

Price setting in a VUCA-world: a simple approach to re-interpret the van-Westendorp-approach (PSM)

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Agenda

- A. The best method to determine WTP?**
 - B. From PSM to “PSM-Plus”**
 - C. Empirical evidence: Project examples**
 - D. Reasons to use 3 price points**
 - E. Pricing in a VUCA-world**
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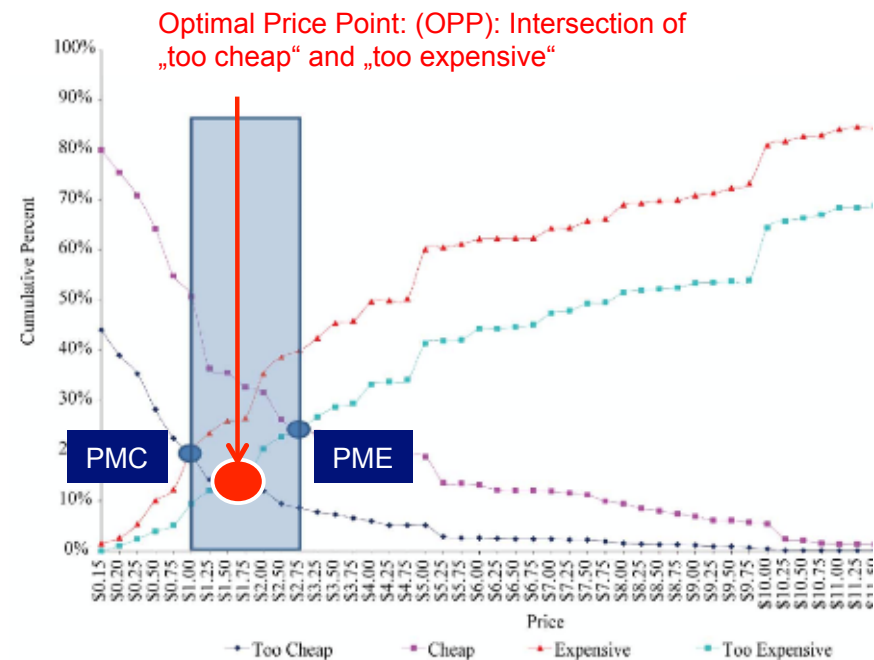
The PSM approach is based on the query of 4 price points - the derivation of the results is based on distribution functions

Query and displayed result for Price Sensitivity Meter (PSM)

Recorded price points*

- 1 **Too cheap** - at what price does this product become too cheap, that is, so cheap that you would question its quality and not buy it?
- 2 **Cheap** - at what price does this product start to seem cheap to you, that is, when does it start to seem like a bargain?
- 3 **Expensive** - at what price does this product start to seem expensive to you?
- 4 **Too Expensive** - at what price does this product become too expensive, that you would not consider buying it?

