



Aalto University
School of Economics

FINANCIAL RESULTS CONTROL SYSTEMS

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Performance Management

AGENDA

- Financial responsibility centers
- Financial indicators for measuring performance
- What is EVA and why has it been argued to be superior to ROCE?
- What are the implications of Value Based Management to management system design?
- Purposes of budgets
- Problems with traditional annual budgeting
- Beyond Budgeting
- Rolling Forecasting

METHODS FOR FINANCIAL CONTROL?

- How can you control costs in an organization? Give few examples!
- Financial control does not mean only control of costs, but also revenues and profitability!
- If you control revenue and cost, do you "by definition" control also profitability?
- What are the advantages of financial results control systems?

TYPES OF FINANCIAL RESPONSIBILITY CENTERS

- Investment centers
 - Profit centers
 - Revenue centers
 - Cost centers
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- In practice, these can mean different things in different firms, e.g. profitability of a profit center can be measured in many different ways

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MEASURING PROFITABILITY

- Profit
 - Gross Profit
 - EBITDA
 - EBIT / Operating Profit
 - Net Profit
 - Return on investment based measures
 - ROI, ROIC, ROCE, RONA, ROE, CROI, RORAC, RoEC, etc.
 - Residual income based measures
 - RI, EVA, EP, etc.
 - Cash Flow
-

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IN ECONOMIC VALUE ADDED (EVA) COST OF CAPITAL IS DEDUCTED FROM PROFIT

- EVA is net operating profit after taxes minus a charge for the opportunity cost of the capital invested
- $EVA = NOPAT - ((TOTAL\ ASSETS - NON\ INTEREST\ BEARING\ LIABILITIES) \times WACC)$
- EVA is an estimate of the amount by which earnings exceed or fall short of the required minimum rate of return for shareholders or lenders at comparable risk.

ECONOMIC VALUE ADDED

- EVA = Economic Profit = Residual Income (RI)

$$\text{EVA} = \text{PROFIT} - \text{CAPITAL CHARGE}$$

$$\text{EVA} = \text{NOPAT} - ((\text{TOTAL ASSETS} - \text{NON INTEREST BEARING LIABILITIES}) \times \text{WACC})$$

$$\text{EVA} = (\text{ROI} - \text{REQUIRED RATE OF RETURN}) \times \text{INVESTED CAPITAL}$$

$$\text{NOPAT} = \text{NET OPERATING PROFIT AFTER TAX} = \text{OPERATING PROFIT or EBIT} \times (1 - \text{Tax Rate})$$

- NOPAT evaluates profitability as if no leverage is used

QUIZ

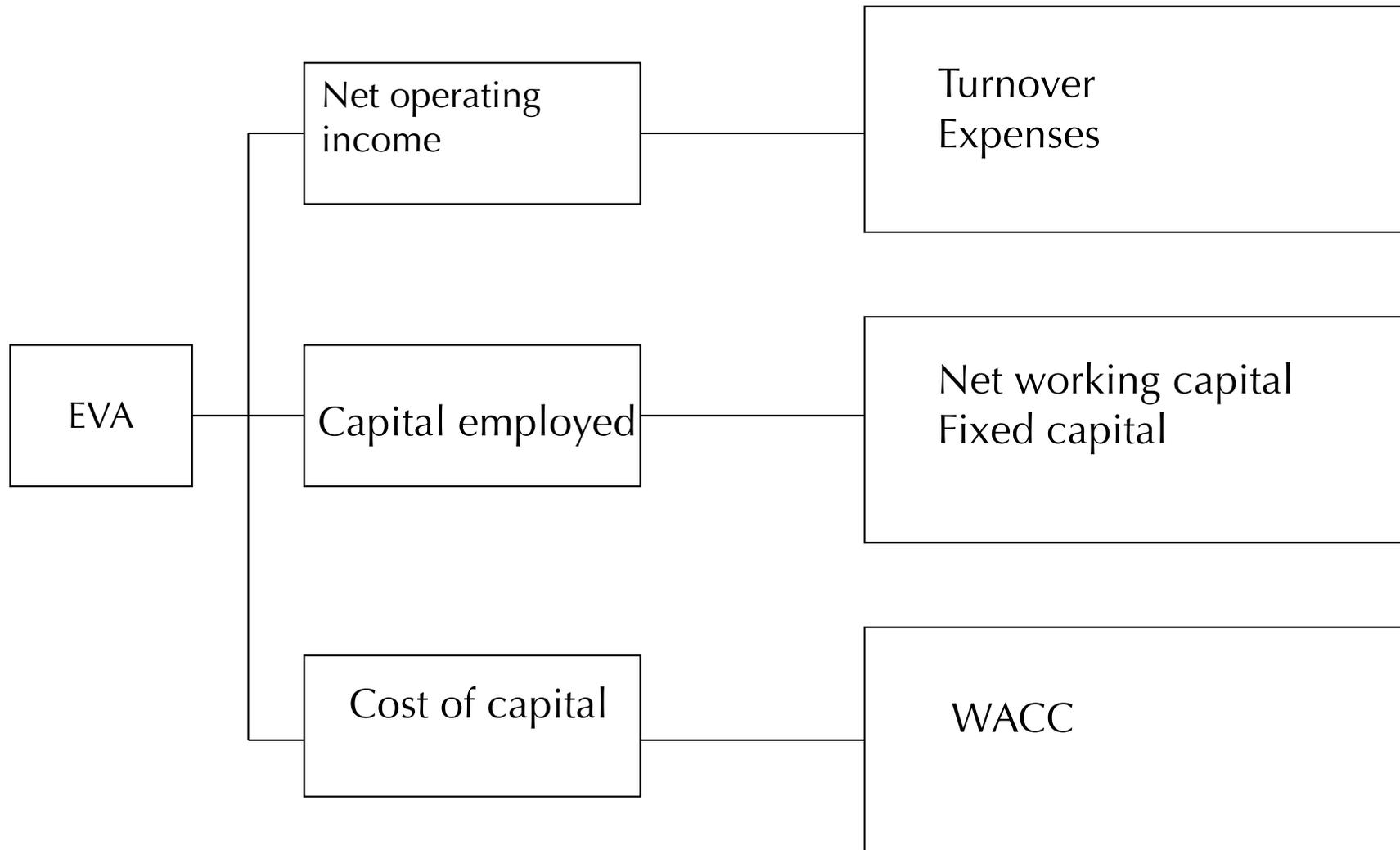
- Revenue / Turnover 10.000.000
- Cost of goods sold 6.000.000
- Other operating expenses 2.000.000
- Depreciation and Amortization 1.000.000
- EBIT / Operating Profit 1.000.000
- Financial expenses 500.000
- Taxes (20%) 100.000
- Net Income 400.000

