

# Contracteren van prestaties: waarom en hoe?

AVAG Masterclass Greenhouse Technology as a Service (GTaaS)  
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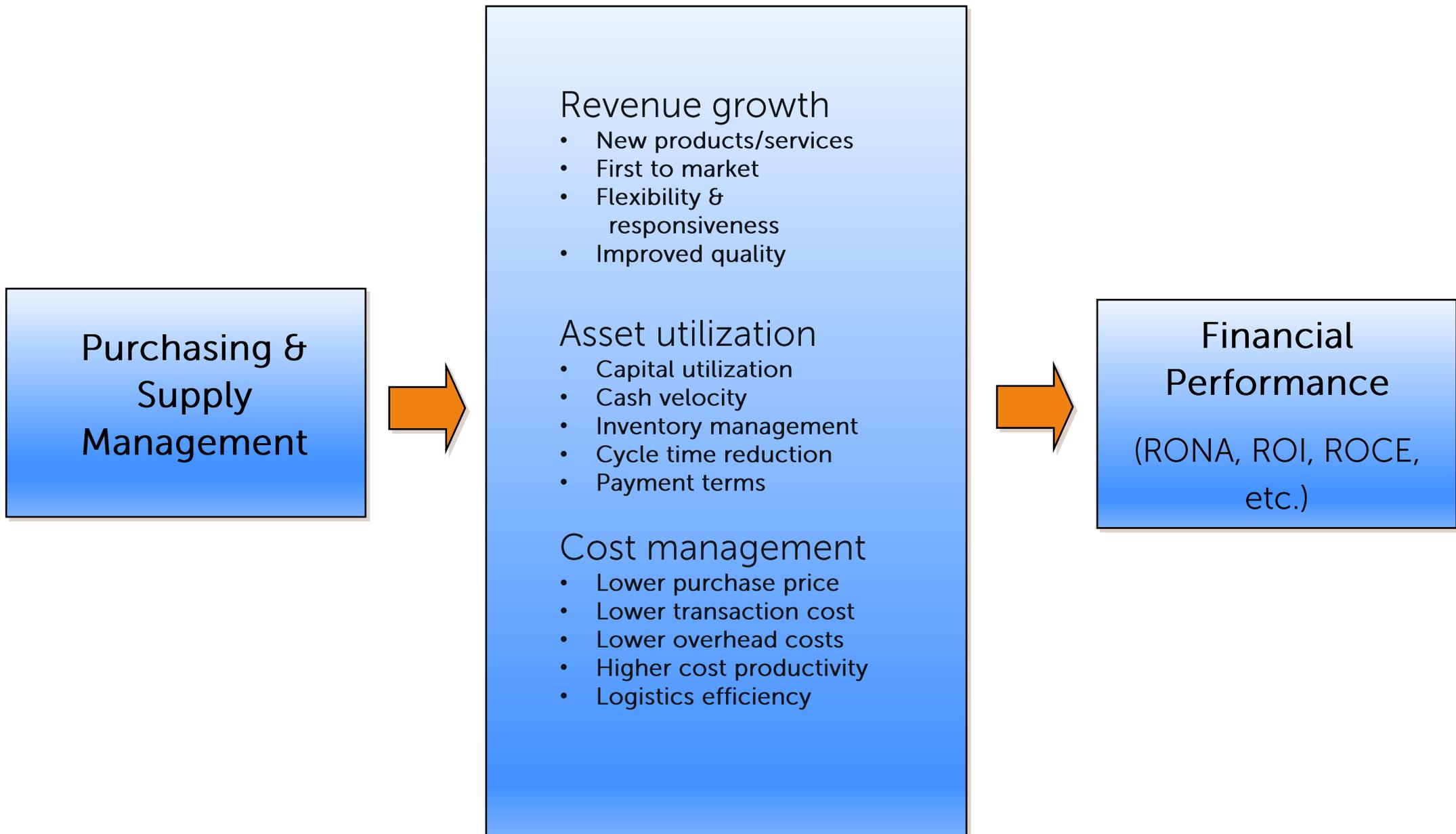
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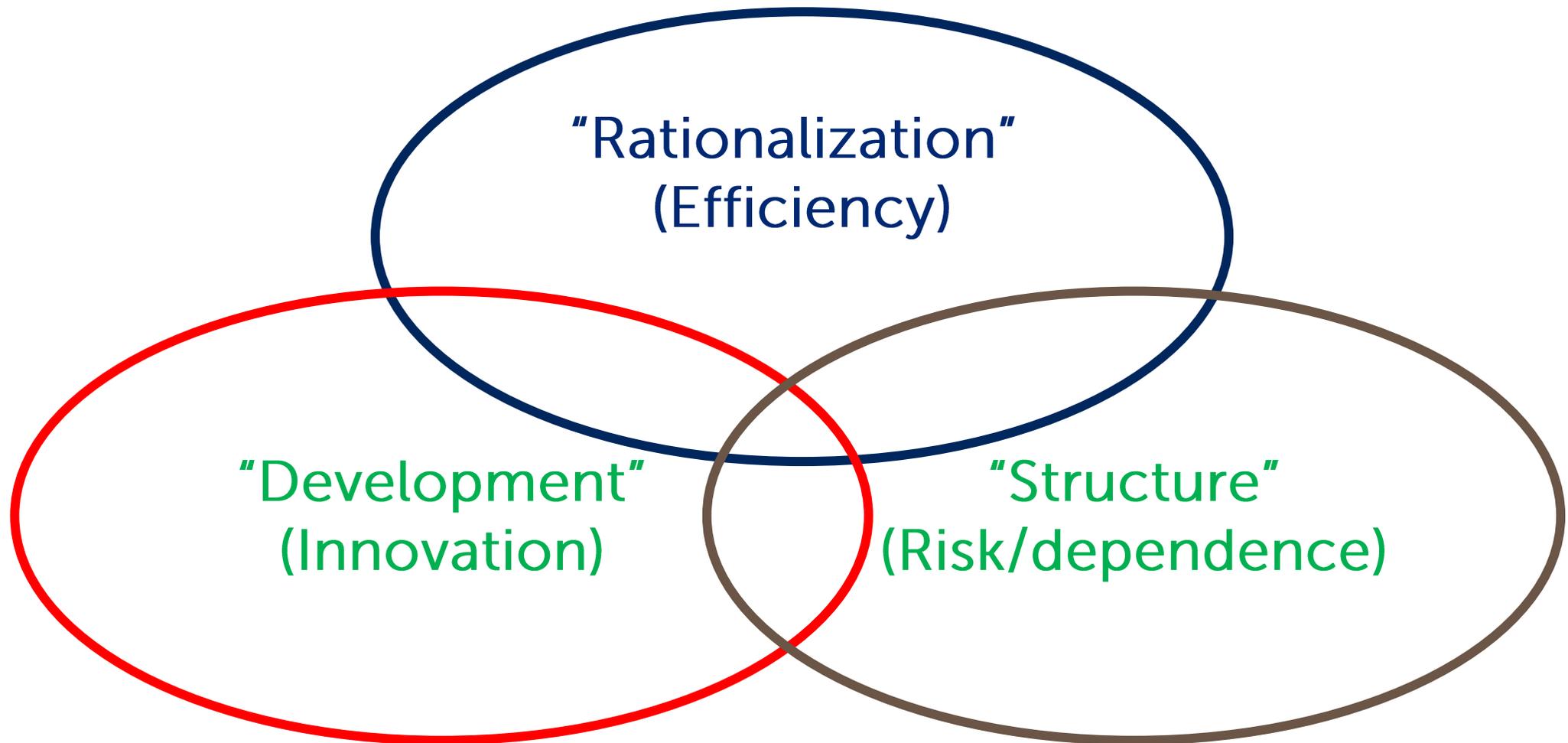
- Drs Economie Rotterdam, gepromoveerd in Eindhoven/Uppsala (S)
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- Sinds 2002: EUR – Rotterdam School of Management
  - NEVI leerstoel/bijzonder hoogleraar // gewoon hoogleraar
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- Eerdere werkzaamheden, o.a.: voorzitter IPSERA, academic director NEVI 3 (PLP), directie onderzoeksinstituut ERIM, voorzitter Taskforce Wetenschappelijke Integriteit EUR
  
