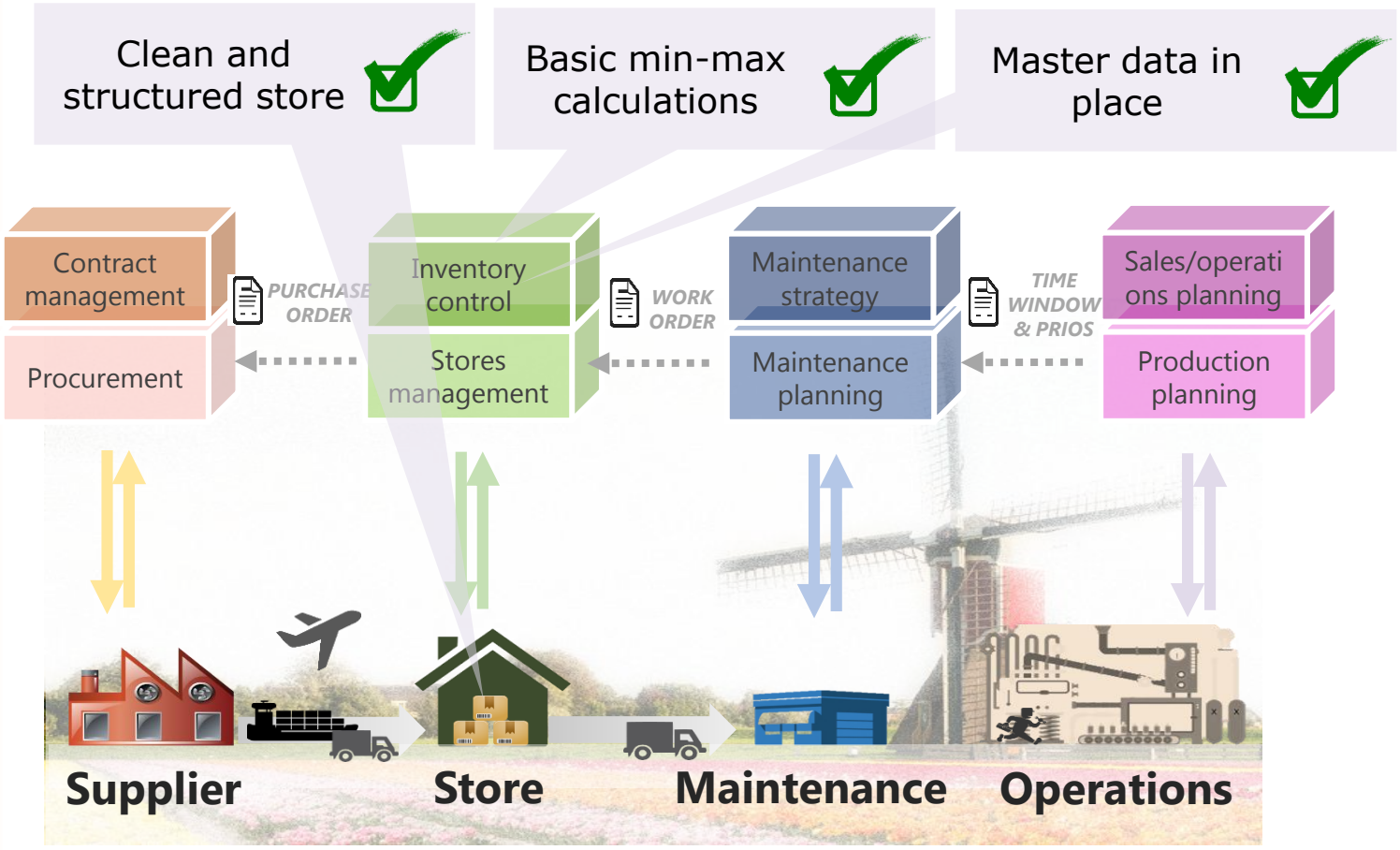
Spare parts supply chain management is more than stores management -1