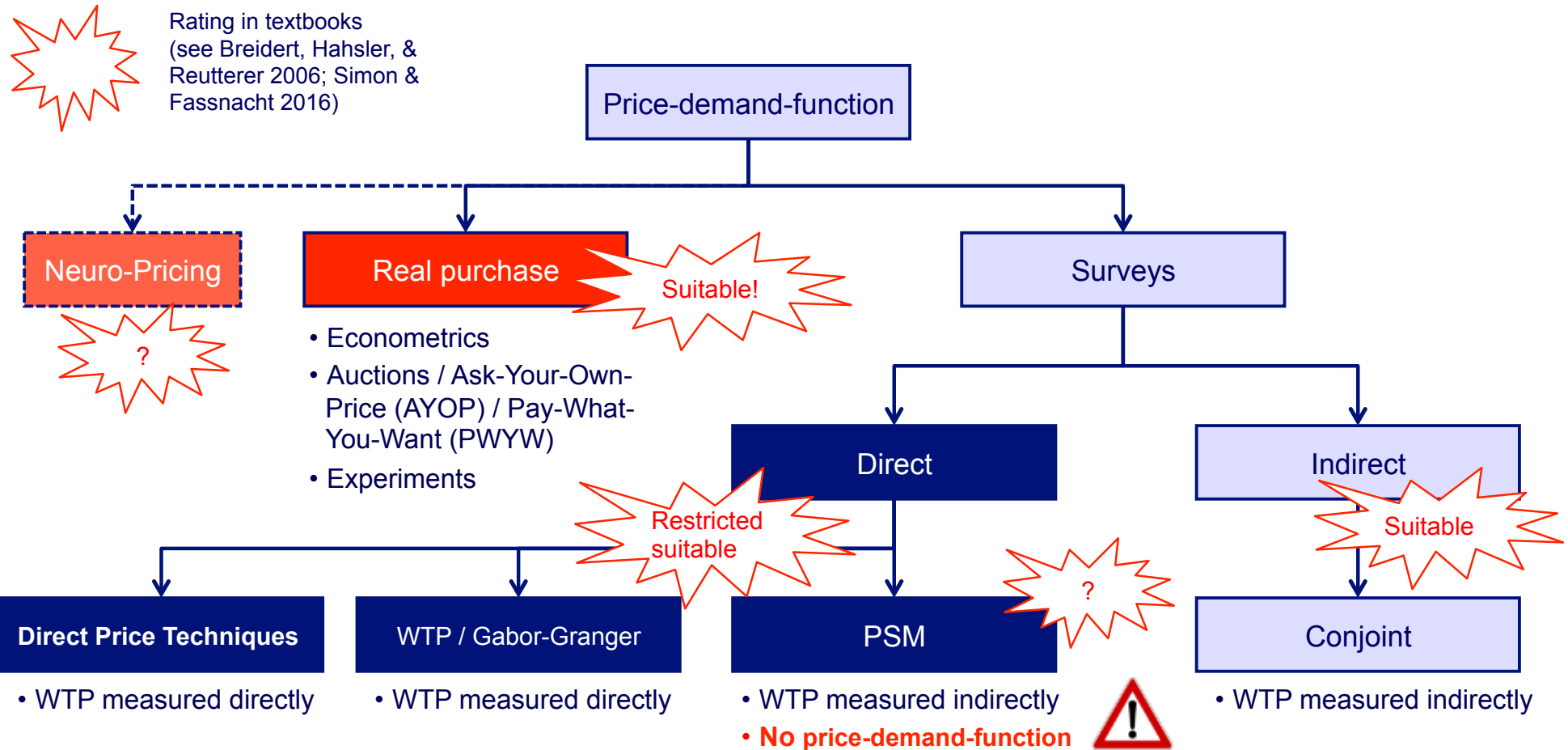
PSM visually displayed**



- Points are displayed in ascending order. ** The intersection of the reversed Too Cheap curve with Cheap curve according to VW is called the point of “marginal cheapness” (PMC). The intersection point of the reversed Expensive curve with Too Expensive curve is called “marginal expensiveness” (PME).

In price optimization based on surveys, indirect and direct methods compete ... PSM is (only) one option

Ways to determine the price-demand-function



Despite the weaknesses described in the scientific literature, the PSM approach is widely used

Usage of PSM in practice and drivers

Usage of PSM in practice

- Simon & Fassnacht (2016):
“This method has gained in importance in market research practice in recent years”
- Steiner und Hendus (2012):
Perspective of the market research institutes in Germany: Van Westendorp approach (PSM) is used as frequently as CBC
- Miller und Hofstetter (2009):
Company Perspective: Pricing Manager: 68% of companies use direct approaches to measuring WTP
- Is there a Research-Practice-Gap?

Drivers to use PSM ...

- 1 Looking for a simple approach (example mobile research)
- 2 Search for fast results (increased dynamics in price management)
- 3 Looking for transparent methods (resistance to black box-tools)
- 4 Search for cost-efficiency (increased price sensitivity of companies)
- 5 Increased attention to the effects of Behavioral Economics in pricing