QUIZ

- Capital employed by the unit is 10.000.000
- WACC 10%

- What is ROCE and EVA for the unit?
- Is the unit profitable and how would you rate it's profitability?

EVA in graph



EVA

- Combines shareholders interest to the control systems
- Adds required rate of return into the calculations, i.e. accounts for risk
- Absolute measure, which is compared with the budget/target.
- Budget/target is defined based on the required rate of return
- Creates correct incentives for SBU managers to invest

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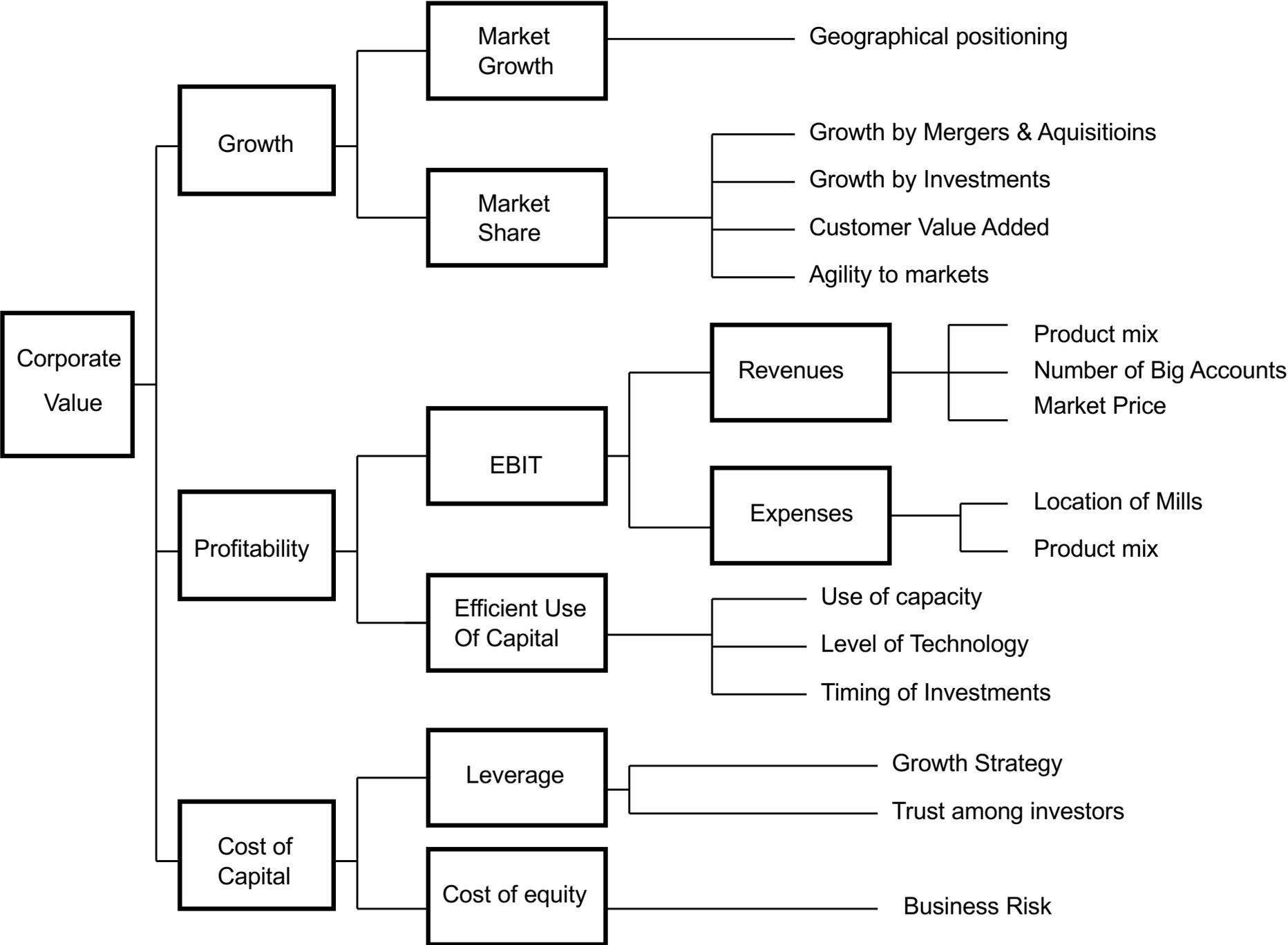
VALUE BASED MANAGEMENT (VBM) - BASIC FRAMEWORK

