

PRESENTATION:
PRICE AS A COST-PLUS
STRATEGY AND ITS
IMPLICATION

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Agenda:

- Challenges with a cost-plus pricing strategy regarding transfer prices and pricing implications in a Danish maritime company producing generators and power plants for ships.
- Difficulties in estimating costs exemplified by the cost-plus problem (Kaplan & Atkinson, 1998, p. 459).
- How to manage costs affecting pricing.

- Transfer pricing (TP); criteria and methods
 - Main criteria:
 - “The optimal transfer price for a product or service is its opportunity cost – it is the value forgone by not using the transferred product in its next best alternative use.” (Zimmerman, p. 178)
 - But this criteria has to be balanced against (many) other criteria. The transfer price also has to be
 - Congruent
 - Controllable
 - Manageable regarding to avoid manipulation/bias and
 - Cost effective to produce
 - The choice of a transfer pricing method in companies is important, because
 - “it does not merely reallocate total company profits among business units; it also affects the firm’s total profits.” (Zimmerman, p. 177)

From manufacturing to sales departments, from service departments (IT, HR...) to other departments

Selling division

1. Revenue (the transfer price).
2. Cost of goods sold
3. Contribution margin
4. Capacity costs
(Business sustaining not transferred)
5. Profit

Transfer price



Buying division

1. Revenue
2. Cost of goods sold (the transfer price)
3. Capacity costs
(wages etc.)
4. Profit

1. Selling division is interested in a high price – since it is held responsible for costs or profit.
2. Rewarded on CM or profit.

1. Buying division is interested in a 'low' price – since a low price increases profit.
2. Reward is based on profit.

TP methods and their advantages and disadvantages

Method	Advantages	Disadvantages
Market-based transfer prices	<ul style="list-style-type: none"> Objective (?!) Less subject to manipulation Often leads to correct long-run make/buy decisions 	<ul style="list-style-type: none"> Only exist for some products Might not capture interdependencies among divisions
Variable-cost transfer prices	<ul style="list-style-type: none"> Can approximate the opportunity cost of transferring one more unit Gives the buying division incentive to purchase the correct number of units if selling division has excess capacity 	<ul style="list-style-type: none"> Variable cost might vary with output Variable cost can be a poor approximation of opportunity cost Selling division has incentive to overuse variable cost
Full-cost transfer prices	<ul style="list-style-type: none"> Avoids disputes over which costs are fixed and which are variable Can approximate opportunity costs 	<ul style="list-style-type: none"> Selling division can export its inefficiencies to the buying division Death spiral Poor estimation of opportunity costs Imprecise calculations
Negotiated transfer prices	<ul style="list-style-type: none"> Both selling and buying divisions have incentives to transfer the number of units that maximize profits 	<ul style="list-style-type: none"> Time consuming Depends on the relative negotiating skills of the two divisions (power)
Reorganize the buying and selling division	<ul style="list-style-type: none"> Eliminates costly disputes over transfer pricing 	<ul style="list-style-type: none"> Reduces the benefits from having two decentralized responsibility centers