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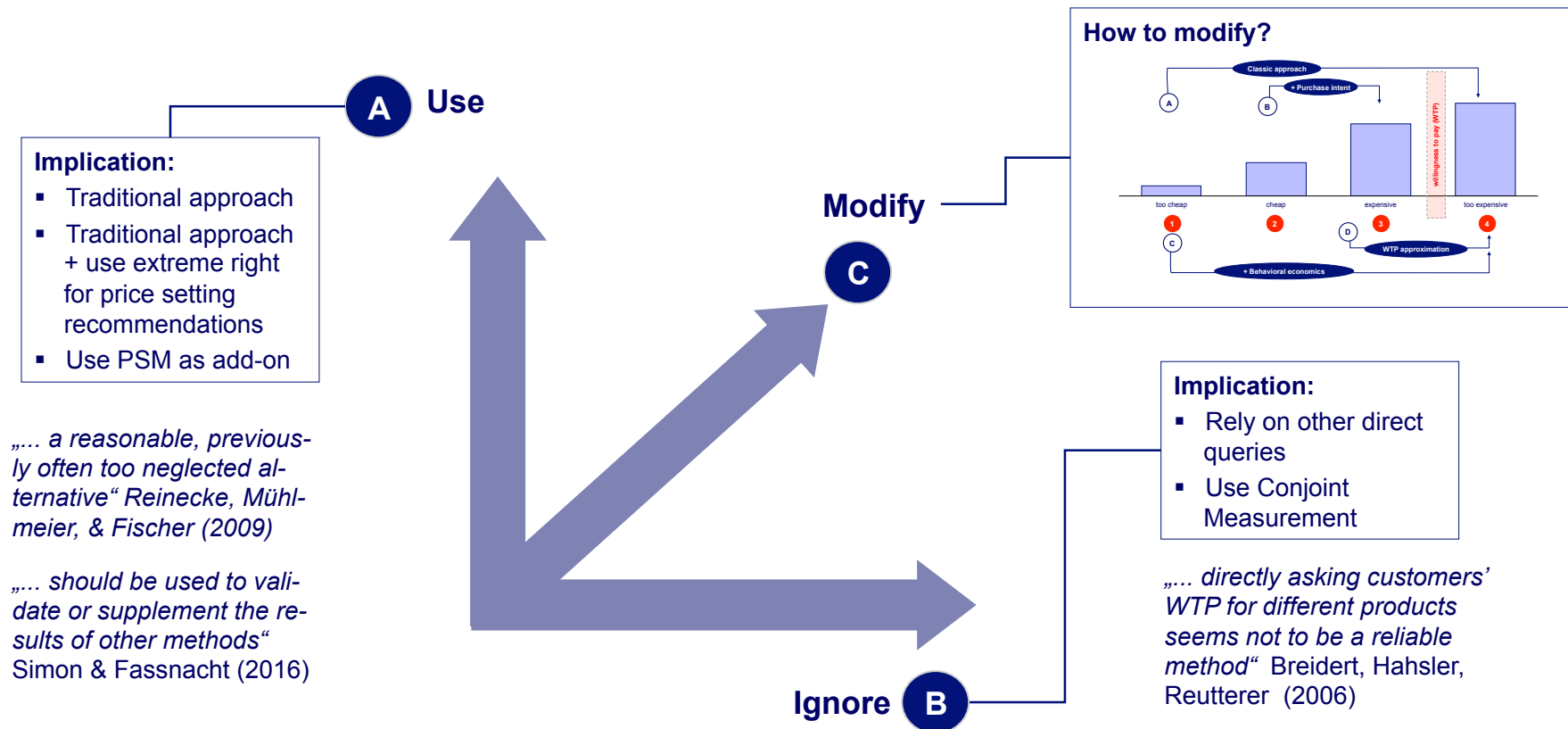
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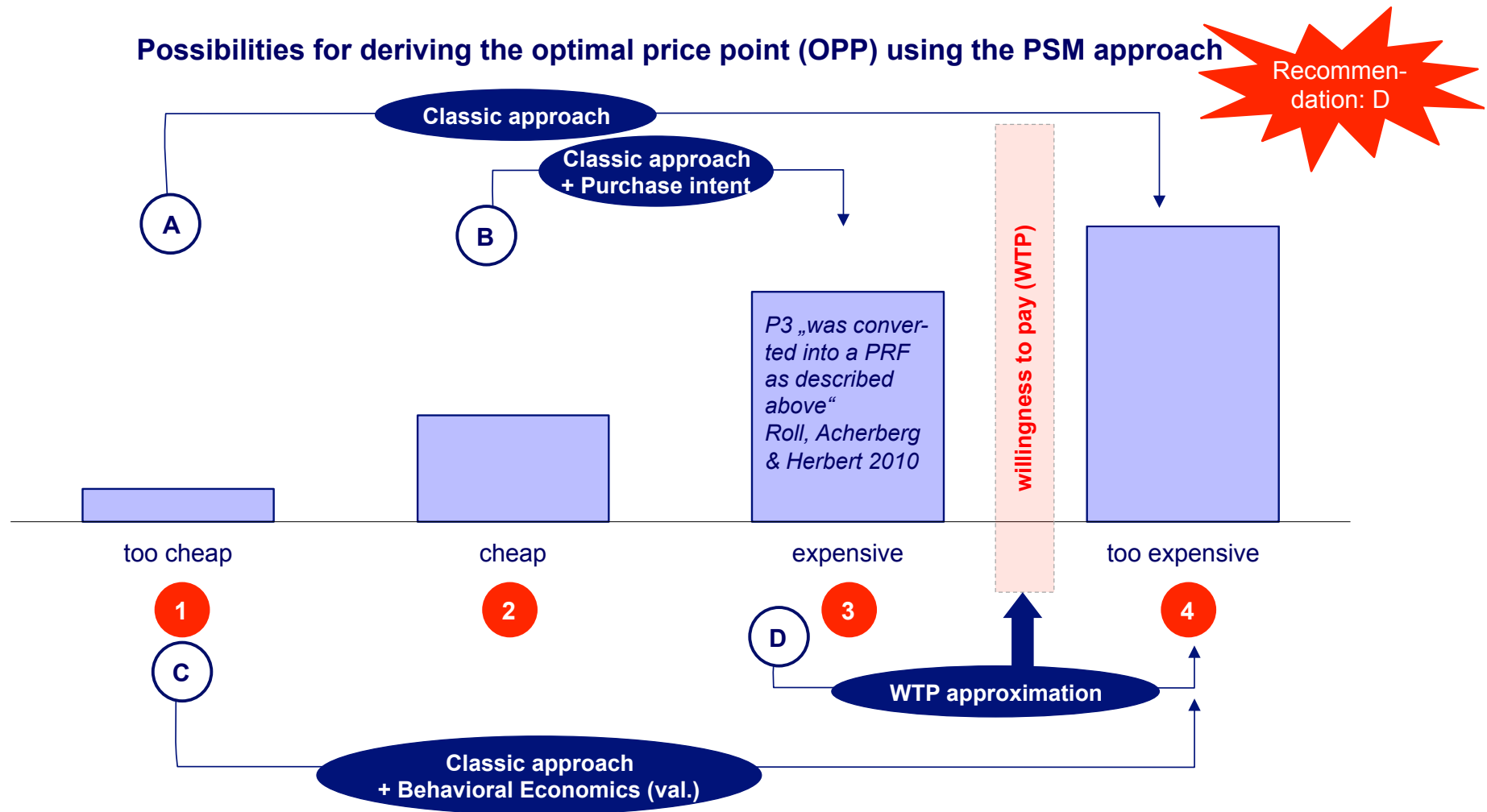
How PSM should be used when determining prices?

Assessment of the PSM approach in terms of practical application



PSM Approach: Which price points are really relevant for estimating the price-demand function?

Possibilities for deriving the optimal price point (OPP) using the PSM approach



Source: **exeo** Strategic Consulting AG based on Krämer, Dethlefsen & Baigger, (2017)