Spare parts supply chain management is more than stores management -2



Suppose that the basic practices are in place…

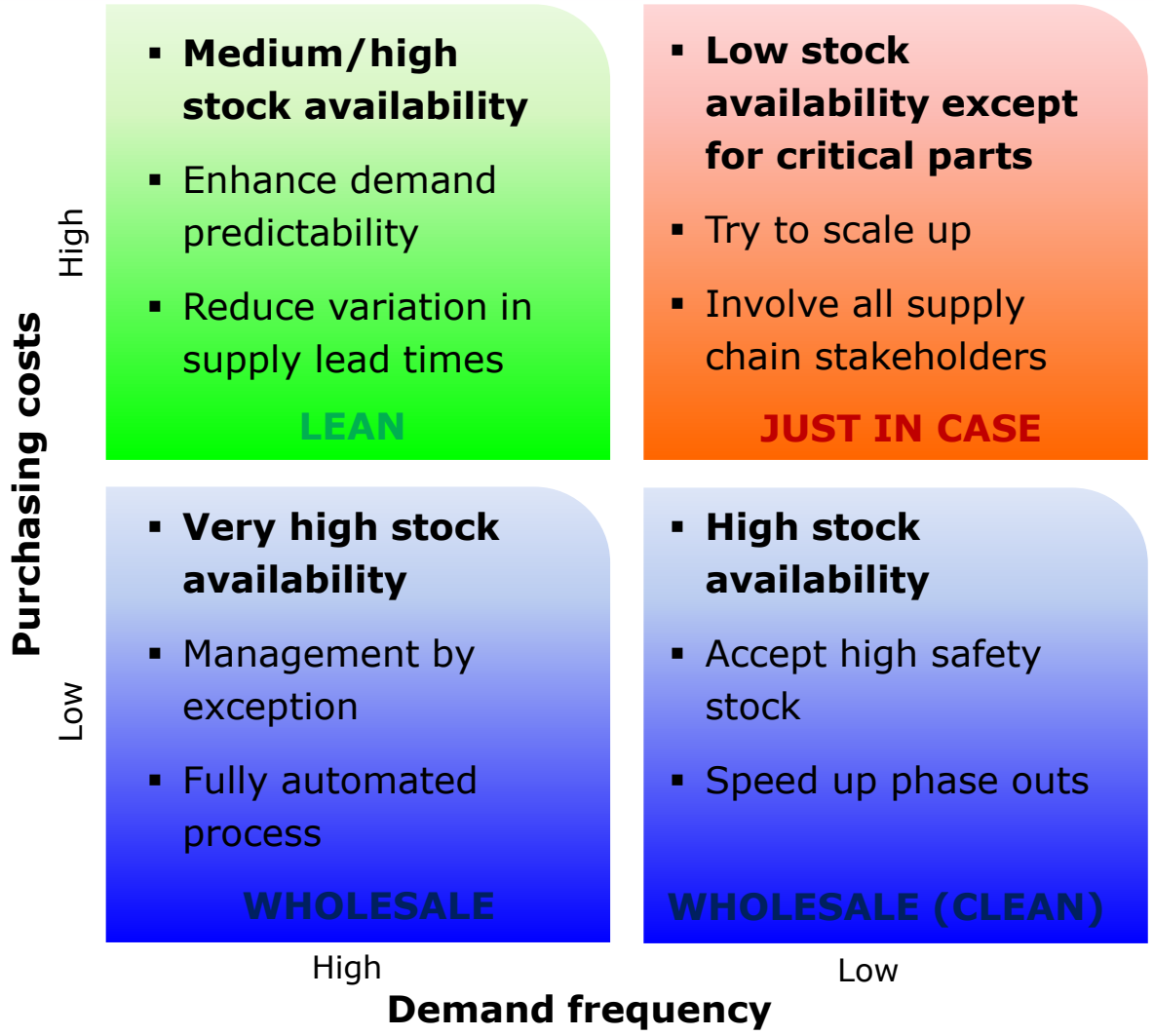


*Which circumstances can then still cause **unplanned down time** due to **lack of spares**? And how to mitigate these risks?*