- Choose internal objectives that lead to shareholder value enhancement
- Select strategies and organizational designs that are consistent with objectives
- Identify Value Drivers
- Develop action plans, select performance measures, and set targets
- Evaluate and reward performance
- Assess the ongoing validity of above and modify as required

EXAMPLE

Macro Drivers

Micro Drivers



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FOR WHAT PURPOSES ORGANIZATIONS DO BUDGETS FOR?

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Budgets cause wrong behavior



How to win the budget game

- Negotiate lowest targets/highest rewards
- Always make the bonus, whatever it takes
- Never put customers above sales targets
- Never share knowledge and resources
- Always ask for more than you need
- Always spend what's in the budget
- Always explain away adverse variances
- Never provide accurate forecasts
- Always meet, never beat the numbers
- Never take risks

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BB:Leadership vision

Predictive & Centralised

1. Climate

Performance contracts

2. Motivation

Plans & incentives

3. Devolution

Constrained to plan

4. Empowerment

Bureaucratic 'red tape'

5. Organisation

Centralised hierarchy

6. Information

Closed & controlled

Adaptive & Devolved

Competitive success

Responsibility for outcomes

Freedom to decide

Capability to act

Customer focused teams

Open & "one truth"

BB: Finance vision

Predictive & Centralised

1. Targets

Negotiating fixed targets

2. Rewards

Paying individual incentives