- Focus: samenwerken met leveranciers aan innovatie, uitbesteding van diensten, contracten en contractmanagement
  
- Fries in Vlaardingen

- Professionaliteit en Volwassenheid in Inkoop en Leveranciers Management
- Segmentatie door middel van de inkoop-portfolio
- Uitbesteding
  
- Prestatiecontracten

# Financial impact of PSM: from bottom-line to top-line



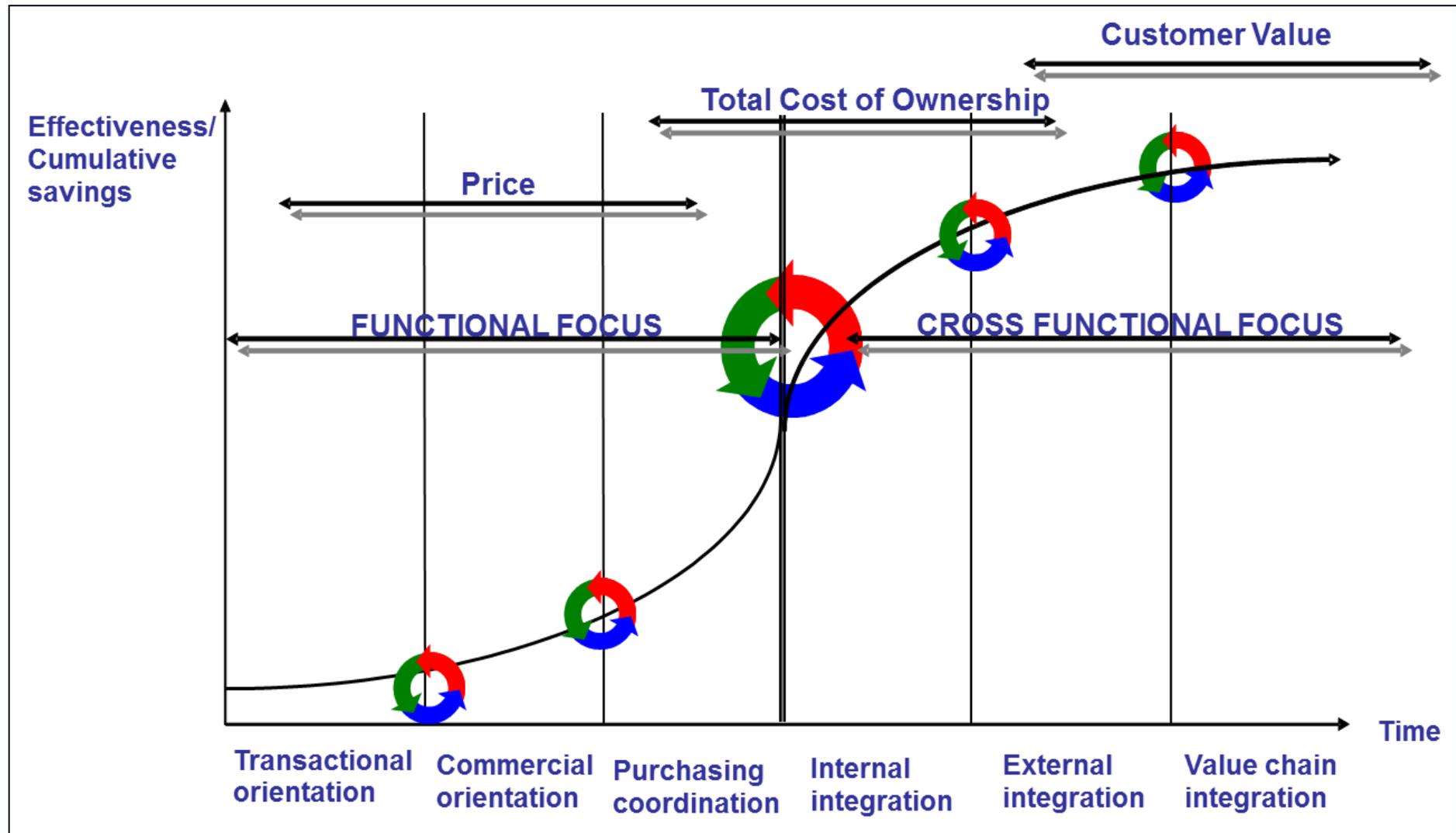
*Adapted from: CAPS 2003*



Most procurement decisions involve trade-offs between at least two of these objectives

Source: Axelsson, B. and Håkansson, H. (1984). *Inköp för Konkurrenskraft*. Stockholm: Liber.

# Kraljic elaborated: purchasing maturity or purchasing development model



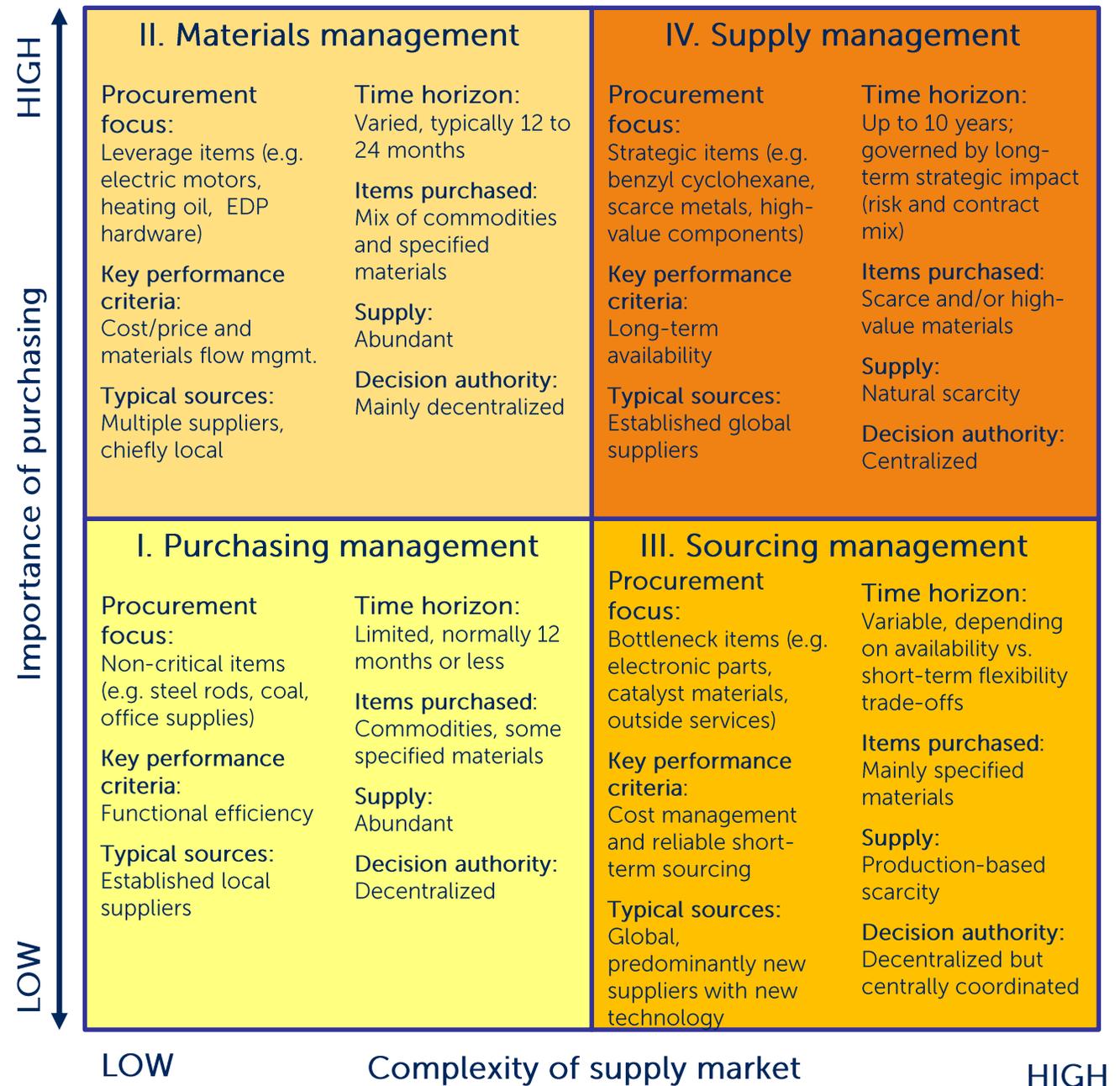
Based on: Van Weele, 2005 / 2015.