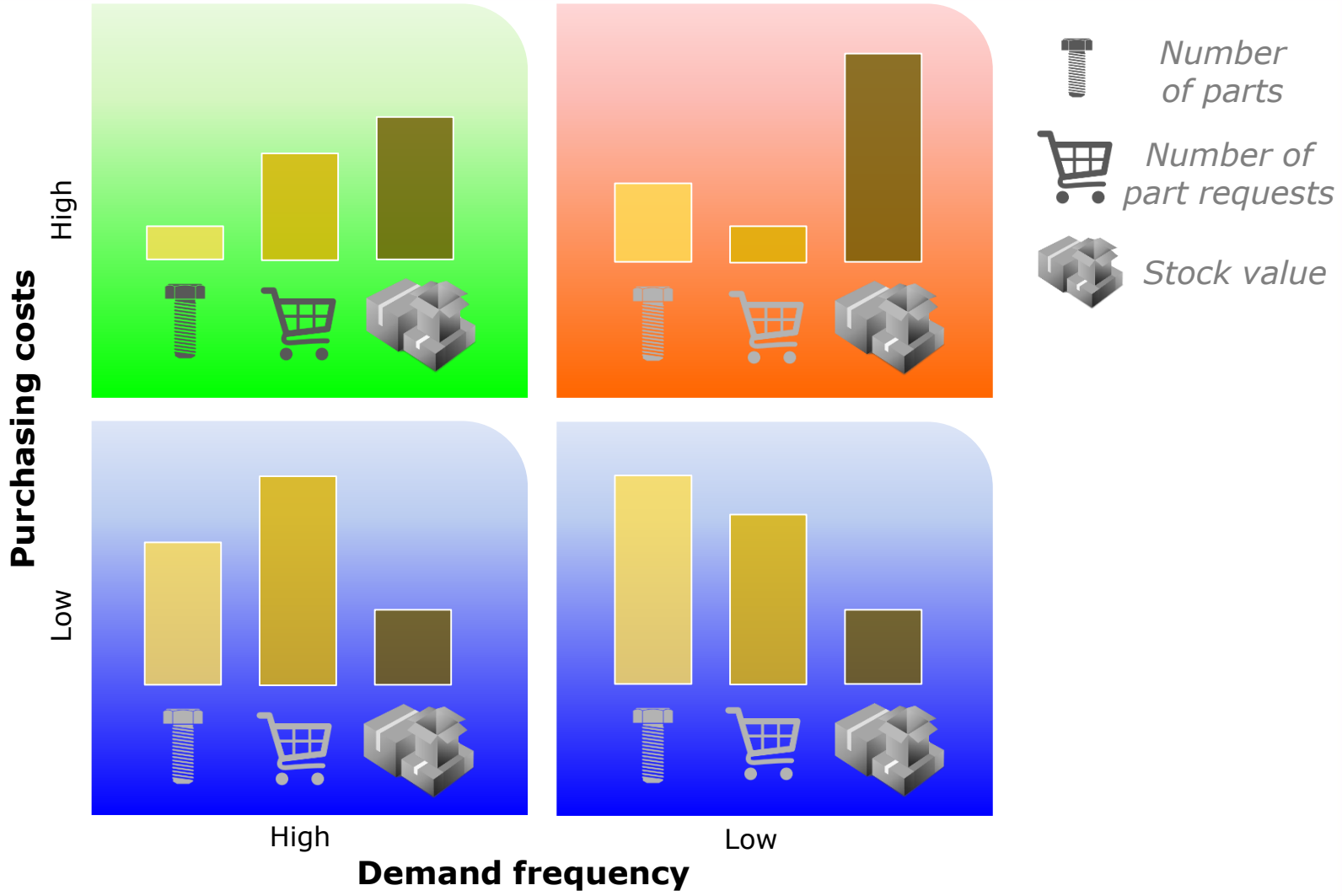
Risk 1:
Unplanned downtime due to unknown parts criticality

Where must the stock controller start in his/her assortment?