Generators used in ships



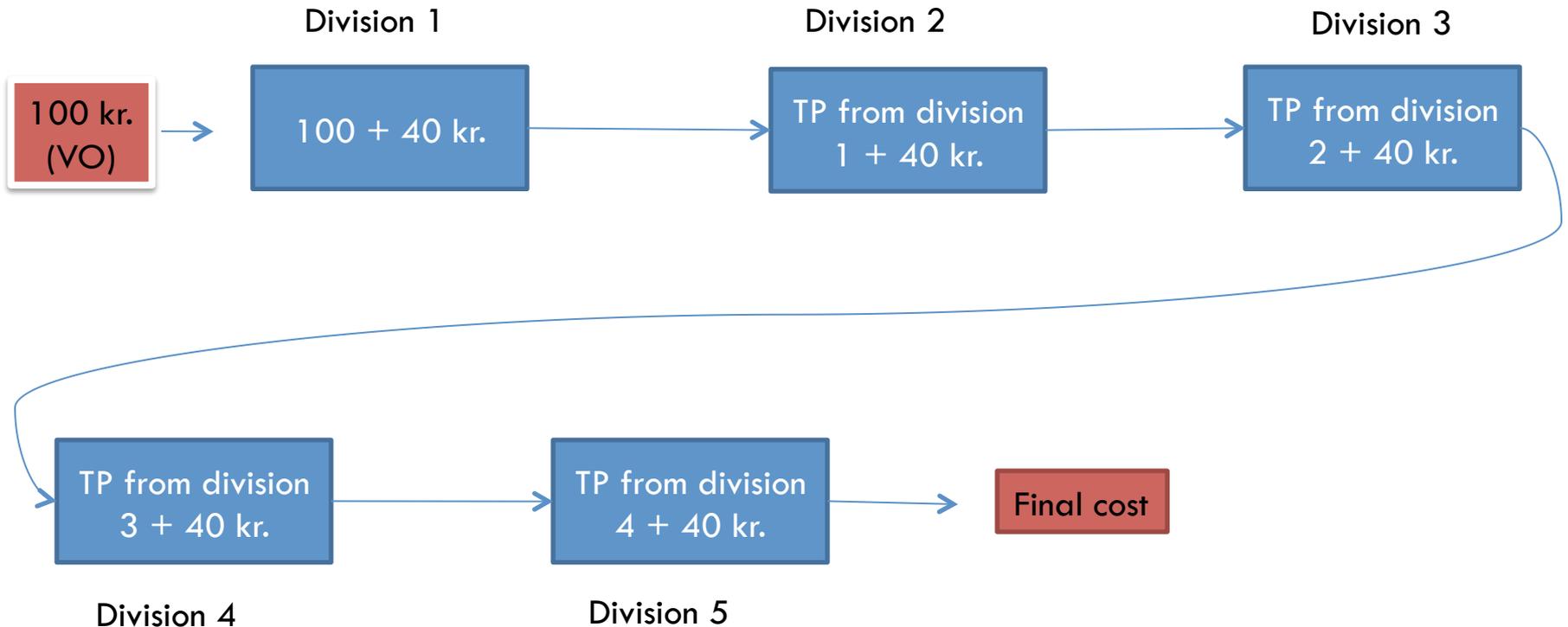
Power plant



In the following example the final cost is an outcome from the following four (TP) methods:

1. The total costs transferred from each division are marked up with 15% with no capital costs calculated
2. The mark-up is only calculated for the extra variable cost of 40 kr. which is added in each center. Each portion of 40 kr. is only marked-up once.
3. The mark-up is only calculated for the use of assets (100 kr. in each center). Each asset is only marked-up once.
4. Only variable costs are transferred - no mark-up calculated.