# Important drivers of (the need for) PSM maturity

*Importance of purchasing criteria: cost of materials/total costs, value-added profile, profitability profile, and so on*

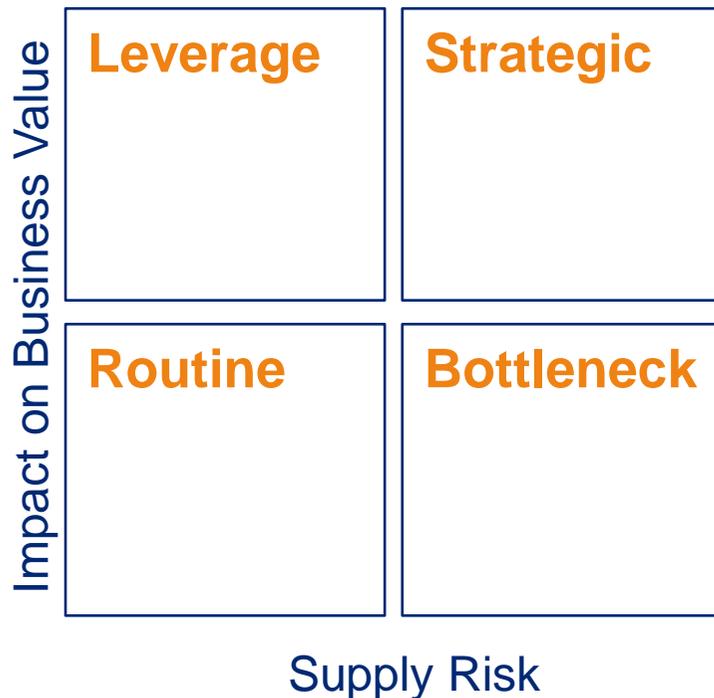
**Kraljic:**  
Two key drivers for the need for "Supply Management"

*Complexity of supply market criteria: supply, monopoly or oligopoly conditions, pace of technological advance, entry barriers, logistics costs and complexity, and so on*



- Hoe volwassen zijn jullie afnemers in term van inkoopvolwassenheid? (1 tm 6)
  - Doelstellingen van de functie
  - Aandachtspunten in selecteren en managen van leveranciers
  - Gebruik van verschillende contractvormen

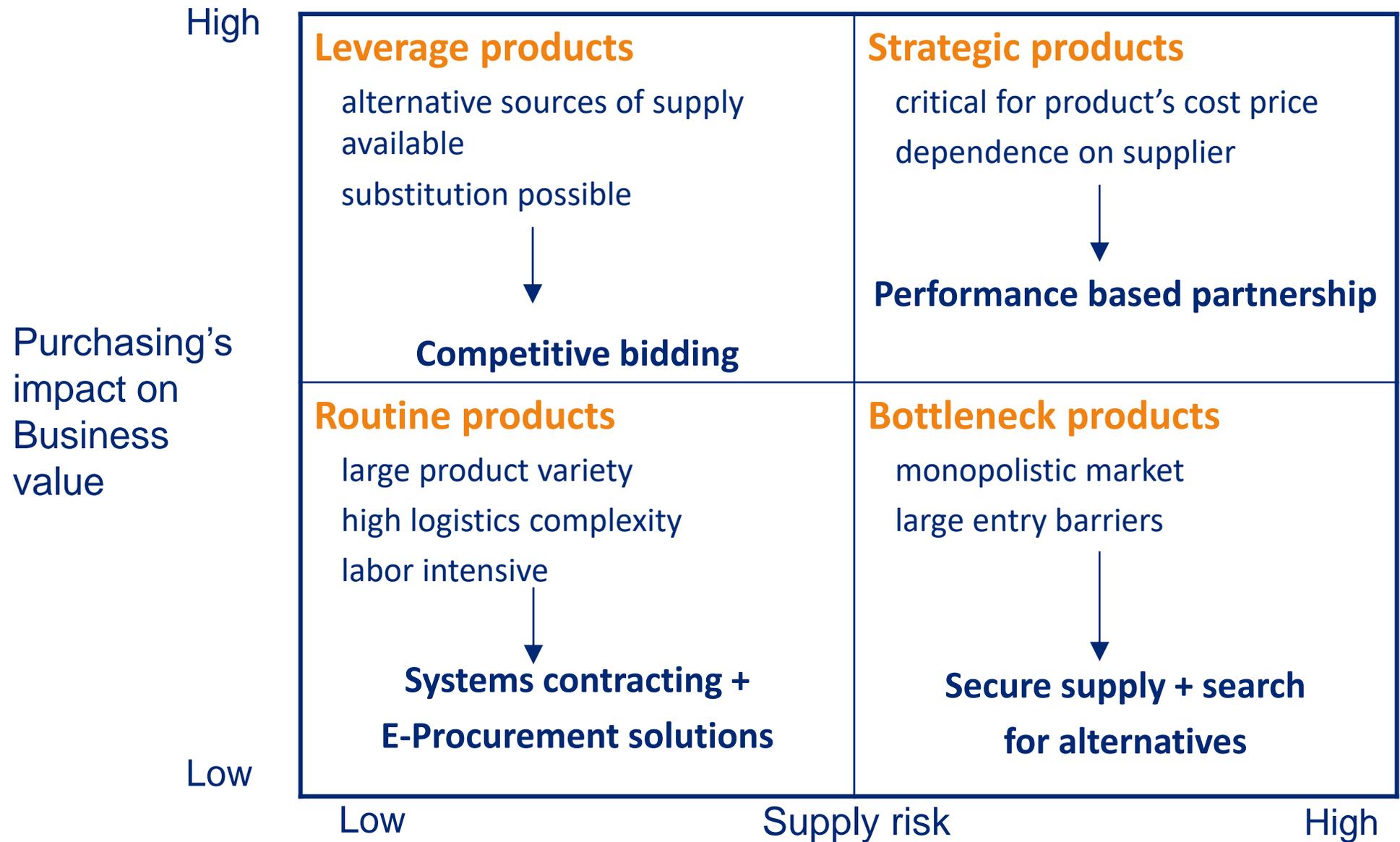
# Segmenteren van inkoop spend: Portfolio analyse mbv de Kraljic matrix



