



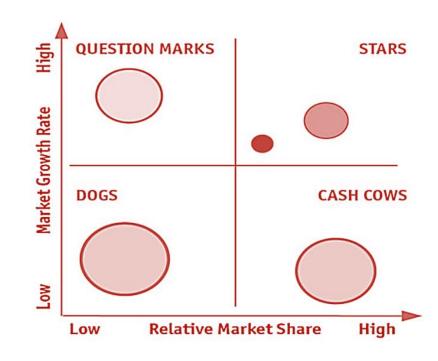


### **Strategic Management**

# Part VI: Joint Analysis: From Portfolio Analysis to SWOT

Winter Term 2025 BSc IM ÖD

PROF. DR. RANDOLF SCHRANK



Chapter I: Foundations of Strategic Management and the Strategy Process

Chapter II: Corporate Governance

Chapter III: Mission, Vision, and Goals of the Corporation

Chapter IV: Internal Strategic Analysis Chapter V: External Strategic Analysis

Chapter VI: Joint Analysis: From Portfolio Analysis to SWOT

Chapter VII: Strategy Formulation Chapter VIII: Strategy Evaluation

Chapter IX: Strategy Implementation & Control Chapter X: Corporate Social Responsibility

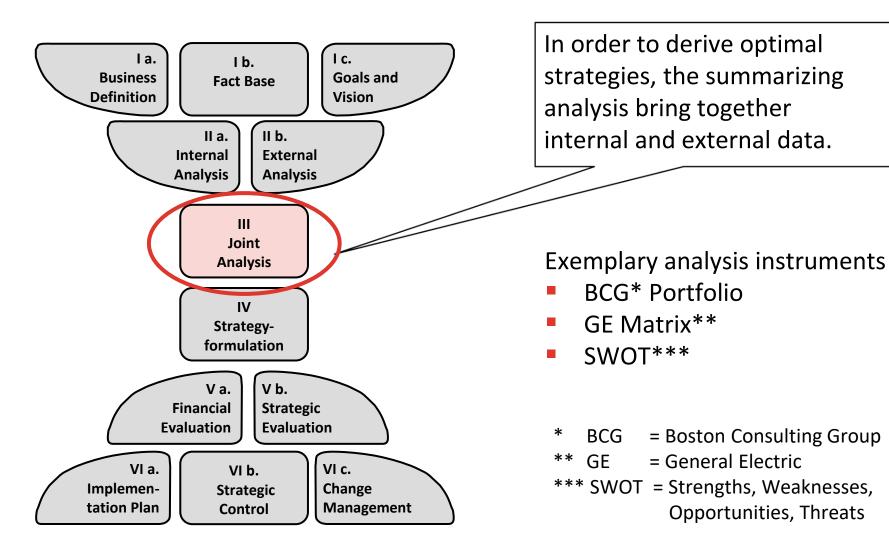




### **Chapter V: Joint Analysis: From Portfolio Analysis to SWOT**

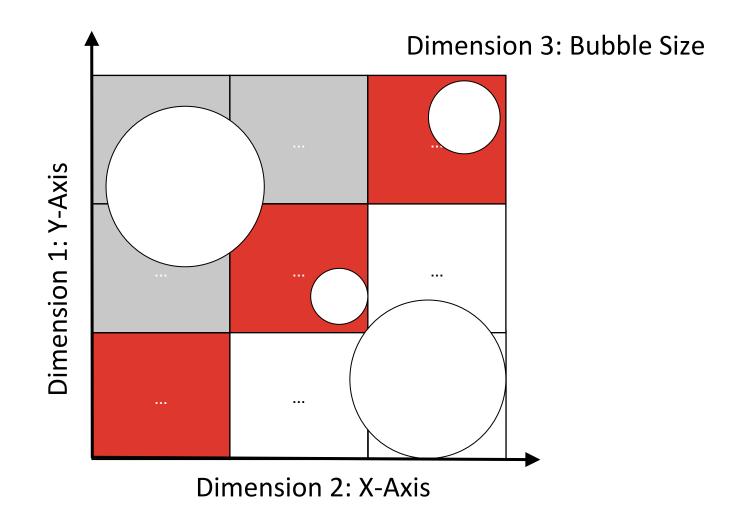
- 1 BCG Portfolio
- 2 Product Life Cycle
- 3 Experience Curve
- 4 McKinsey GE-Matrix
- 5 SWOT Analysis