3. Strategy

Centrally driven, annual event

4. Resources

Allocated annually thru budgets

5. Coordination

Predetermined by central plans

6. Control

Top-down thru variances to plan

Adaptive & Devolved

Setting relative measures

Recognising team-based success

Devolved, inclusive & continuous

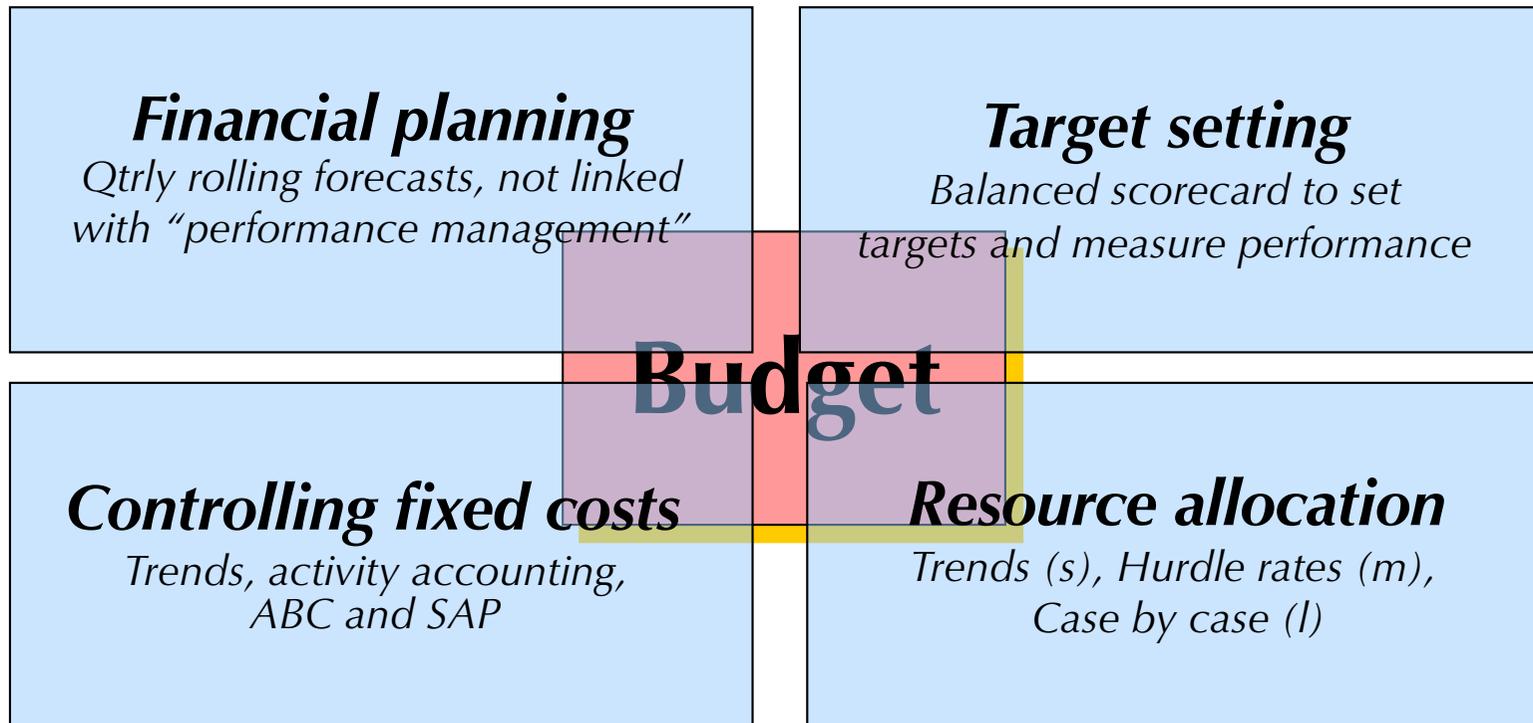
Free access with accountability

Dynamic market-like processes

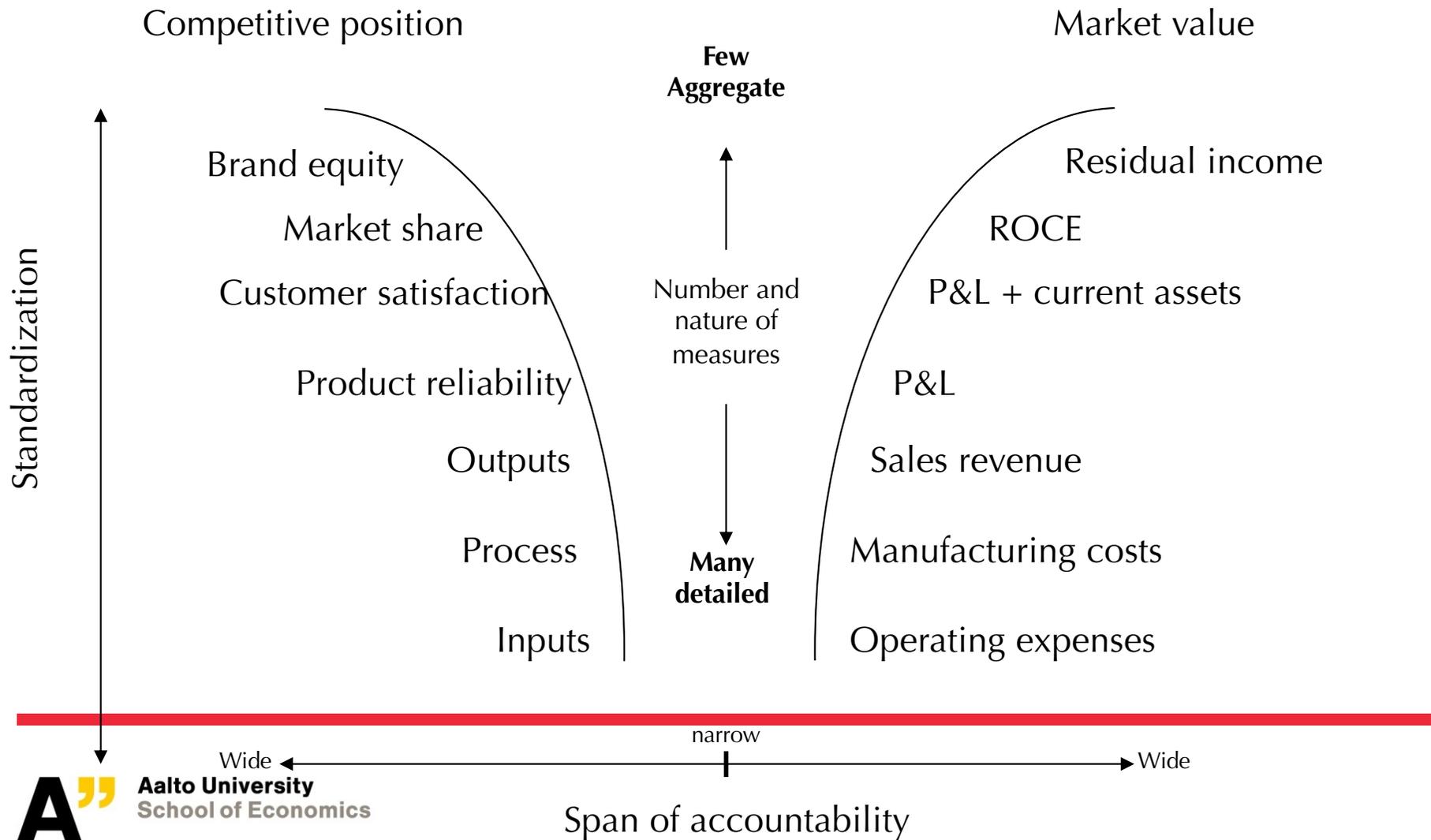
Multi level, fast and open

Tools in use

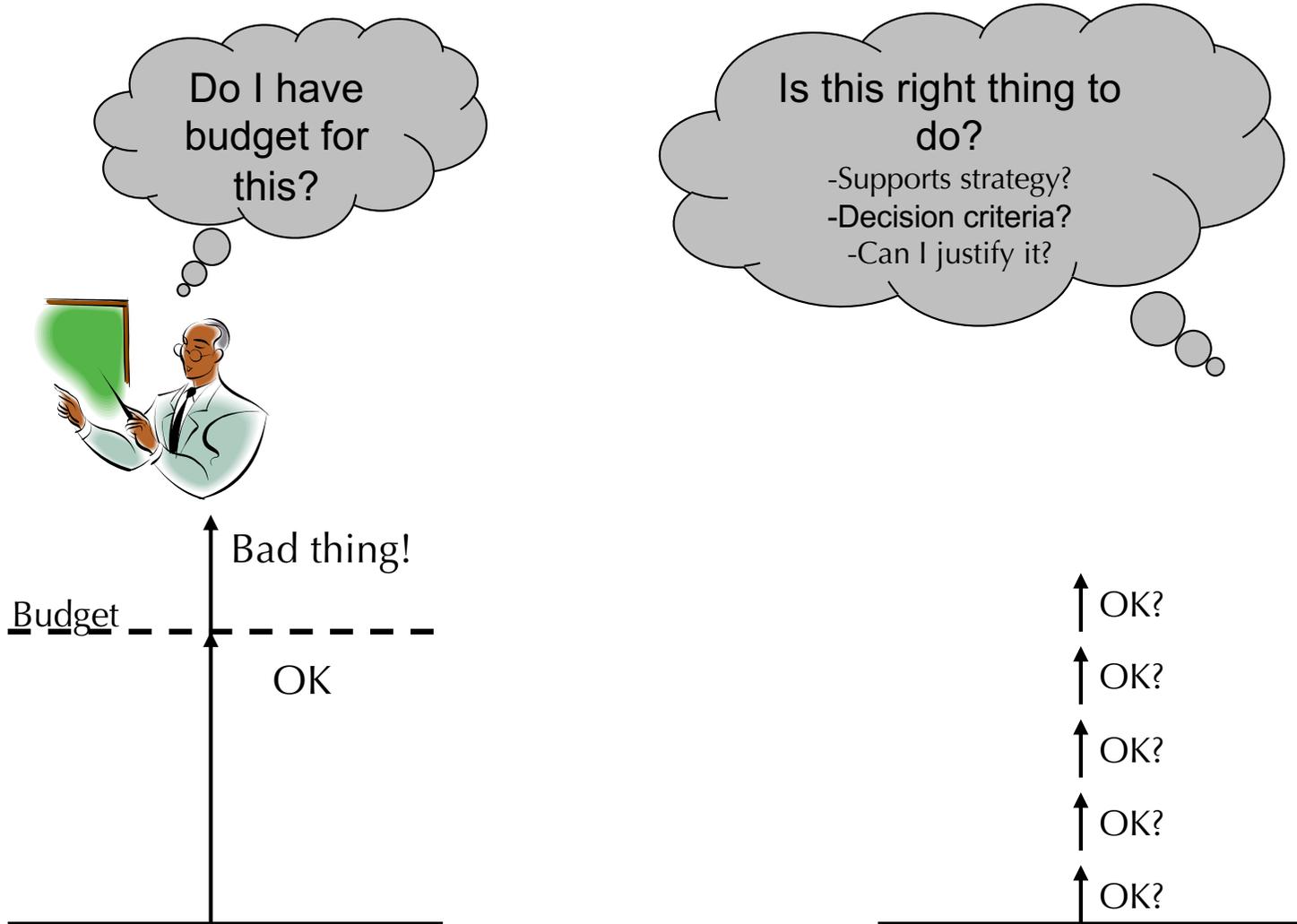
Borealis - Europe's 2nd largest petrochemical company.



Performance measures



Dynamic resource allocation



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ROLLING FORECASTING

- Why do companies need rolling forecasts?
- How to forecast?