Factors for plotting a category in the matrix:

- **Impact on Business Value:**
  - Spend of the product
  - Impact on profitability
  - Impact on business growth
  - Impact on overall strategy
  - Influence of product interruption / shortage
- **Supply Risk:**
  - Number of potential suppliers
  - Competition in the supplier market
  - Capacity in the market
  - Dependency of buying organization on one or few supplier(s)
  - Entry barriers for new suppliers
  - Switching costs and time

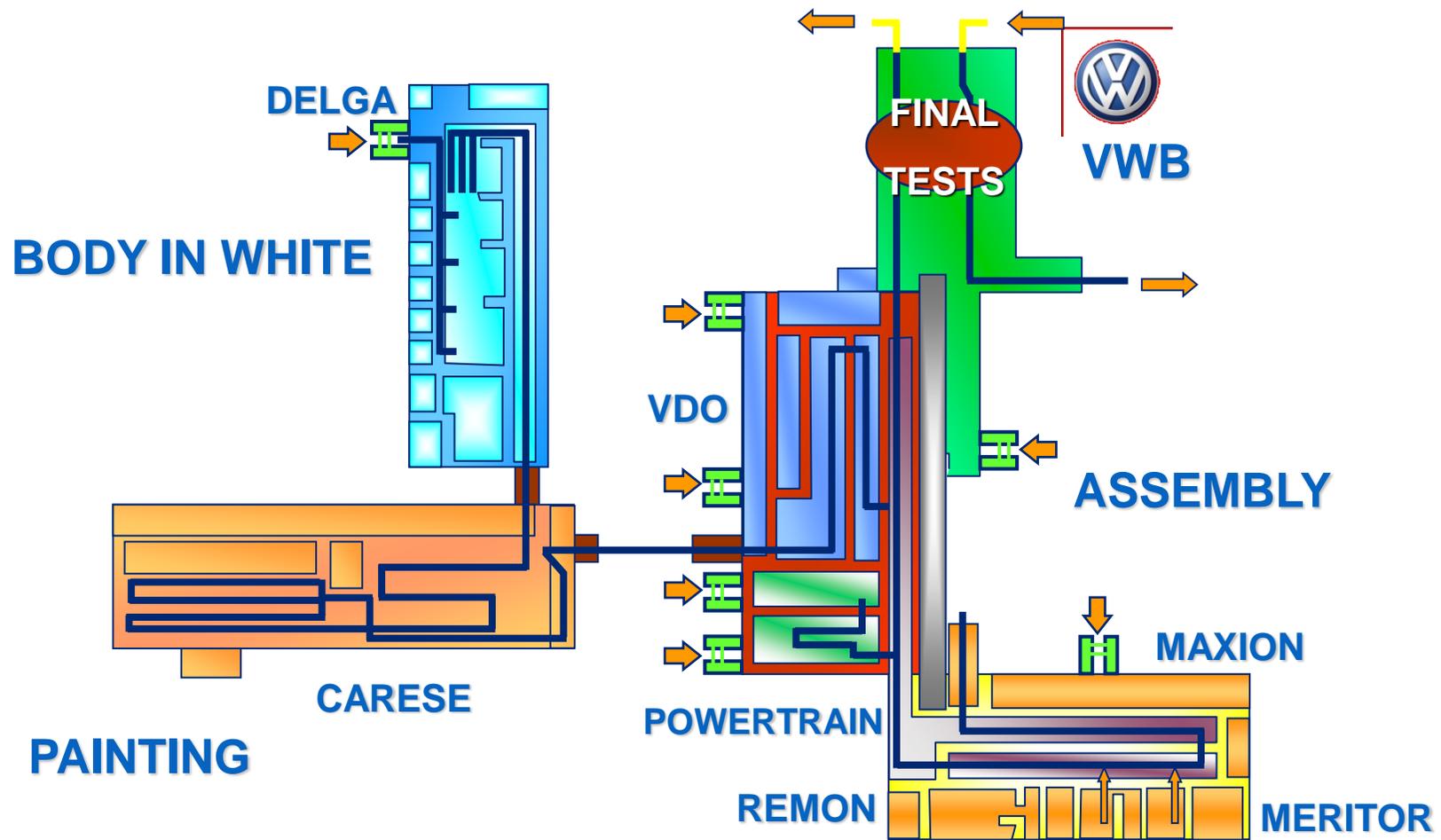
# Vier 'category sourcing' strategien



- Segmenteren jullie klanten ook leveranciers / inkoopgoederen en – diensten, bewust of bewust?
- In welk segment komen jullie diensten/goederen dan terecht?
- Biedt dat voldoende ruimte om de waarde propositie van jullie diensten/goederen goed neer te zetten?



**From the Collections of Henry Ford  
Museum & Greenfield Village**

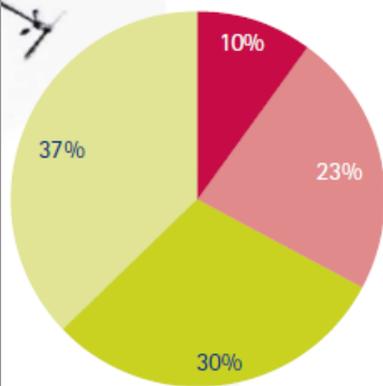


Level of competitiveness relative to suppliers	High	Maintain / invest (opportunistically)  Competencies are <b>not strategic</b> but provide important advantages; keep in-house as long these advantages are (integrally) real	In-house / invest  Competencies are <b>strategic and world-class</b> ; focus on investments in technology and people; maximize scale and stay on leading edge	
	Low	Outsource  Competencies have <b>no competitive advantage</b>	Collaborate / maintain control  Competencies are <b>strategic but insufficient to compete</b> effectively; explore alternatives such as partnership, alliance, joint-venture, licensing, etc.	
	Low (non-core)	Strategic importance of competence		High (core)

Source: Van Weele, A.J. (2014). Online lecture on Outsourcing  
<https://www.youtube.com/watch?v=8DEhWa4frrM>

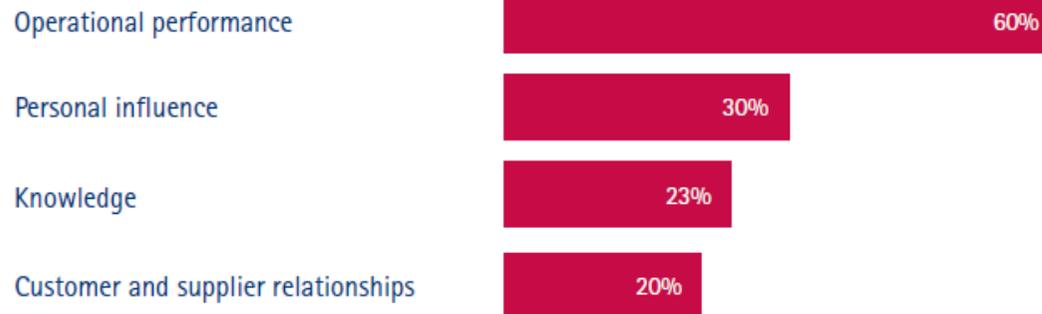
Figure 1. Importance of Losing Control for Companies Considering BPO

"How important was the issue of losing control when considering whether to outsource a business process?"<sup>1</sup>



Very important  
Important  
Somewhat important  
Unimportant

"What did executives fear losing control of?"<sup>2</sup> (Multiple responses accepted)



<sup>1</sup>Percent of 30 companies implementing or considering BPO

<sup>2</sup>Percent of 20 companies rating control as a "very important" or "important" issue

Source: Accenture, *Control: Getting It and Keeping It*, 2008.