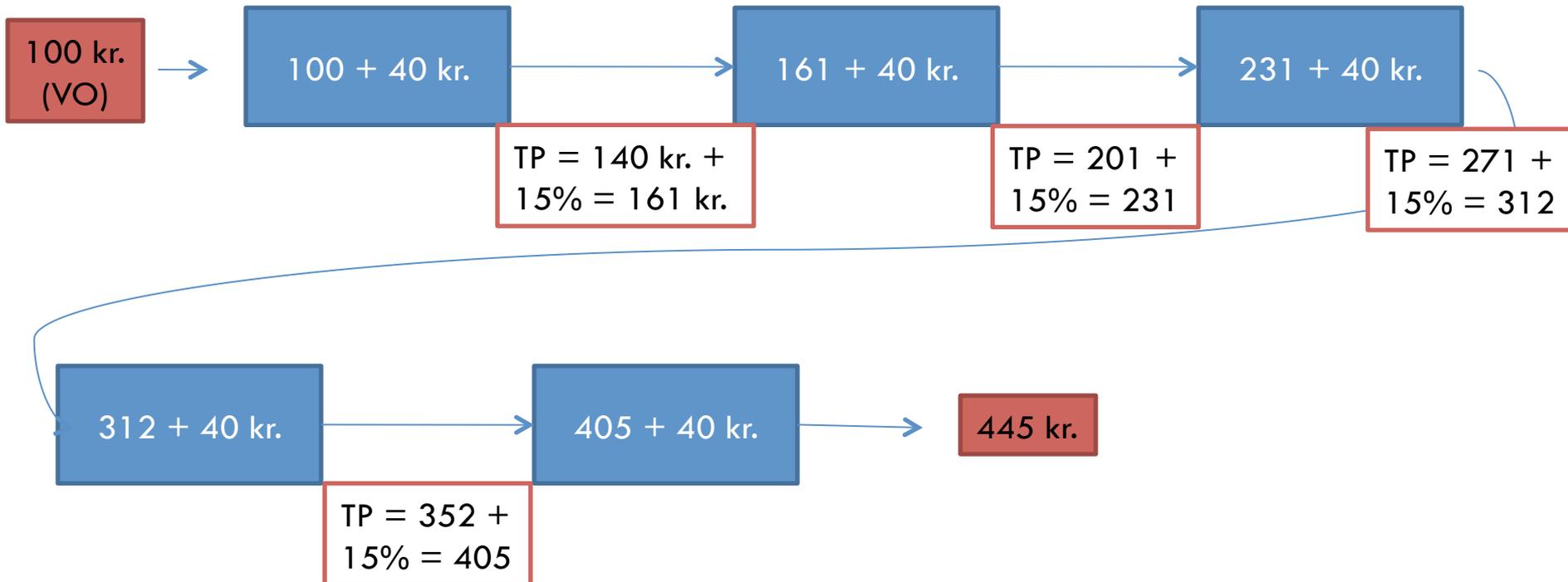
The cost-plus problem - inspired by a case company in the Danish Maritime Industry



Assumptions:

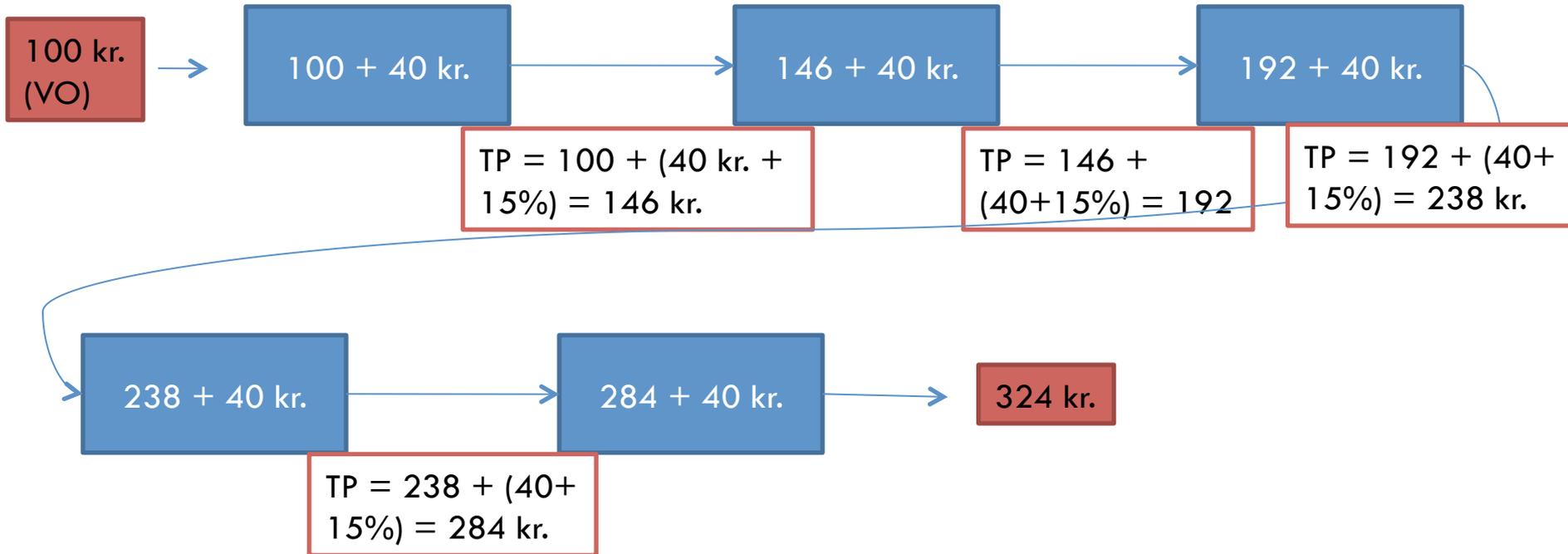
1. Cost of capital 15%
2. The 40 kr. is the extra variable costs incurred in each division.
3. Each division holds 100 kr. in assets