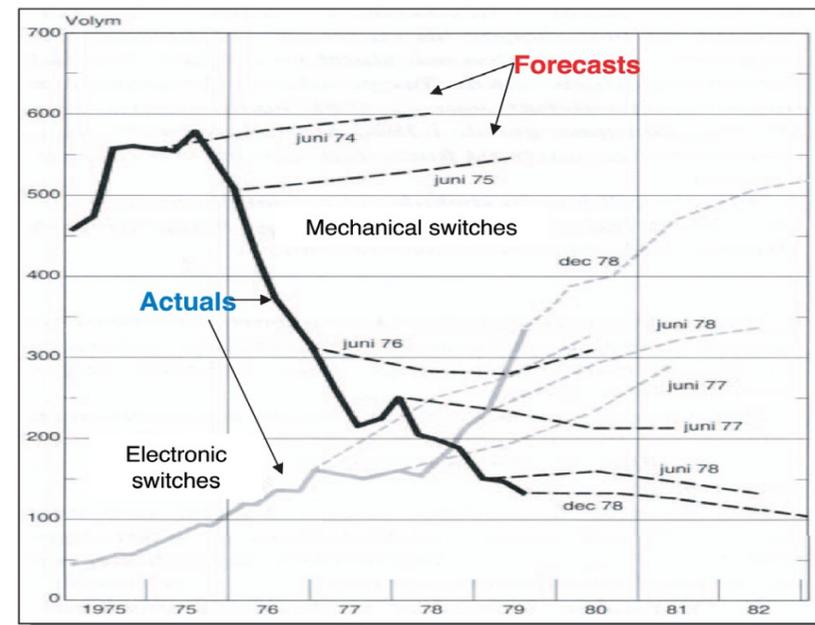
Why to forecast?

- *Investor relations*
- *Measurement*
- *Management*

Is the purpose to:

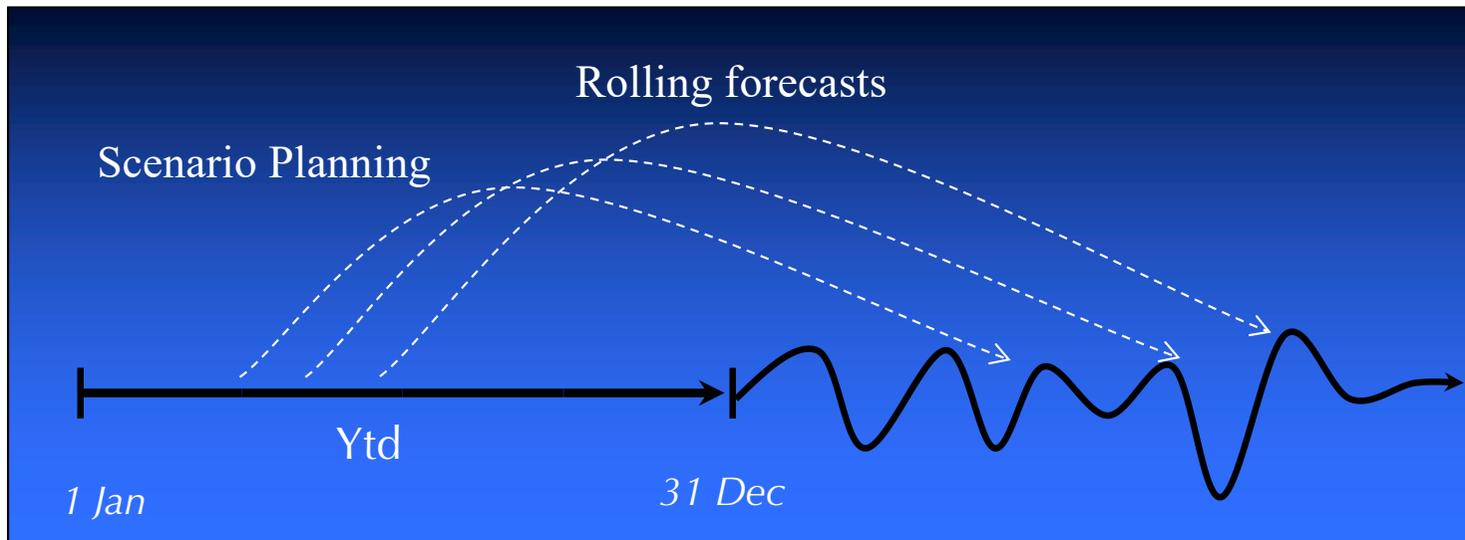
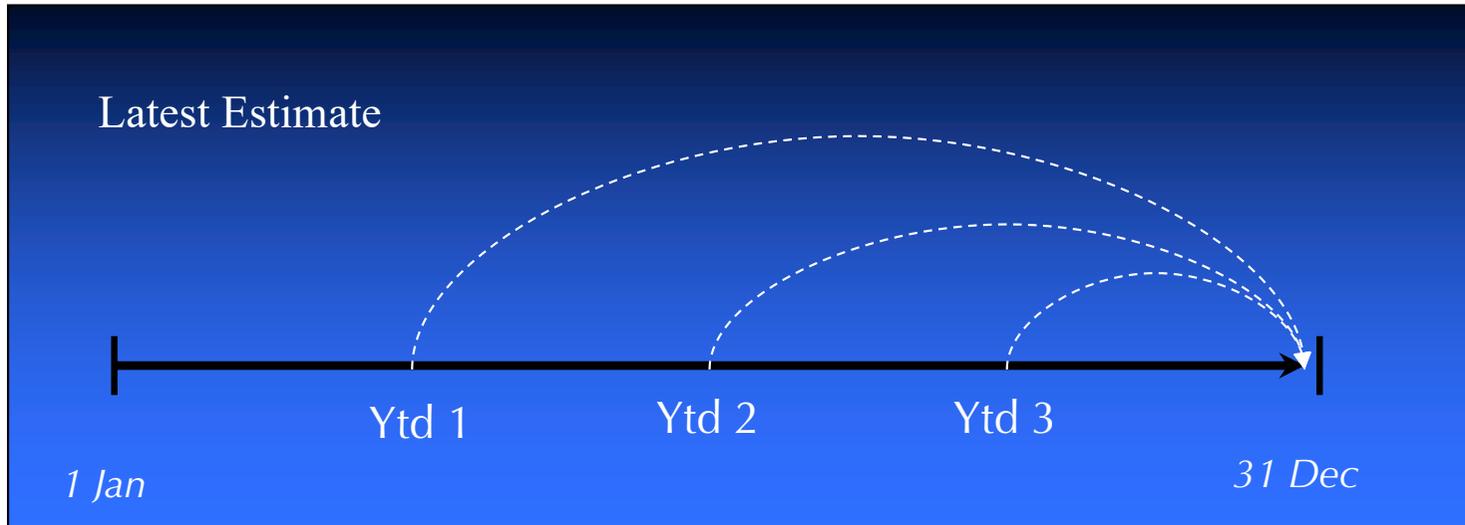
a) get accurate view of the future?