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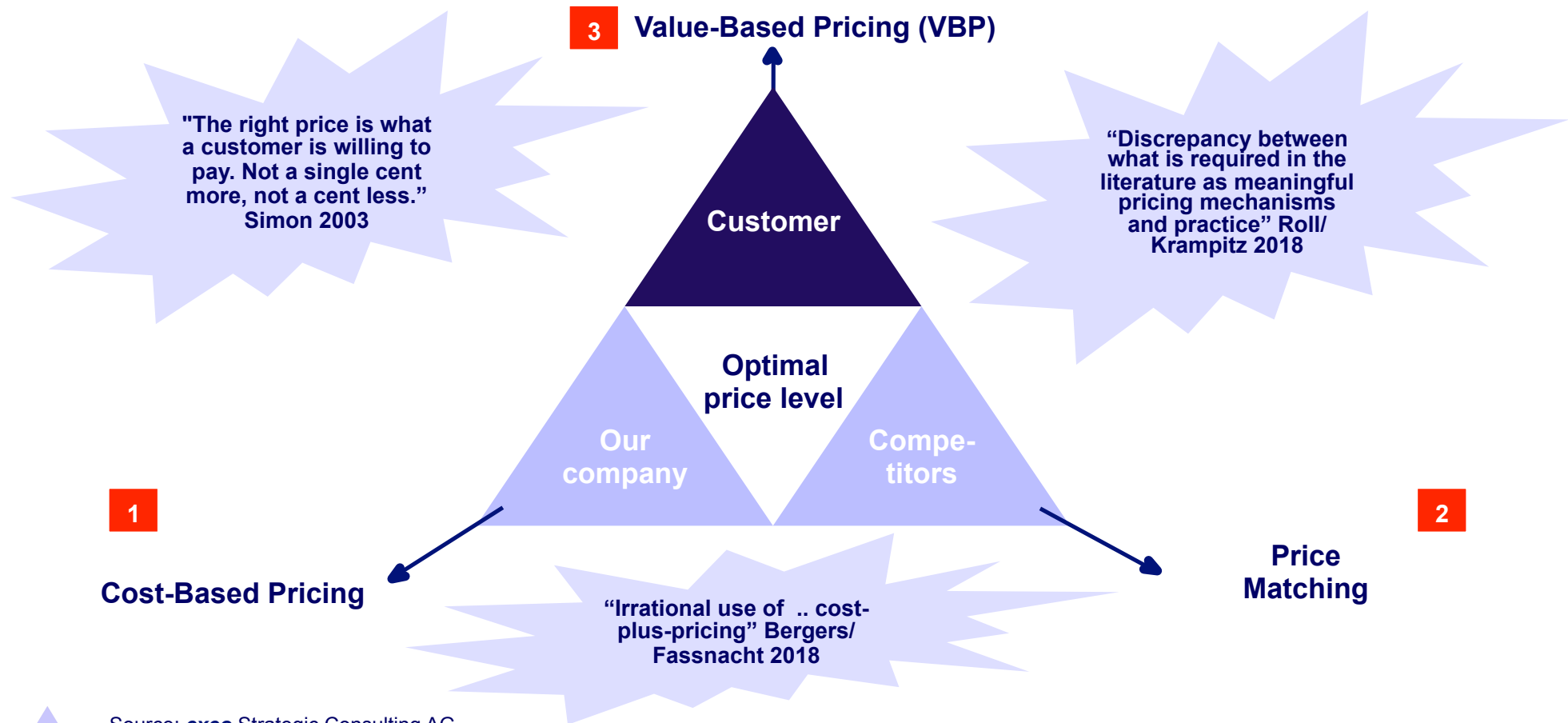
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Mainstream of pricing research and consulting: Value-Based Pricing (VBP)

Framework for decision-making



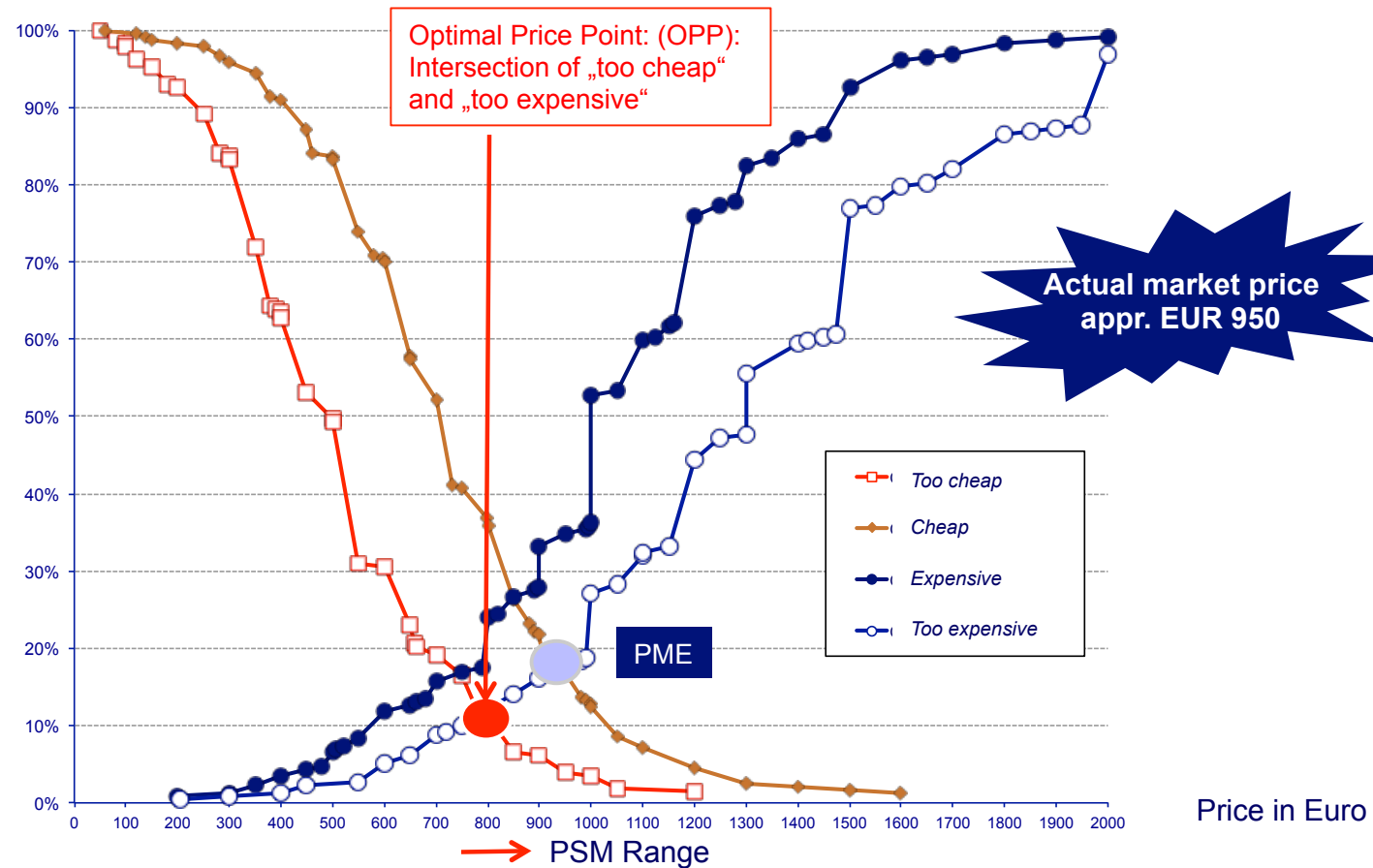
Source: **exeo** Strategic Consulting AG

Classic PSM: How does the “workhorse” instrument in marketing research perform?