- Only 58 % have set measurement performance indicators, and of these:
  - 92 % are generally to very satisfied with controls in place
  - 19 % will definitely and 42 % probably are thinking of strengthening techniques and processes for performance monitoring controls
- “The service level agreements are of limited use and we are thinking of creating an internal reference for each of the outsourced functions to monitor the quality of the service.” (Italian CFO of an aircraft handling services company)
- “Companies no longer want to know specific details, but to be given information in a way that makes sense for their processes, so they can concisely and clearly see the impact for their business.” (Spanish outsourcing provider)

*Source: Ernst&Young, Outsourcing: The Rise of Fragmentation, 2008.*

*(Survey of 600+ executives in F, UK, D, I, ES and B.)*

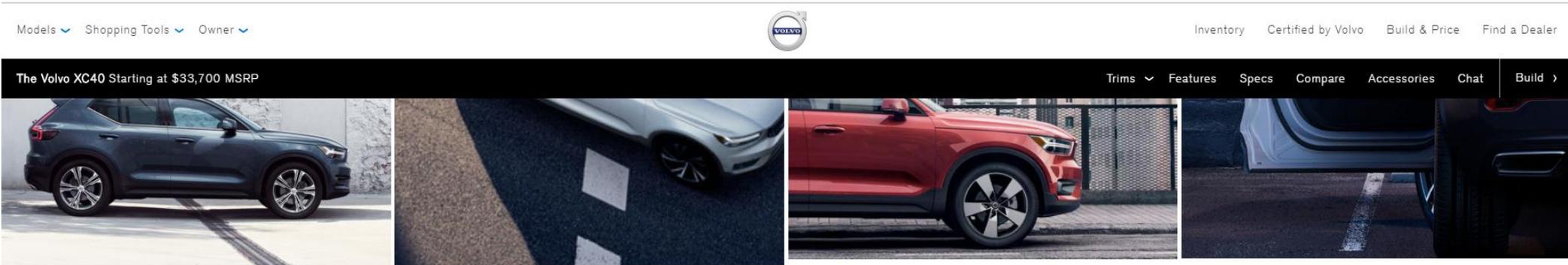
***“If you want to build a ship, don't drum up the men to gather wood, divide the work and give orders. Instead, teach them to yearn for the vast and endless sea.”***

*Antoine de Saint-Exupery, “The Wisdom of the Sands”*





# Van kopen naar leasen, naar abonnement



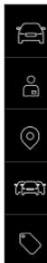
## Three ways to drive an XC40

<p>LEASE</p>	<p>PURCHASE</p>	<p>SUBSCRIBE CARE BY VOLVO</p>
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- Lower monthly payment
- Customizable to your budget
- Upgrade to a new vehicle when your lease is up

- No mileage restrictions
- No monthly payment after your loan
- Available through Overseas Delivery in Sweden

- Subscribe online or via the Care by Volvo app
- All-inclusive, one flat monthly rate
- Includes insurance, maintenance and service
- Upgrade to a new car in as little as 12 months





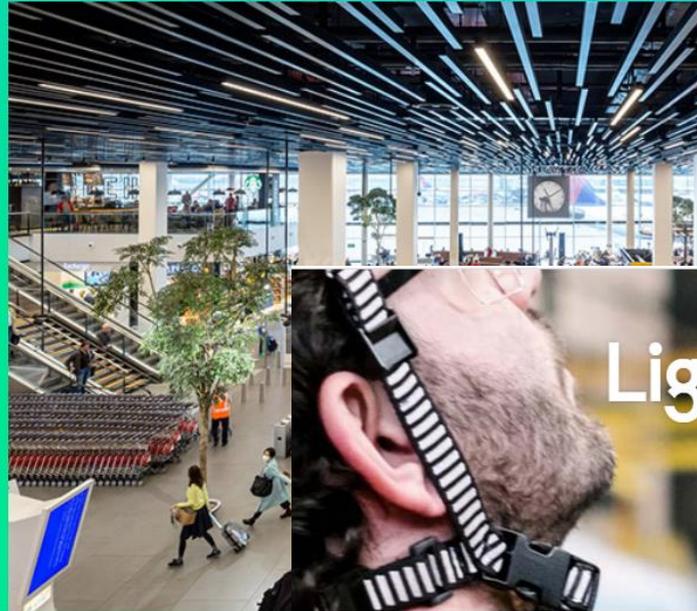
A performance-based contract emphasizes the **value of the transaction for the customer**, and not the costs for the supplier, and relates to this (a part of) the **compensation of the supplier**. This customer value or performance can be measured in **non-monetary units** (such as uptime of a machine), or in **monetary units** (such as the turnover generated with the use of that machine).

Selviaridis, K. and Wynstra, F. (2015). Performance-based contracting: a literature review and future research directions. *International Journal of Production Research*, 53 (12): 3505-3540.

# Signify: Light as a Service as tool to create savings and environmental benefits

## De juiste verlichting

Het Circular Lighting businessmodel geeft een volledig nieuwe kijk op licht, waarbij 'bezit' wordt vervangen door 'gebruik'. "Het principe is simpel: je koopt geen armatuur maar licht. Daardoor wordt het noodzakelijk om kwalitatief goede, duurzame Philips verlichtingsproducten te vervaardigen, die modulair zijn opgebouwd en compleet te repareren zijn. Als de contractperiode is afgelopen, kan de klant ervoor kiezen om het contract te verlengen met de bestaande verlichting of voor nieuwe verlichting kiezen. De armaturen gaan dan retour en de materialen en de componenten worden hergebruikt of gerecycled", aldus Thomas Rau.



## Light as a Service

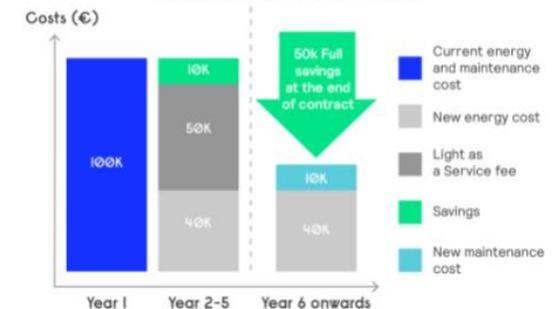
We take care of your lighting, so that you can take care of your business.

From the initial design and installation to operation and maintenance, we've got you covered. You get the service levels you deserve, and the system performance we've agreed.

With LaaS (Light as a Service), you can generate instant savings and optimize your cash-flow from day one.