b) make better decisions?



Source: Jan Wallander, Budgeten - ett nödigt ont, 1994, p24

Traditional vs. rolling forecasting



Forecast period

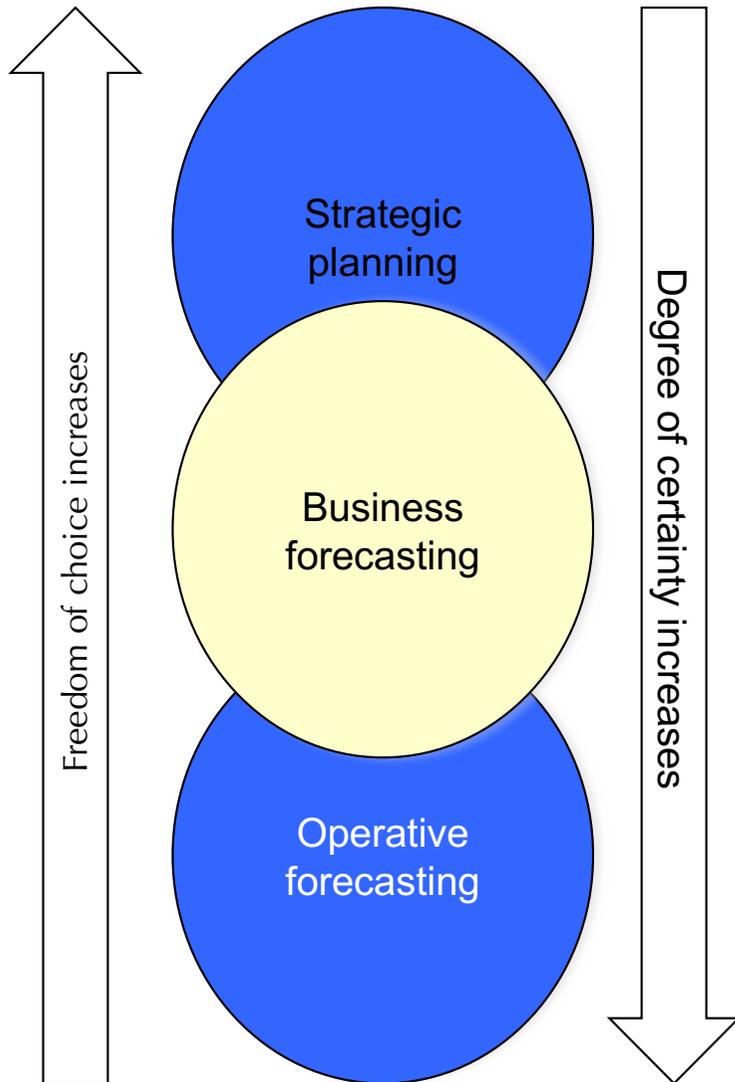
How long into the future to forecast?

- Lead time between decision and the impact (reaction time)
- What is the longest reaction time in the business?
- Reaction time varies between industries and within a company
- Calendar year (fiscal year) is hardly the best period...?

How often the forecasts should be updated?