Example

Demand

Results from market survey and data analyses



Determine the price demand function – based on WTP data: price of appr. EUR 1.100 generated highest profits

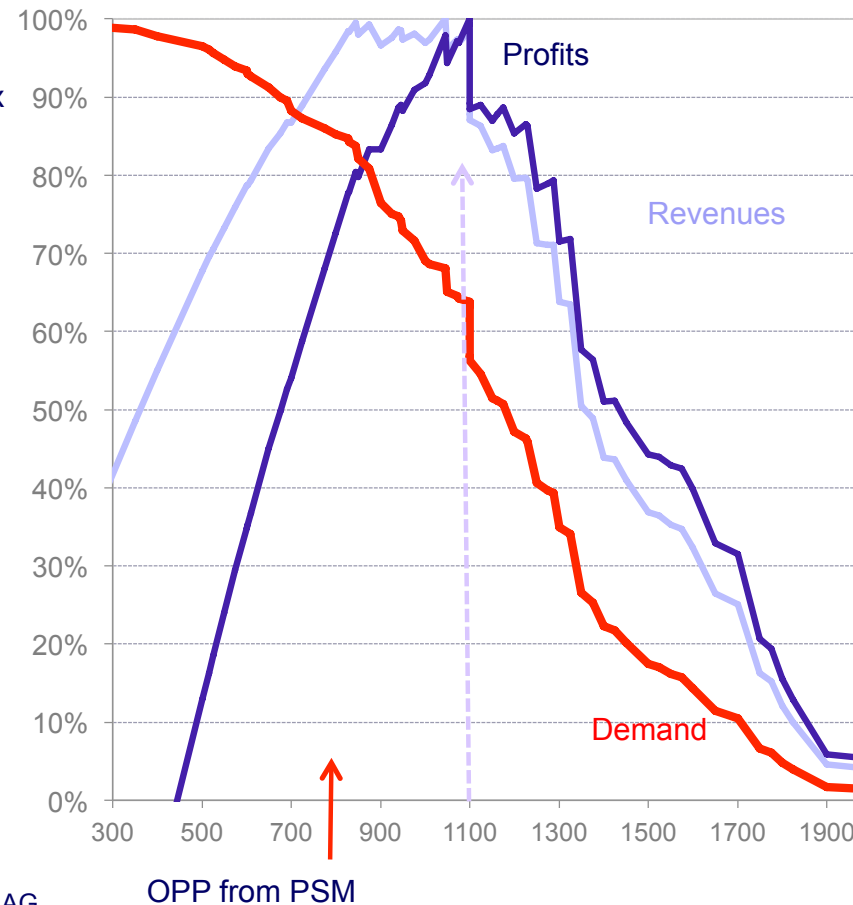
Example

Demand,
revenues,
profits, (index
max.=100%)

Classical PSM approach

- Actual market price appr. EUR 950 (optimal price point assumed to be even higher)
- OPP very low (EUR 800)
- PME close to market price

Results from market survey and data analyses



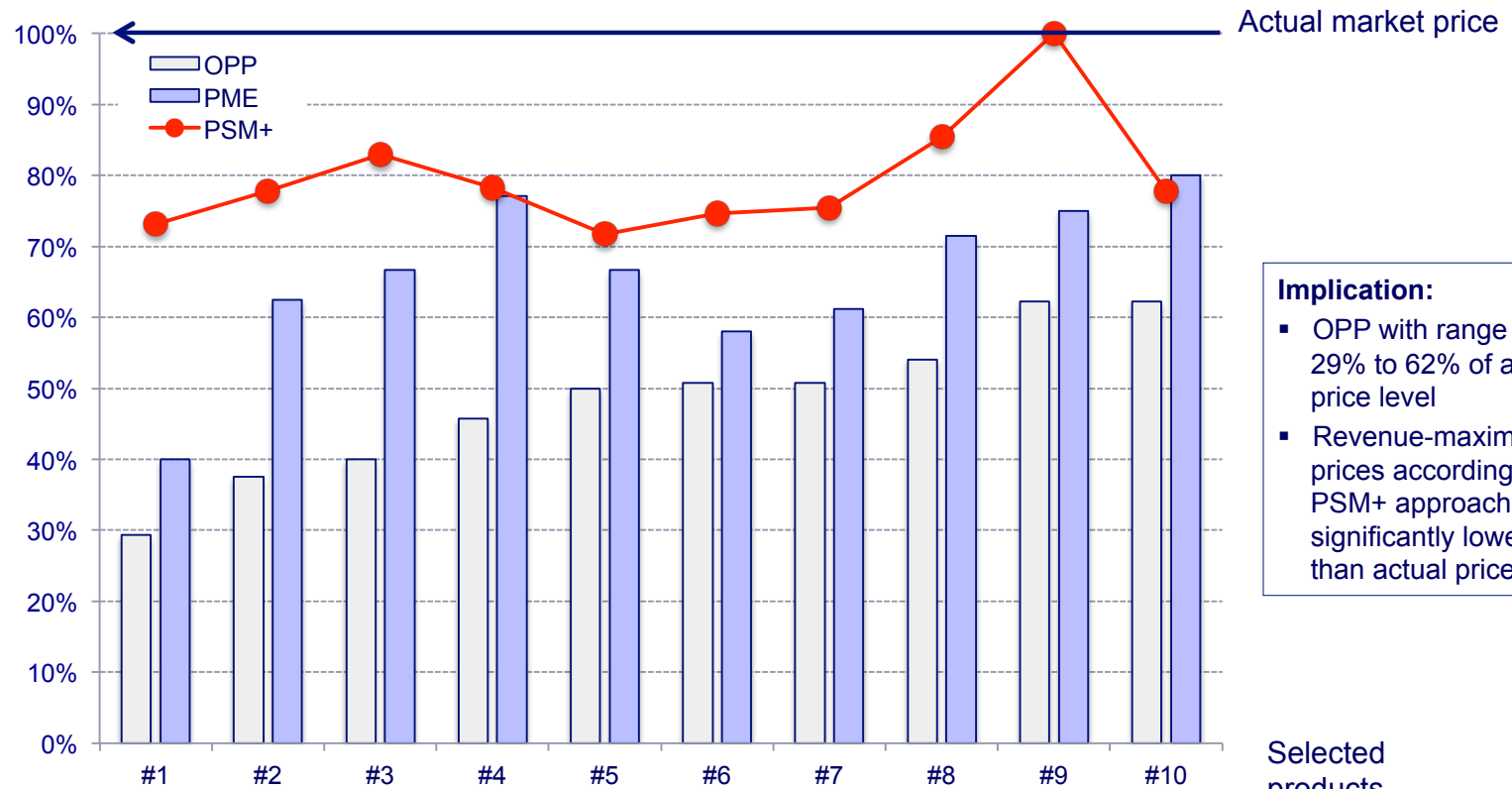
What is the PSM-Plus approach ...?