### Annual savings example

10K instant annual savings, 50K annual service fee during the Service Agreement (Year 2-5), and 40K new annual Energy Cost (Year 6 onwards)



- Pay-on-availability (*assets*)
- Pay-on-use, pay-per-unit (*services from the assets*)
- Pay-on-qualitative outcomes (*for the customer, or the customer of the customer*)
- Pay-on-economic results (*monetary value of the output*)

**Stads** *gehoorzaal*



- Since 2001 DSM is outsourcing maintenance activities to DSC Maintenance by using a performance-based contract:
- DSC: joint venture of Stork Technical Services, SPIE and DSM
- Total revenue: 3 million euro per year
- Workforce: 60-100 employees



Contract into its third phase:

- **Maintenance fee for DSC is directly related to the sales of the plant**
- DSC has full information on volumes and transfer as well as market prices of DSM output (anti-infectants, ingredient for penicillin)
- Maintenance in this case is a high cost vs. total production cost (~20%); many more maintenance people in the plant than process operators

## Stimuleren/afdwingen van **transparantie** en **consistentie**

- Duidelijke einddoelen voor leverancier
- Vereist interne discussie en consensus

## Creëren van **nieuwsgierigheid** en **interactie**

- Leveranciers willen contact met de 'fabrieksvloer' en (externe) gebruikers

## Verschuiven van **risico** naar de leverancier

- Leverancier kan dit beter inschatten en beheersen (aanname)

## Stimuleren van innovatie

- Gebruik van **functionele** specificaties
- **Lange-termijn** contract, zodat leveranciers initiële investeringen kunnen terugverdienen
- **Proces** innovatie (bijv. onderhoud van gevechtsvliegtuigen) vs. **product** innovatie (bijv. LED verlichting voor snelwegen)

## Verbeteren van de kwaliteit van prestaties

- Functionaliteit, kwaliteit, duurzaamheid..
- Aanbesteder moet de **juiste KPI's** kunnen definiëren en meten

## Verlagen van kosten

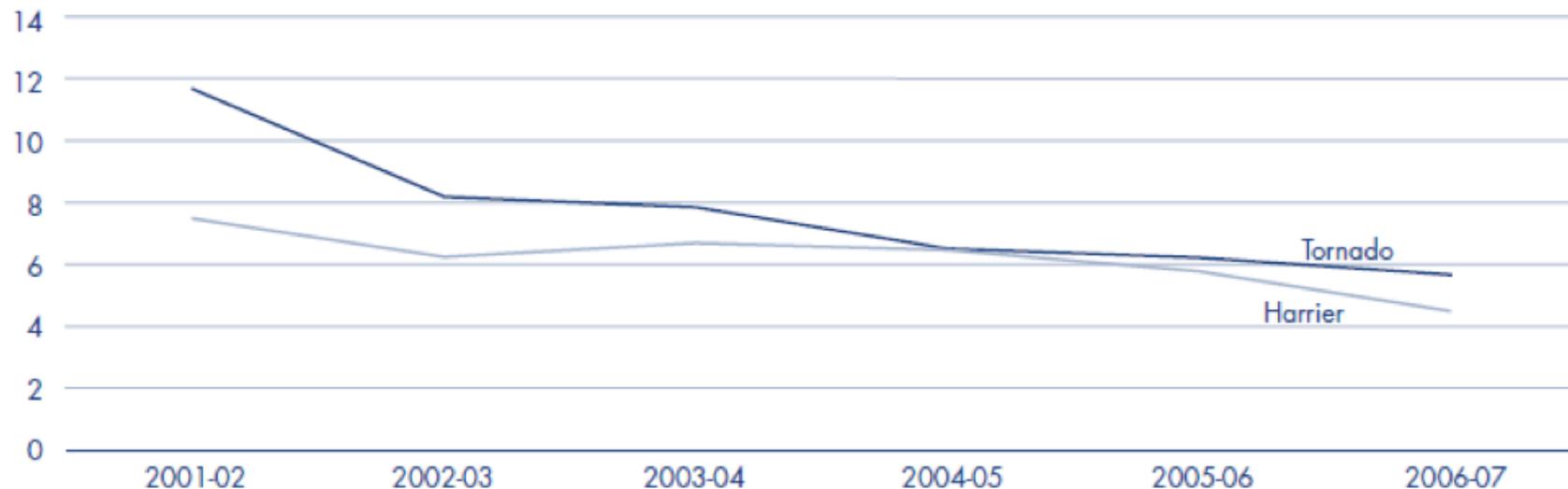
- Potentiële spanning: **minder omzet** leverancier



## 8 Cost per flying hour for Tornado and Harrier aircraft

The cost per flying hour for Tornado aircraft has reduced by 51 per cent and for Harrier by 44 per cent based on the Integrated Project Team budgets.

£000s



Source: National Audit Office analysis of Ministry of Defence data

### NOTE

Harrier budget excludes the capital cost of the GR9 upgrade programme.

National Audit Office (2007). Transforming logistics support for fast jets.

Report by the comptroller and auditor general.

# One size does not fit all: a spectrum of PBC

Weight in max. total payment		0-5 %: Penalty/bonus scheme	6-99%: Strongly performance-based	100 %: Fully performance-based
Reward basis				
<i>Effort-based</i>	Pay-on-input			
	Pay-on-process			
<i>Output-based</i>	Pay-on-availability (assets)			
	Pay-on-use, pay-per-unit (services by assets)			
<i>Outcome-based</i>	Pay-on-qualitative outcomes (for customer, customer's customer)			
	Pay-on-economic results (monetary value of the output)			

More pure forms of PBC

*Note: weight percentages are illustrative indicators only*

- Biedt u diensten aan middels een prestatie-contracten?
- Zo ja:
  - Wat was de aanleiding?
  - Wat zijn de Key Performance Indicators (KPIs) waar u op wordt afgerekend?
  - Hoe succesvol is het contract?
- Zo niet:
  - Waarom niet?
  - Wat moet er veranderen zodat prestatie-contracten wel mogelijk/aantrekkelijk worden?
    - Bij de klant?
    - Binnen uw eigen organisatie?

- Performance (output/outcome) is measurable
  - Validly
  - Reliably (consistently)
  - Efficiently
- Performance is **not highly dependent** on external conditions or behaviour of others:
  - Other suppliers
  - Buying organisation
  - Final customer



- **Supplier**
  - Entrepreneurship
  - Knowledge and information
  - Experience and size, opportunity for “risk pooling”
  - Flexibility; customised solutions
- **Customer**
  - Identifying suitable services
  - Identifying and determining appropriate form of PBC, KPIs
  - True willingness to pay incentives/rewards (establish a “pot of gold”, upfront)
  - No finger-pointing, but helping hand
- **Implementation**
  - Burning platform
  - Measurement capability
  - Stepwise approach, endurance



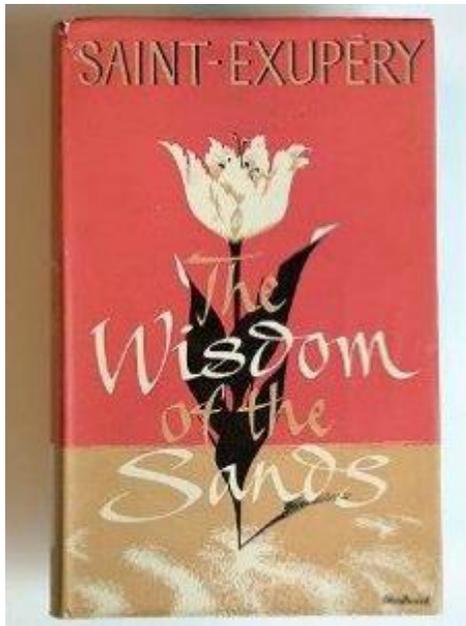
- **Wet van de remmende voorsprong**
  - Deelsectoren waar nieuwe partijen actief zijn staan wellicht meer open voor GTaaS (voorbeeld: startups in vertical farming / Priva)
- **Leidend principe: business model of technologie**
  - We kunnen tegenwoordig veel meer meten dan zinvol lijkt
  - Zelfs leveranciers die al jaren op 'pay for use' model draaien, lijken niet altijd een doordachte technologie-strategie te hanteren; dit leidt tot hoge kosten en veel tijdverlies
- **Wie krijgt het mandaat bij complexe systemen?**
  - Leveranciers van de technologisch meest onderscheidende componenten? Duurste onderdelen? (Verwarming, klimaat computer, watermanagement, energie en Co2 gebruik, logistieke automatisering)
  - Of de generieke IT/IS leveranciers, zoals Siemens etc?
- **Leveranciersprestaties worden veelal door derden beïnvloed**