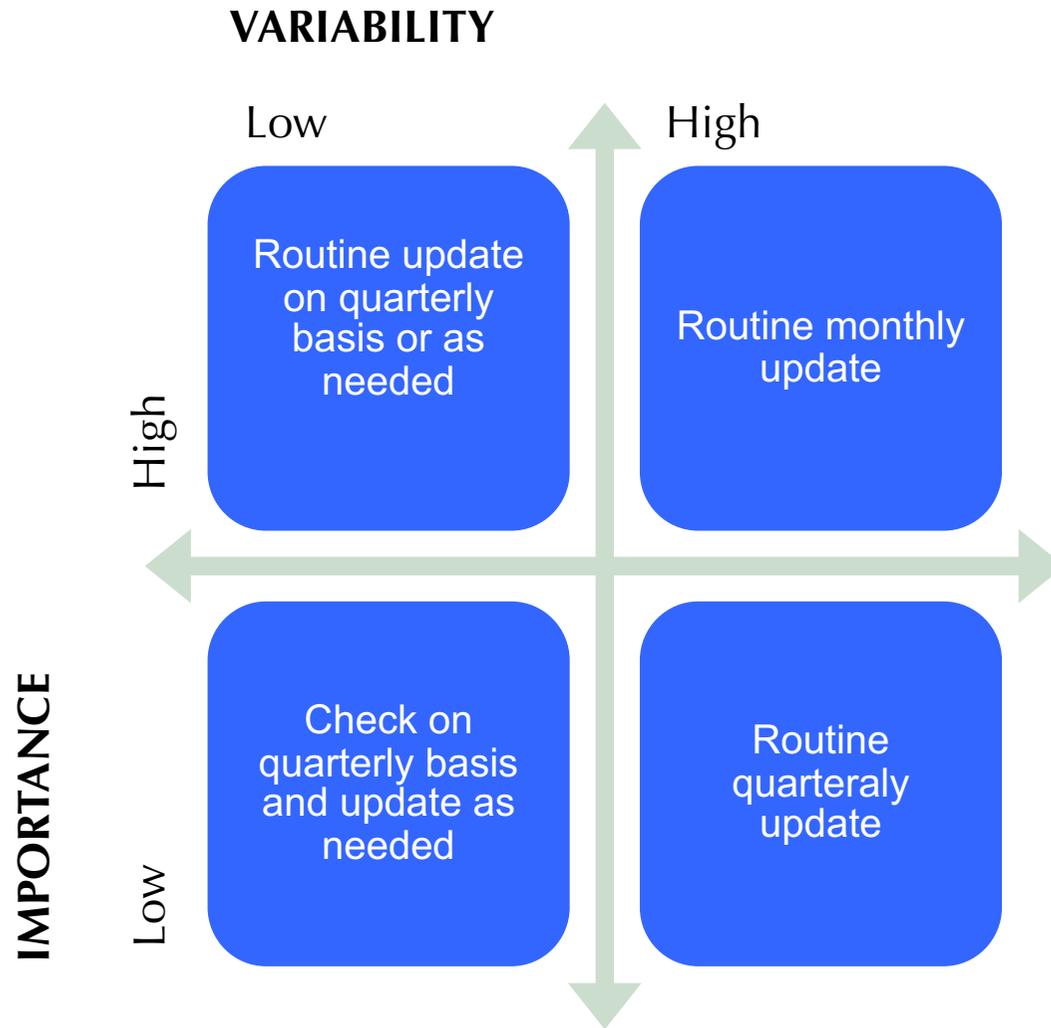
- How often revenues / costs change?
- How often environment changes?
- How often key assumptions change?
- Is it reasonable to forecast everything in the same cycle?

Different forecasts



PURPOSE	PROCESS
<p>ADAPTATION "How to structure the business cost-effectively"</p> <p>Creation of options</p>	<p>ADAPTATION Alternative scenarios of the future environment Broad lines Freedom of choice</p>
<p>ANSWER "How to make the best use of resources"</p> <p>Decision-making</p>	<p>ANSWER The most likely estimate of what is going to happen based on current assumptions Detailed enough Limited freedom of choice</p>
<p>REACTION "How to satisfy demand effectively"</p> <p>Implementation</p>	<p>REACTION Prediction of what will happen Very detailed Limited choice</p>

How often and what to forecast?



Forecasting frequency – South West Airlines

	Economic significance	Variability	Importance of rapid response	Update frequency	Forecasting horizon
Revenue	High	High	High	Daily	Month
Labor	High	Low	Medium	Twice a month	6 months
Petrol	High	High	Medium	Weekly	Quarter
Maintenance	Medium	Medium	Medium	Twice a month	6 months
Marketing	Medium	Medium	High	Monthly	6 months
Depreciation	Medium	Low	Low	Quarterly	Year
Airport fees	Medium	Medium	Low	Weekly	6 months
Other	Medium	Medium	Medium	Twice a month	Quarter

Summary

- What to forecast?
 - Fundamental business drivers
 - Variability + significance → keep it simple!
- When to forecast?
 - Issues change in different cycles → horizons and frequencies
 - All costs are ultimately variable if the horizon is long enough
- Who do the forecast?
 - Inputs from responsible managers
 - Modelling and updating by F&C

SUMMARY – WHAT DID YOU LEARN FROM THESE TOPICS?

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