Remedy to risk 1:
Isolate the problem by smart classification

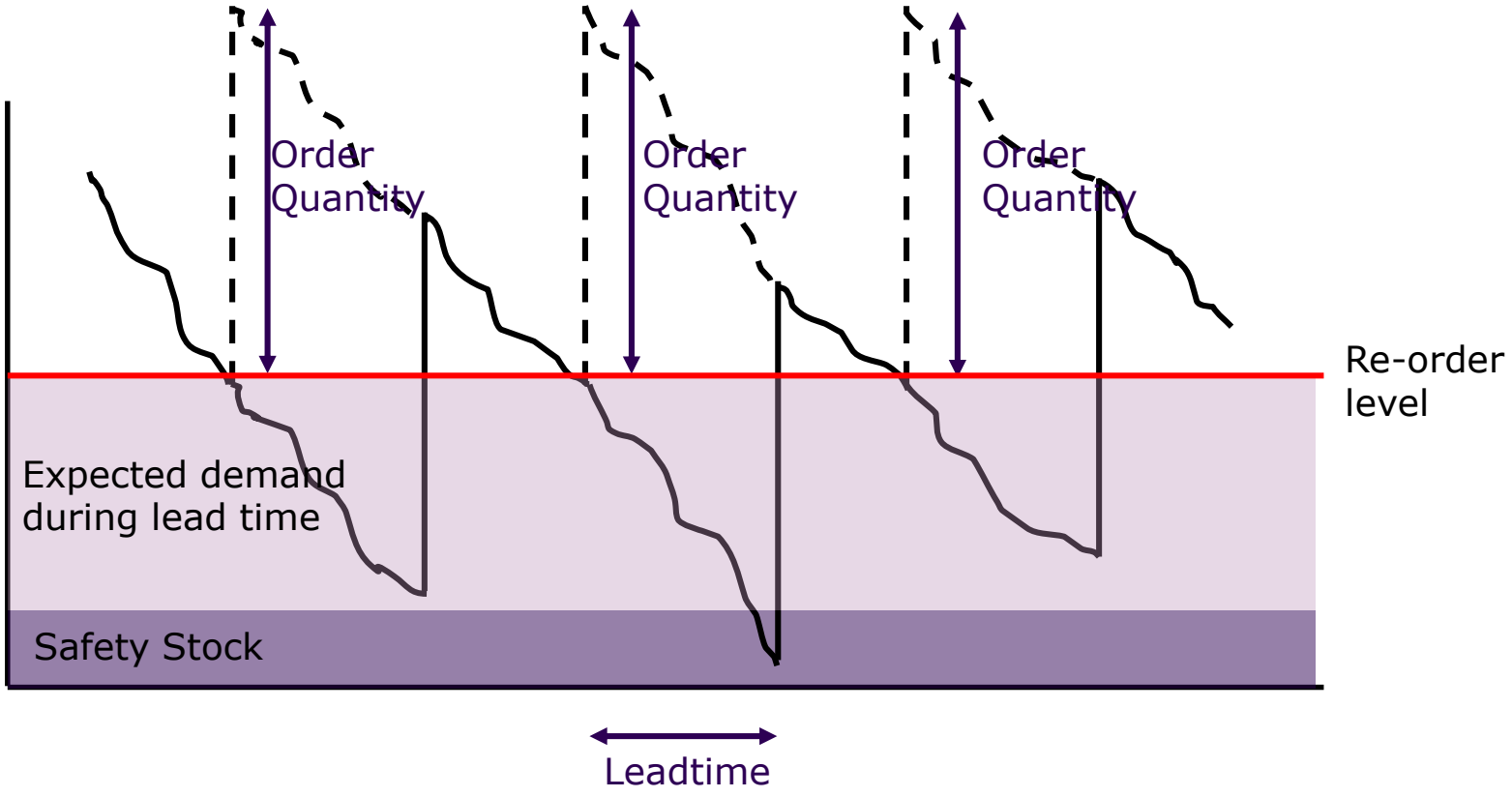


Remedy to risk 1:
Isolate the problem by smart classification