1. Total Cost plus 15%, no capital cost



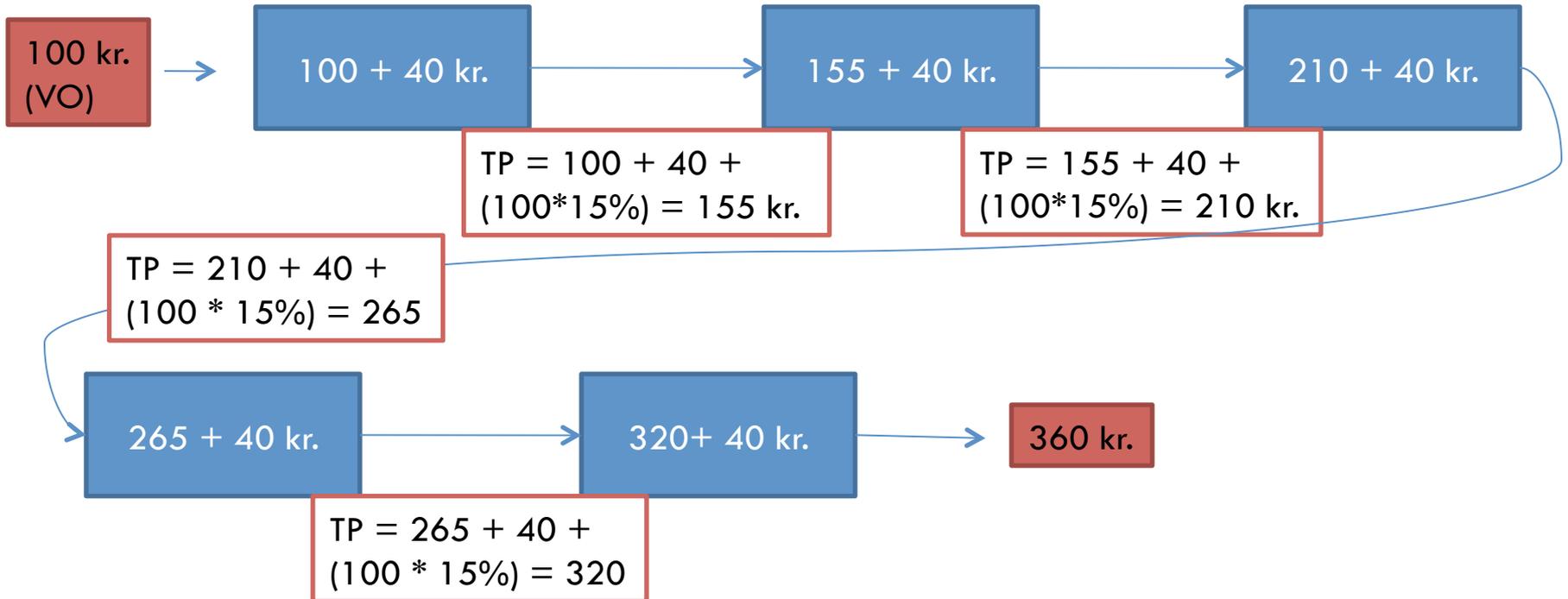
Price?