# Checklist for applying PBC, 1/2

Does PBC fit with rules and regulations?	If not, possible remedies?
Is this sector exempt from public procurement legislation?	Ensure that selection criteria are objectively measurable and sufficiently specific
Within the legislation, can long-term contracts be established?	No mitigation possible
Limitations regarding tasks and responsibilities suppliers?	If too restrictive, don't proceed
Does PBC fit with internal policy, priorities and culture?	
Can bonuses/penalties be applied within current financial policies?	Incorporate non-financial incentives
Is the organizational culture focused on short-term results?	Change the culture, change personnel
Are both parties committed to invest in improving service delivery?	Convincing both parties of the importance
Shared interests supported by top management?	Convince or cancel
Is there enough improvement potential?	
Sufficient insight into risks, costs and benefits?	Frequently evaluate and adapt, possibly (temporarily) different contract form
Sufficient win-win for both parties?	Only choose PBC if the experience has surplus value for other applications
Costs of termination overseable?	Determine exit conditions and liabilities upfront

# Checklist for applying PBC, 2/2

Is the service suitable for PBC?	If not, possible remedies?
Are the results objectively and efficiently measurable?	Introducing shared definitions, engaging third party for performance measurements
Is it easy to establish a reasonable performance level?	Collect historical data, possibly via third parties
Are the results only to a small extent dependent on external circumstances?	Investigate possibilities to index for external conditions
Are the results only to a small extent dependent on the influence of the buying firm?	Introduce 'collaborative KPIs' to account for buying firm influence Transfer tasks/responsibilities to reduce interdependencies
Are the results only to a small extent dependent on the influence of the final customers?	Investigate possibilities to index for customer (population) characteristics
Are the parties suitable?	
Do both parties have experience with PBC?	Start small, with new partner use different contract form first
Do both parties have sufficient contract management knowledge and experience?	Training, external knowledge sharing

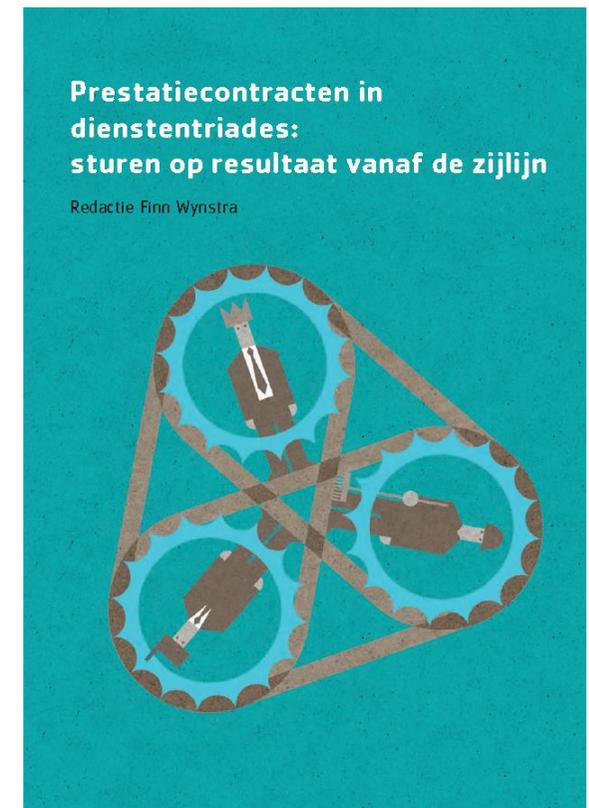


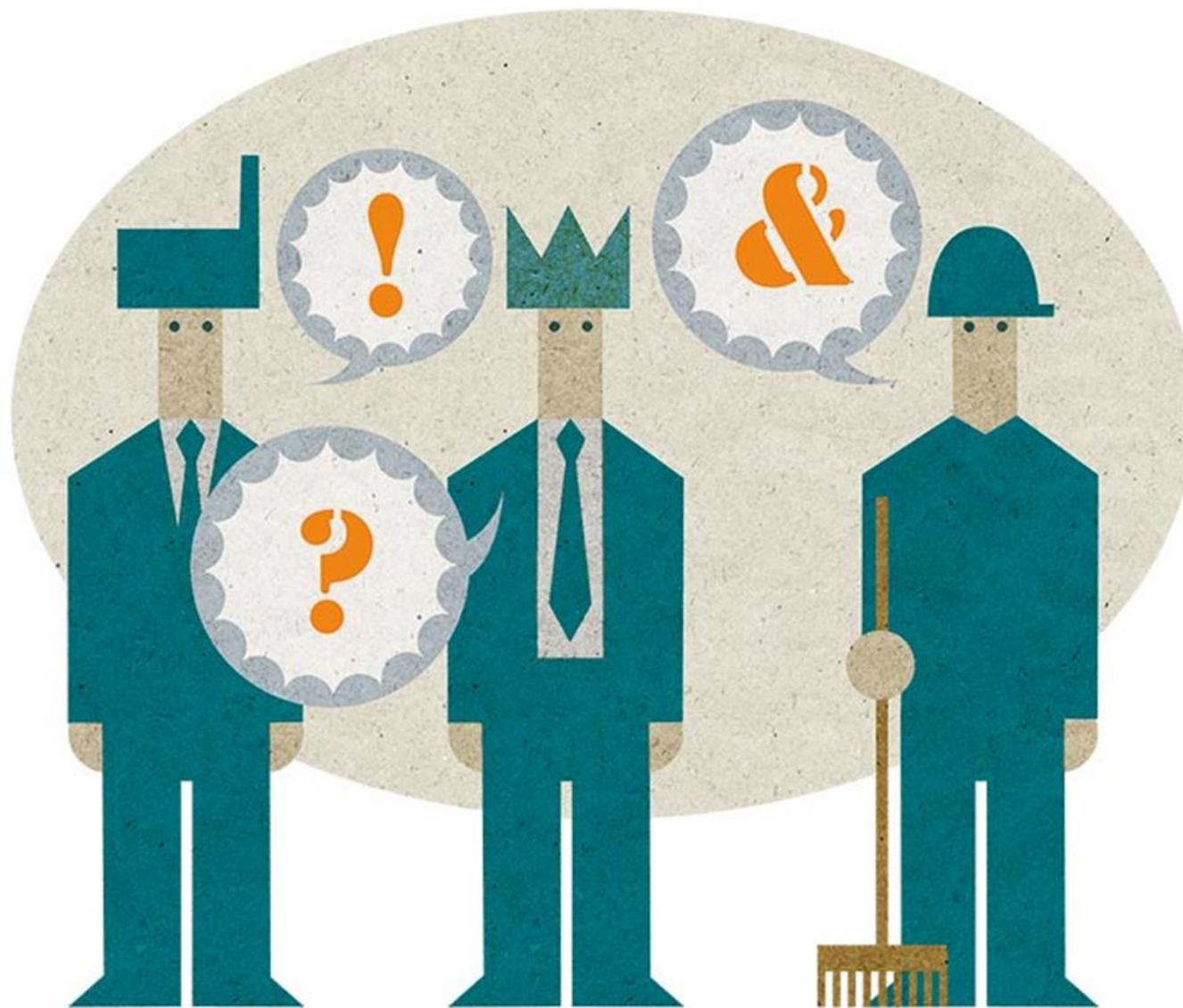
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*Antoine de Saint-Exupéry, “The Wisdom of the Sands”*

