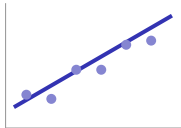


Marketing

A-Level Business ■ Topic 8

A-Level Business



What we will cover

1 Time-series forecasting

2 Correlation

3 Elasticity

4 Marketing strategy

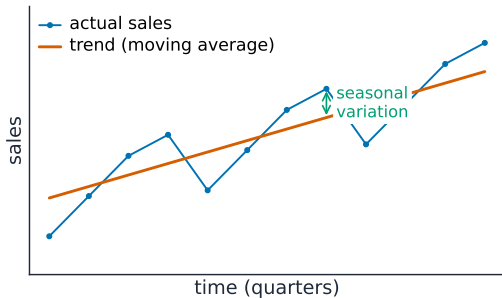
5 Ansoff & portfolio

6 Recap



firms compete on data

Sales forecasting and time-series



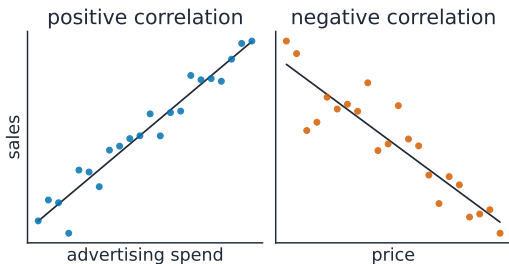
Time-series

analysis 时间序列分析 splits past sales into:

- the **trend** 趋势 – long-run direction (a **moving average** 移动平均 smooths it)
- **seasonal variation** 季节性波动 = actual – trend

Forecasts **extrapolate** 外推 the trend – never certain.

Correlation

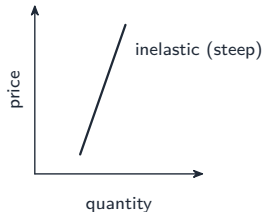


Correlation 相关性 measures how two things move together:

- **positive** 正相关 – both rise together
- **negative** 负相关 – one rises as the other falls

Correlation **is not causation** – another factor may be at work.

Elasticity in marketing decisions



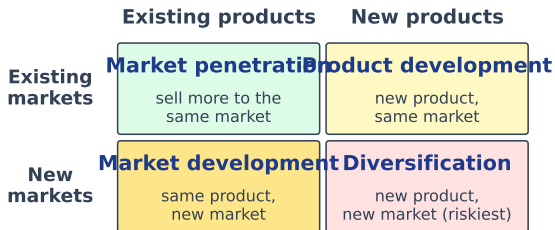
- **PED** 需求价格弹性 – elastic: cut price for more revenue; inelastic: raise it
- **YED** 需求收入弹性 – how sales move with incomes (booms vs slumps)
- **XED** 需求交叉弹性 – effect of a rival's or partner's price

Marketing strategy and planning



A **marketing strategy** 营销战略 is the long-term plan for marketing to meet objectives. **Marketing planning** 营销规划 studies the market, picks target customers, and sets the mix. Two tools shape it: [Ansoff's matrix](#) and portfolio analysis.

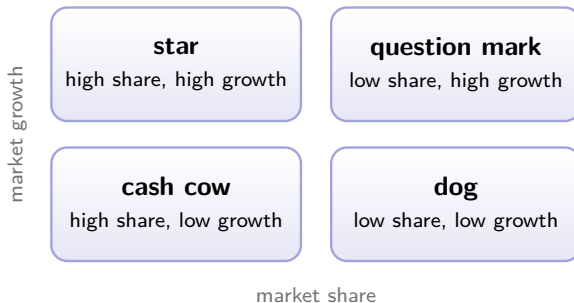
Ansoff's matrix



Ansoff's matrix 安索夫矩阵 maps growth by product × market:

- **market penetration** 市场渗透 – safest
- **product development** 产品开发
- **market development** 市场开发
- **diversification** 多元化 – riskiest (new × new)

Product portfolio analysis



Portfolio analysis 产品组合分析 balances the range – steady **cash cows** fund risky new products.

Entering international markets



Enter a new country by **exporting** 出口, a **joint venture** 合资企业, or an own branch – rising commitment & control.

Localisation 本地化 adapts the mix (product, language, price) to local tastes & laws.

Worked example – elasticity and revenue

A firm cuts price by 10% and demand rises 25%. Find PED and say whether the cut was right.

- $PED = \frac{\% \Delta Q_d}{\% \Delta P} = \frac{25}{10} = 2.5$ (ignoring the minus sign).
- $PED > 1 \Rightarrow$ demand is **price elastic**.
- Quantity rose **proportionally more** than price fell $\Rightarrow$ **total revenue rises**.
- So yes – but check that the extra volume still **covers the variable cost**.

Elastic $\Rightarrow$ cut price to raise revenue. **Inelastic** $\Rightarrow$ raise it. Revenue is not profit: always check costs before calling it a good decision.

Topic 8 – key takeaways

1 Time-series

trend + seasonal variation;
extrapolate

2 Correlation

moves together $\neq$ causes

3 Ansoff

penetration safest, diversification
riskiest

4 Portfolio

balance stars, cash cows, dogs

Check yourself

- 1 Seasonal variation = actual minus what?
- 2 Does strong correlation prove causation?
- 3 Ansoff's safest growth strategy?
- 4 Which Boston product funds the others?



Answers 1. the trend value 2. no 3. market penetration 4. the cash cow