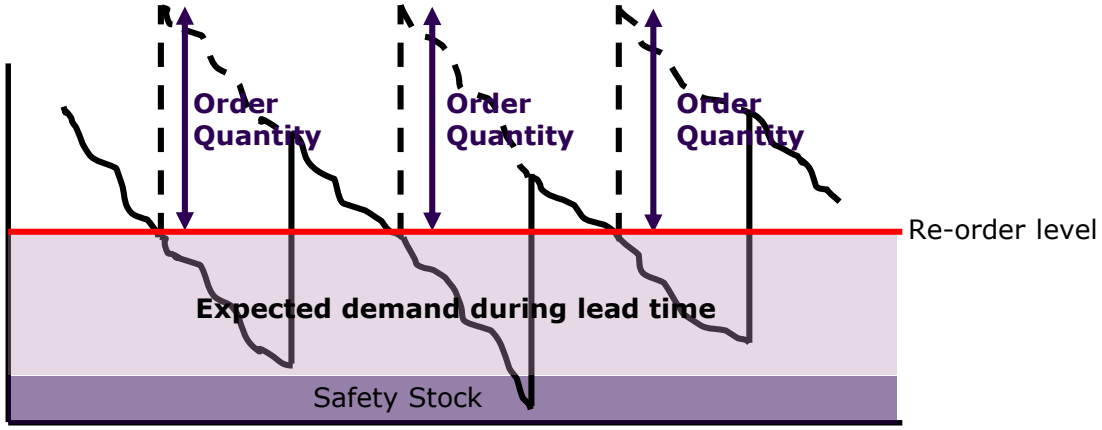


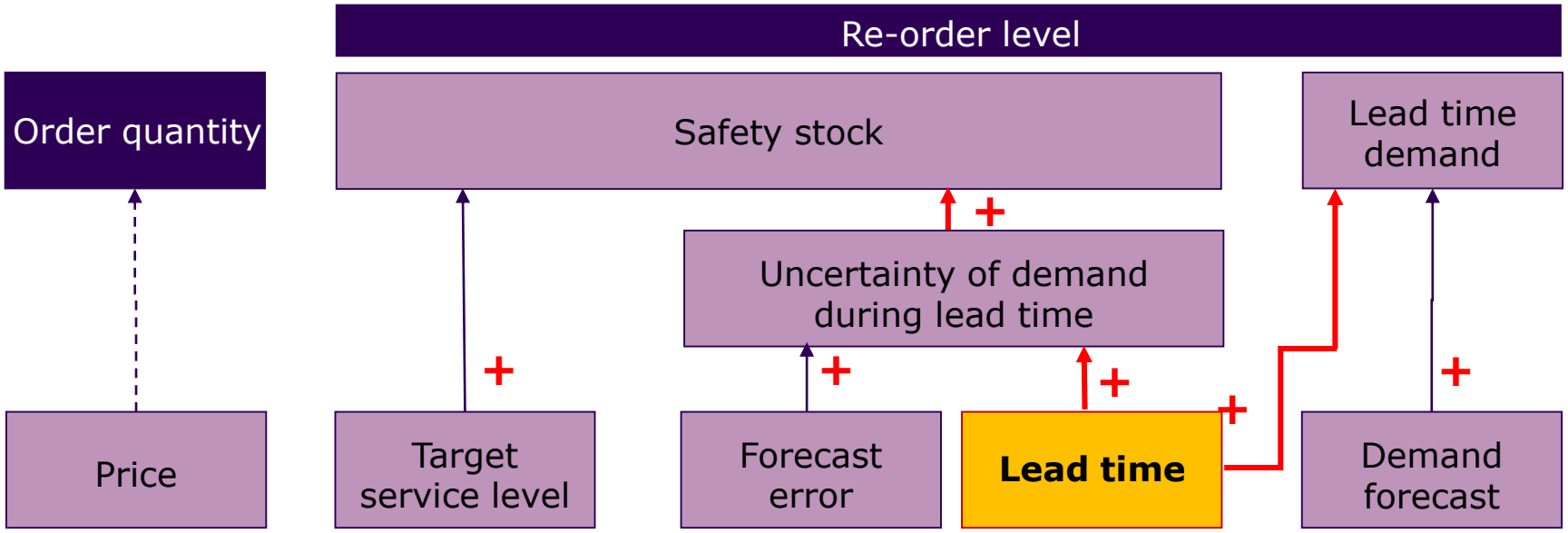
Risk 2:
Unavailability of spares due to long lead times