- Van Westendorp (1976) recommends 4 price points: Too cheap, cheap, expensive, too expensive (no purchase)
- PSM-Plus: Use P3/4 as proxy for WTP

Underestimation the optimal price using PSM is sometimes considerable: Company with critical perceived “value for money”

Overview project examples: restaurant

Price in % of
actual market
price



Implication:

- OPP with range of 29% to 62% of actual price level
- Revenue-maximizing prices according to PSM+ approach significantly lower than actual prices

Apple is known to meet the willingness to pay in the market

Example: High-involvement product - Current offer iPhone 6s (32)

The iPhone 6s is offered as a standard version in silver and with 32 GB of memory.



iPhone 6s

Hier ist dein neues iPhone 6s.

iPhone 6s Silber 32 GB

Preis 519,00 €

MediaMarkt

Apple iPhone 6s 32 GB Silber

Apple

519.-

Conrad

Apple iPhone 6s 32 GB Spacegrau

519,00 €

Price in the Apple Store and in the electronics department store: 519 EUR (Oct. 2017)

Experimental design: overall, the tested direct methods for measuring WTP come to realistic results

WTP for iPhone 6s (32): results from experimental design¹⁾

	1 Test 1	2 Test 2	3 Test 3	4 Test 4
	PSM 4 points (WTP = p3+p4)	PSM 2 Points (WTP = p3+p4)	WTP open	WTP open + incentive to buy
Sample size n = ...	260	259	266	260
iPhone owners	24%	16%	26%	20%
Apple sympathizers	29%	22%	29%	30%
WTP > 0 EUR	38%	38%	30%	42%
Average WTP (€) ²⁾	472 (181)	389 (149)	392 (120)	358 (154)
Revenue-maximizing price (€)	349	349	349	299
Profit-maximizing price (€)	540-549	525-549	450	499
Market share in %	14%	10%	13%	12%

299 €
PSM

1) Assumption: cost = 300 EUR. 2) Values without indication 0 EUR.

Source: **exeo** Strategic Consulting AG; Krämer 2017

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Relevance of price point “inexpensive” for price optimization

Strategic Information

- “Perceived inexpensiveness” plays a strategic role in pricing – besides aspects as the WTP and perceived value for money

Warm up

- In the interview, a conditioning of the respondent is required - the survey situation must be adapted as well as possible to the purchase situation

Framing

- Evaluating the “perceived inexpensiveness” could also influence the rating of price points „expensive“ and “too expensive“

Hypothesis:

- information on the maximum willingness to pay (WTP) for a product in the online interview are influenced by a prior evaluation of the price point “inexpensive”