**Gratis e-boek:**

<https://www.nevi.nl/nieuws/vrijheid-over-prestatiecontracten-door-finn-wynstra-blog>





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# PBC in practice: cleaning services at NS



Enquête over reizen met NS

Wij willen graag uw mening weten over het reizen per trein. Daarom vragen we u deze enquête te vullen. We vragen uw waardering in een opvallend (kleur)gebied naar vervoerbiljet onderdelen van de treinreis die u noemde en over het reizen per trein in het algemeen. **Geef uw antwoord binnen de hokjes plaatsen, NIJ 'geen mening'** v.v.p. de hokjes lang laten. We realiseren ons dat het niet altijd mogelijk is alle vragen te beantwoorden. Een van onze medewerkers zal het formulier voor u vullen. U kunt het formulier ook bij uw stopplaats inleveren. Hartelijk dank voor uw medewerking.

Jagrid O. Thissen  
Directievoorzitter NS Reizigers

DE REIS DIE U NU MAAKT

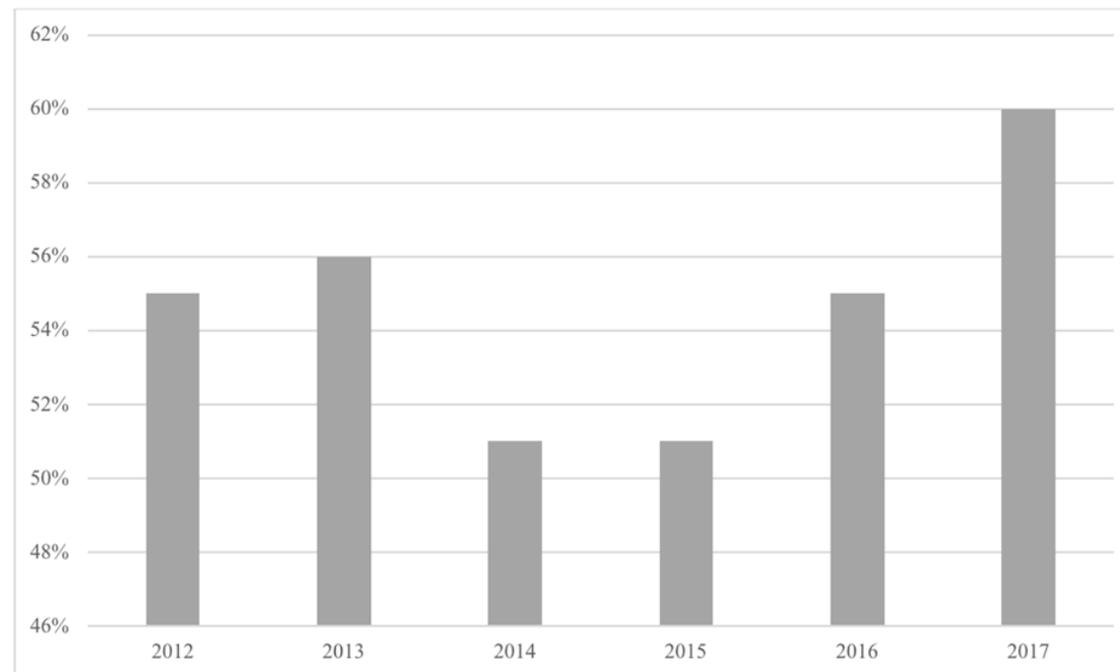
1. Welke treinstops maakt u op dit moment van vertrekstation naar bestemmingsstation?

2. Hoe bent u naar dit vertrekstation gekomen?

3. Wat is voor het vertrekstation uw oordeel over:

4. Wat is voor deze treinstops uw oordeel over:

# Results: passenger satisfaction with train cleanliness



Performance pay introduced, but quickly suspended

Performance pay reinstated

More information sharing, better operational coordination

Source: Franke, Nullmeier & Wynstra, *working paper*.

# When service performance is not only dependent on supplier effort..

**KPN behaviour** that affects possibilities for AO to perform is made **measurable and accountable**:

- Business services like these are highly interactive, and supplier performance is highly dependent on client behaviour, e.g.:
  - Clarity and timely availability of specifications
  - Transparency of anticipated customer demand fluctuations (that can affect demand for server capacity)
  - Compliance of the business with the single sourcing contract with provider (non compliance will affect economy supplier)

Some clients will let suppliers rate client's behaviour ("supplier satisfaction surveys") but typically:

- One-off, ad-hoc
- Not tied to specific service/product but entire relation
- Not tied to financial incentives for supplier/penalties to client

**Table 1: Two-way KPI with their weights over time**

KPI's	2004	2005	2006	2007	Total
Innovation & Redesign	3%	2%	2%	0%	6%
<i>Operational and Enabling KPIs</i>	6%	6%	5%	3%	20%
Total Cost of Ownership	8%	6%	0%	0%	14%
KPN BU Client Satisfaction	2%	2%	2%	2%	6%
Sell to and with Atos	3%	3%	2%	2%	9%
<b>Total of Atos-directed KPIs</b>	<b>21%</b>	<b>18%</b>	<b>9%</b>	<b>6%</b>	<b>55%</b>
Atos wallet share at KPN BUs	6%	12%	6%	3%	27%
IT Governance	3%	6%	2%	0%	11%
<i>Operational &amp; Enabling KPIs</i>	3%	2%	2%	2%	8%
<b>Total of KPN-directed KPIs</b>	<b>12%</b>	<b>20%</b>	<b>9%</b>	<b>5%</b>	<b>45%</b>

Total amount of money at stake: a million Euro number with double digits

Source: Akkermans, Van Oppen, Voss & Wynstra, 2019.

Strategic	<p>KPN satisfaction from 4.2 (2004) to 5.6 (2005), 5.9 (2006) and 6.2 (2007)</p> <p>Cumulatively, €17.9 M paid to Atos; €14.7 M related to positive incentives Atos and €3.2 M tied to KPN penalties.</p> <p>Total cost of ownership savings achieved of €48 M.</p> <p>KPI 'sell to, with, and through Atos' was major success.</p>
Tactical	<p>Host of innovative Atos ideas implemented.</p> <p>Focus on quality and collaboration.</p> <p>Simplification and rationalization drive.</p> <p>Potential conflicts captured and addressed before reaching escalation levels.</p>
Operational	<p>Complaint level fell from 15 to 5% in two years.</p> <p>Service order rework reduced from 14 to 8%.</p> <p>First time right call resolution increased from 82 to 95%.</p>

## Service Process (30 %)

- 5 AO KPIs; incl. measurement of end user satisfaction with the IT-chain of the service process PSTN/ISDN (cf. market research agency)

## Delivery Process (30 %)

- 7 AO + 2 KPN KPIs; incl. “uptime of applications that support the day-process of Delivery PSTN/ISDN” and “KPN reacts on the notification of the service disruption and supplies the required instructions”

## Service and Delivery Chain Mgt (40 %; *enabling*)

- 10 KPIs for AO/KPN/joint; timeliness and completeness of availability of delivery and service protocols

This subgroup of KPIs are used partly as AO-directed KPIs and partly as KPN-directed KPIs: 22,5 % are KPN-directed