Remedy to risk 2:
Apply proper re-order level calculations

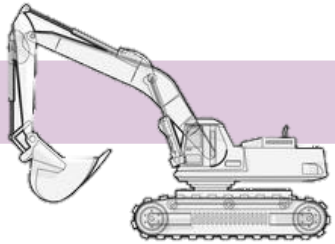


Remedy to risk 2:
Apply proper re-order level calculations





Risk 3:
Unavailability of spares due to obsolescence



From a typical asset life cycle of **15-20 years**…

To **variable** parts life cycles

Original part in original equipment

SUDDEN DEATH!!

Successive part

Successive part (modified due to obsolesence?)

Smooth process of successors

Successive part

Successive part, perhaps modified due to phasing out of asset

Remedy to risk 3:
Consider ordering more frequently in order to better monitor supplier behavior

Science* tells us that the probability for obsolescence depends on the following factors:

- Average interval between two purchase actions
- Time between the last purchase and now
- Increase in lead time
- An observation of a recent long lead time

So interestingly:

As a client
you can

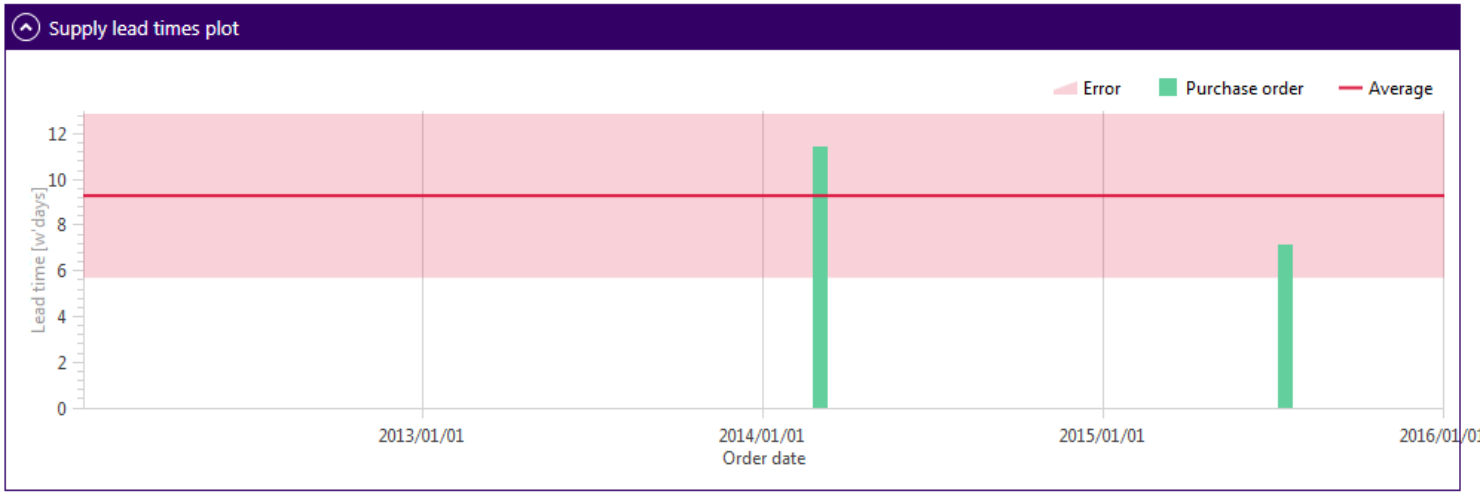
INFLUENCE
obsolescence
yourself !!