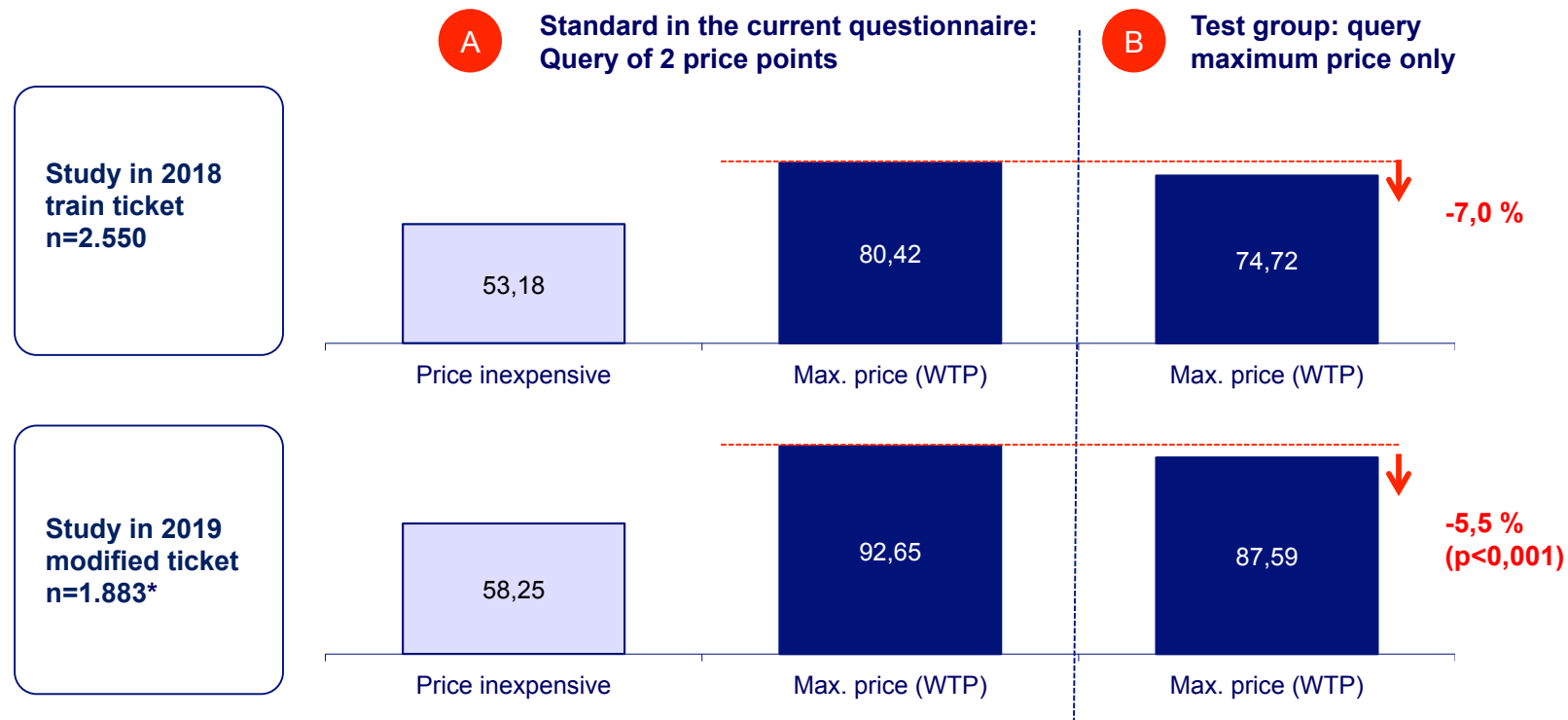
Method

- 2 online studies (conducted 2019 and 2018)
- Focus: determine additional revenue effects
- Respondents: buyers of a promotional ticket (flat price)
- Experimental design at the end of the interview

The average maximum price (WTP) is increased when respondents are asked to indicate price point “inexpensive”

Experimental design to determine the maximum ticket prices [mean values EUR]¹⁾

Example study train tickets GER



* By using Chi-square tests, it could be shown that the two groups did not differ statistically in terms of age ($p = 0.41$), rail usage intensity ($p = 0.74$) and BahnCard ownership ($p = 0.11$),

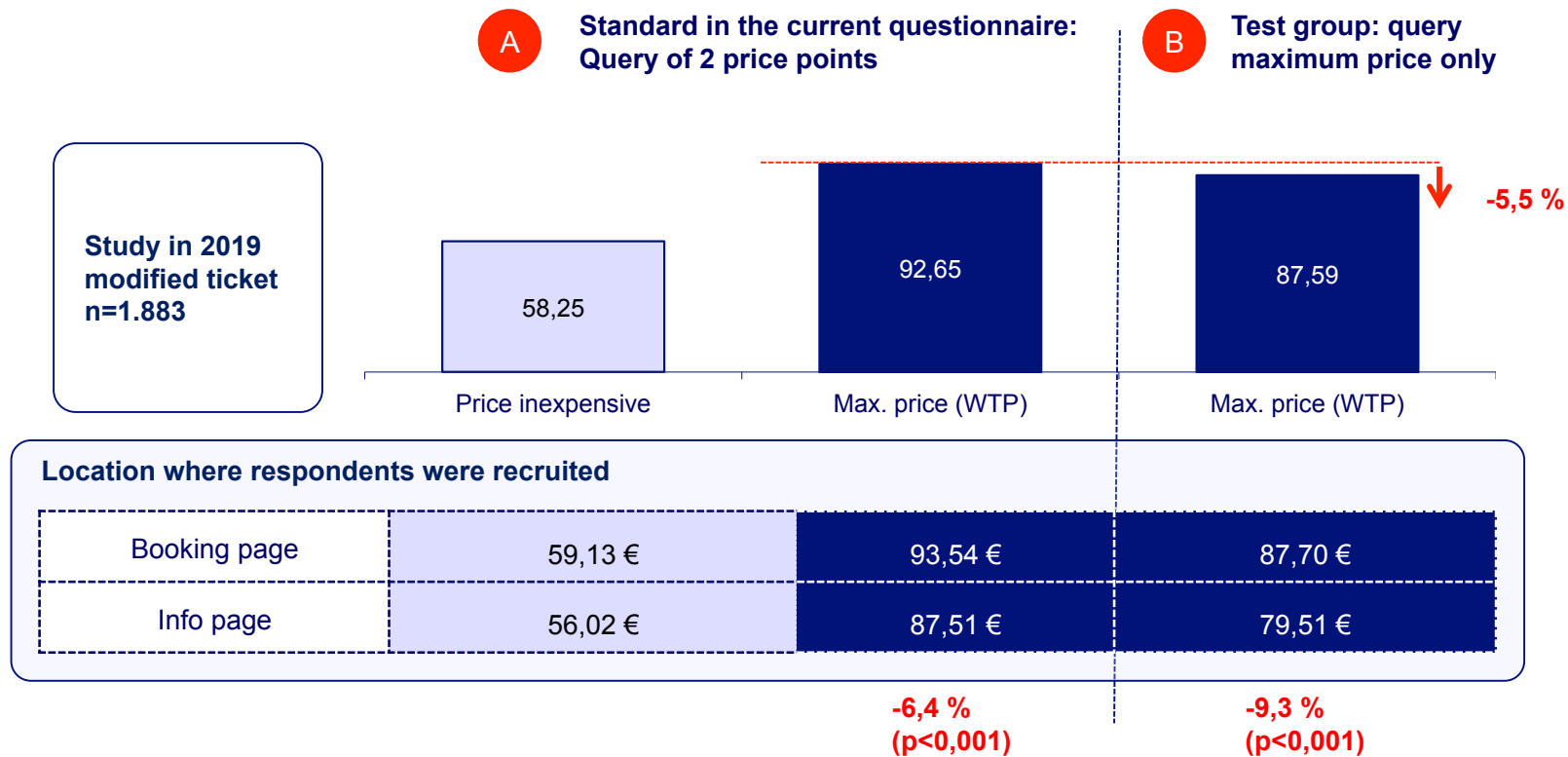
1) Up to which ticket price for this trip (round trip with all travellers) would the offer be considered cheap? and: From which ticket price would you have decided for this trip (round trip with all passengers) to stop using the train? Result for single travellers.