2. 'Plus'/mark-up is calculated only for the incremental cost in each division (40+15%).



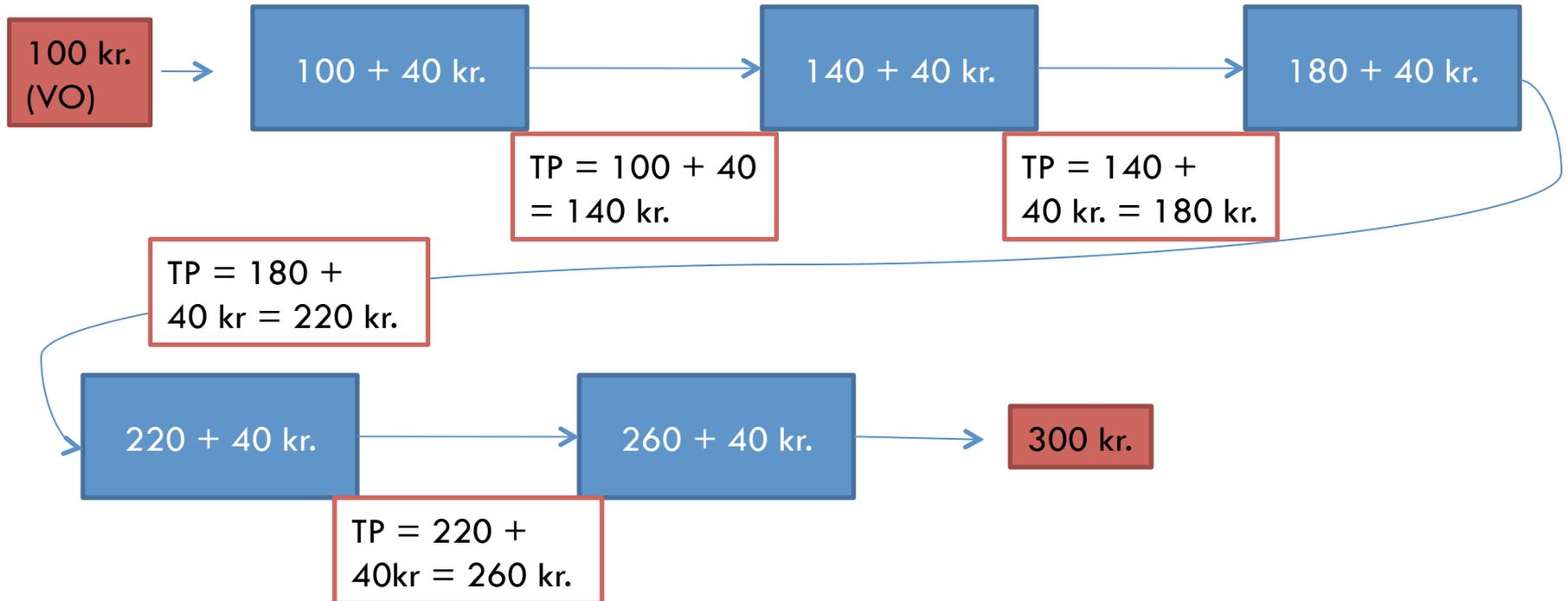
Price?

3. 'Plus', VC + mark-up for assets (+ 15 kr)



Price?

4. 'Plus' is not calculated, only VC



Price?

Conclusions

- Criteria for ‘good performance measures’ are important when analyzing transfer prices – these has to be taken into consideration due to effects on costs/CM/profit. Often ignored!
- ‘Final costs’ varies much (in the ex. between 300 – 445) with huge impact on final price. Double (triple) mark-up is a potential, dangerous trap. In case of 1) decentralized decision rights and 2) alternative, available market suppliers ‘death spirals’ might occur.
- Costing practices and choice of transfer price method influence the allocation of intra organizational/divisional ‘profit’ – and (also) through this process final prices and firm profit.