** Research by prof. dr. Rommert Dekker, Erasmus University Rotterdam*

Remedy to risk 3:
Consider ordering more frequently in order to better monitor supplier behavior

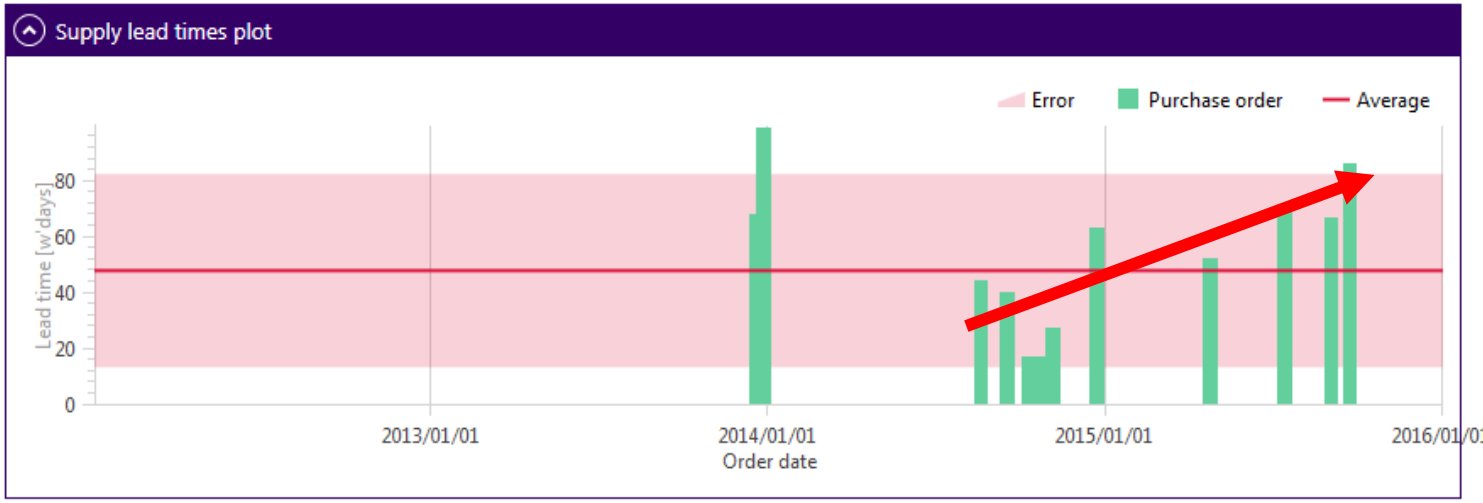
Unit value = R 1 910
Usage = 3.4 p/m
20 part requests p/y

Order more frequently, especially for parts which are not that cheap !!



Unit value = R 5.50
Usage = 23 000 p/m
214 part requests p/y

Start talking to your supplier about possible obsolescence !!



Conclusions

Supply chain risk management …

- ✓ Is very important but make sure that some **basic spare parts management** is in place
- ✓ Requires a **multi-disciplinary approach** to capture all relevant risks and ways to mitigate them
- ✓ Can be supported substantially by **proper spare parts management skills**

Contact details

Any questions, remarks or some desire for an informal chat?

Jan Willem Rustenburg
FOUNDING PARTNER

jw.rustenburg@gordian.nl

Tycho Lejeune
CONSULTANT

t.lejeune@gordian.nl

Supply Chain Criticality Game

Identify risks in the supply chain and develop mitigating measures

10:50 – 11:00 Introductory round

11:00 – 11:10 Individual risk generation

11:10 – 11:20 Explain the risks within your group

11:20 – 11:30 Develop Mitigating Measures with the group

11:30 – 11:40 Prepare a 5 minute presentation per group

11:40 – 12:00 Present to the audience

Making teams

4 groups and 4 group Facilitators

Front side

Stijn
1.Riaan
2.Lionel
3.Zukisa
4.Stephen
5.Leon
6.Graham
7.Nigel
8.Francoise
9.Malusi

Tycho
1.Hannes B
2.Hannes F
3.Ciaran
4.Jano
5.Tirwirei
6.Herman
7.Hendrik
8.Billy
9.Andre

Julia
1.Pierre
2.Helen
3.Jeremiah
4.Pieter O.
5.Frikkie
6.Cyril
7.Andries van H
8.Andrew

Johan
1.Isaac C
2.Marius
3.Bob
4.Wendy
5.Daniel
6.Willem
7.Ben
8.Andries K

Evaluation Criteria:

✓Completeness (50%)

✓Relevance (30%)

✓Creativity (20%)

Lunch and evaluation of the game

Until 13:00 hour