Source: **exeo** Strategic Consulting AG

The WTP obviously depends on how close the users are to the real train journey

Experimental design to determine the maximum ticket prices [mean values EUR]¹⁾

**Example study
train tickets GER**



1) Up to which ticket price for this trip (round trip with all travellers) would the offer be considered cheap? and: From which ticket price would you have decided for this trip (round trip with all passengers) to stop using the train? Result for single travellers.

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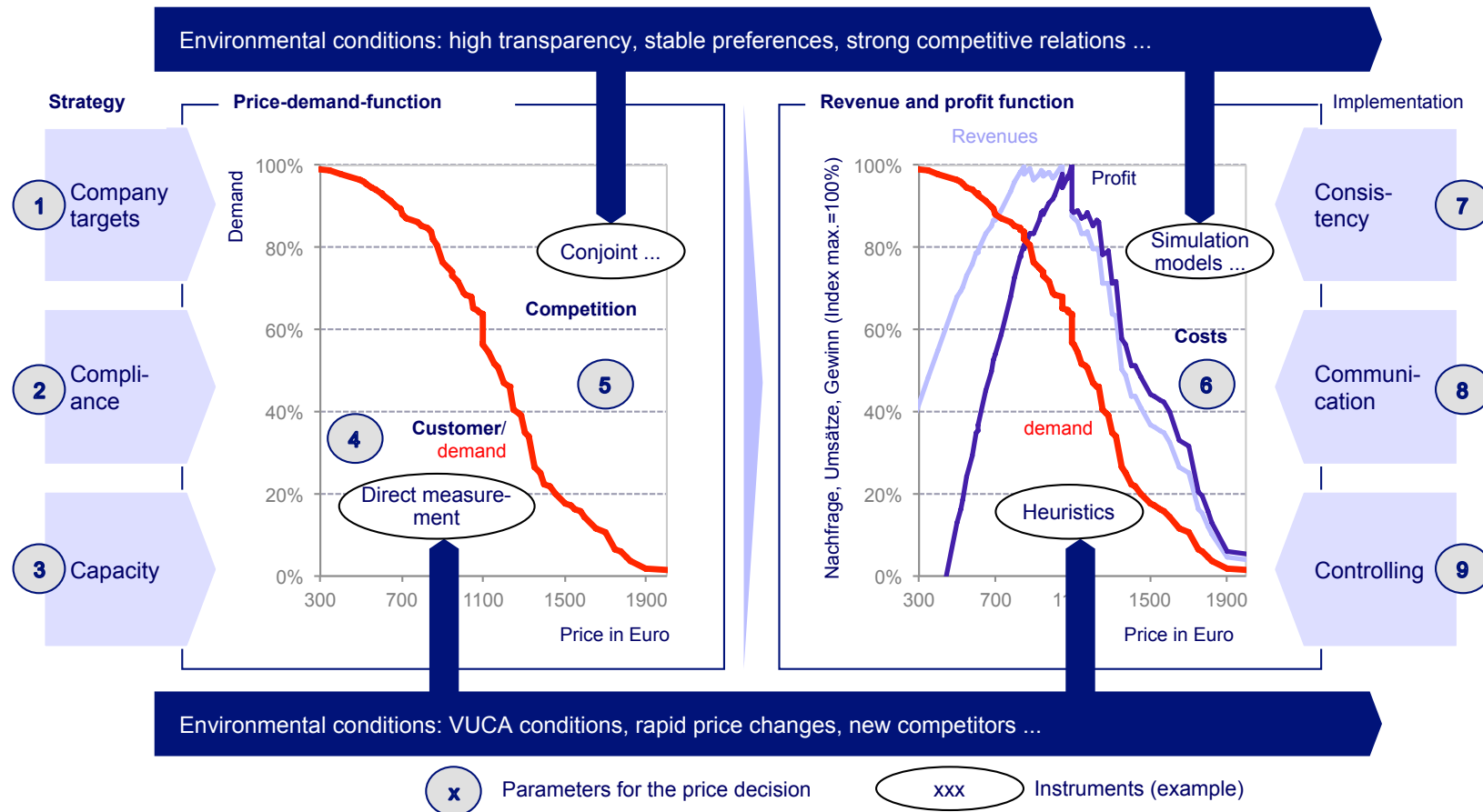
Recommendation: Use 3 price points for optimized price setting ... for different reasons

The modified PSM-approach “PSM-Plus”

	Strategic relevance	Tactical relevance	Advantages ...
Price point “inexpensive” (“cheap”)	<ul style="list-style-type: none"> Segment view Price positioning Actual price vs. ... 	<ul style="list-style-type: none"> Framing effect Validate WTP-Input 	1 Simple approach
Price point “expensive”	<ul style="list-style-type: none"> Input WTP approximation 	<ul style="list-style-type: none"> Consideration of price thresholds 	2 Fast results
Price point “too expensive”	<ul style="list-style-type: none"> Input WTP approximation 	<ul style="list-style-type: none"> Consideration of price thresholds 	3 Transparent approach
			4 Cost-efficient approach
			5 Fit to Behavioral Pricing

A changed market environment (VUCA) inevitably leads to a rethinking of the process of price optimization and tools used for it

Pricing in a VUCA-world: today and tomorrow: The 9-C-model for price setting



Thank you for your attention!

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