#### **Summarizing Analysis**

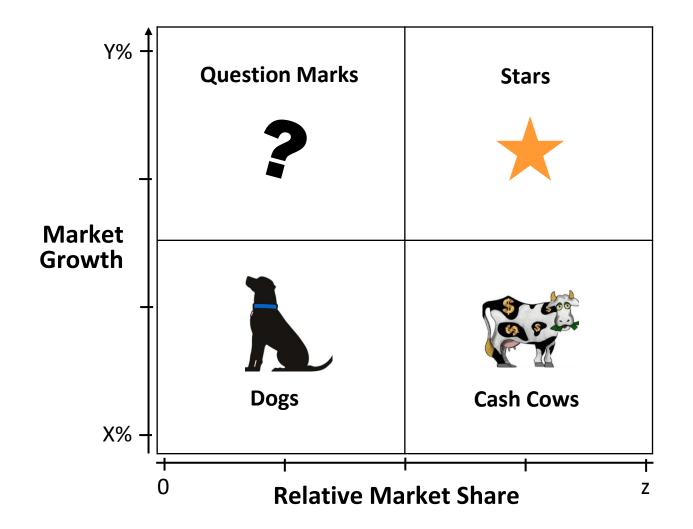




#### The Portfolio-Approach to Combining Information in the Joint Analysis Phase



#### **BCG Portfolio (Matrix Framework Diagram)**



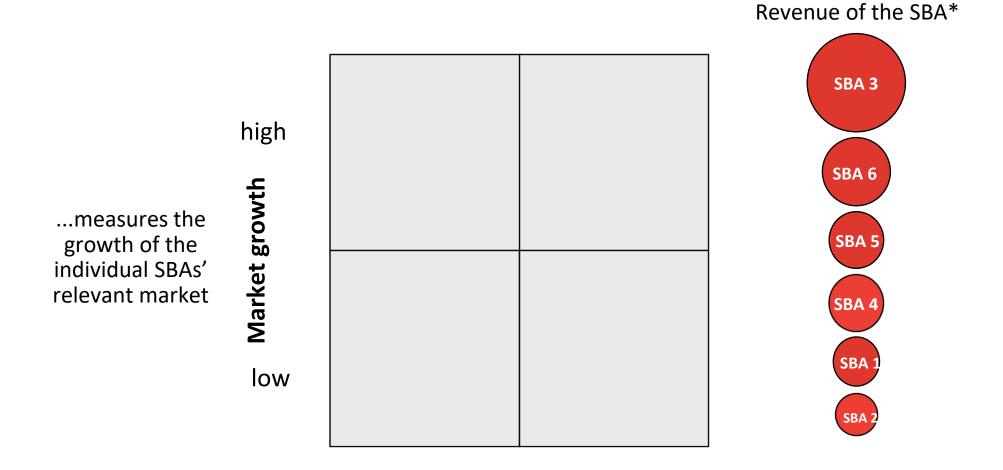
# Building a BCG Portfolio – Step 1: Identify Strategic Business Areas (SBA's) and assign related revenues to them

Size of the circle: Revenue of the SBA\*

SBA Nbr.	Core Business	Revenues 2024 in k €
SBA 3	Printers	26.500 €
SBA 6	Copy machines	10.200 €
SBA 5	Scanners	7.100 €
SBA 4	Technical services	7.080 €
SBA 1	Lighting solutions	5.310 €
SBA 2	Leasing & Finance	3.800 €
Sum		59.990 €

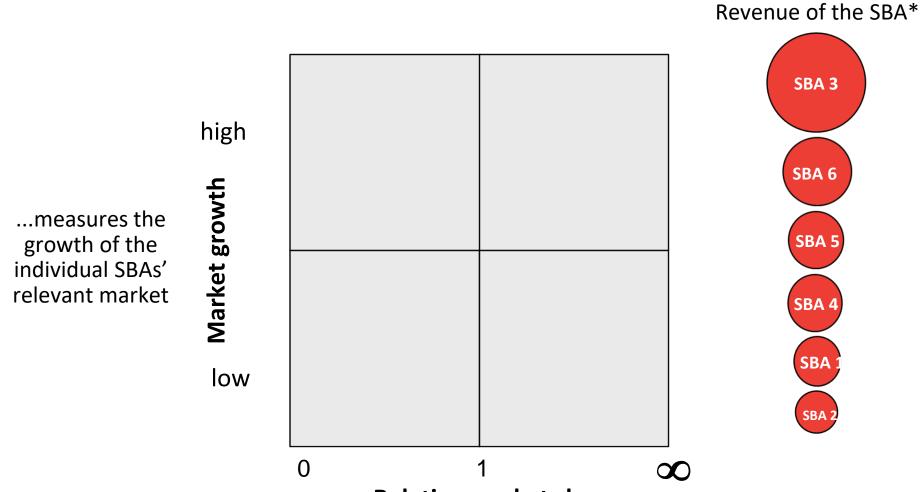
<sup>\*</sup> SBA = Strategic Business Area

Building a BCG Portfolio – Step 2: Identify the growth rate of the market the respective SBA works in (NOT the revenue growth of the SBA!)



# Building a BCG Portfolio – Step 3: Identify the biggest competitor of each SBA and calculate the relative market share

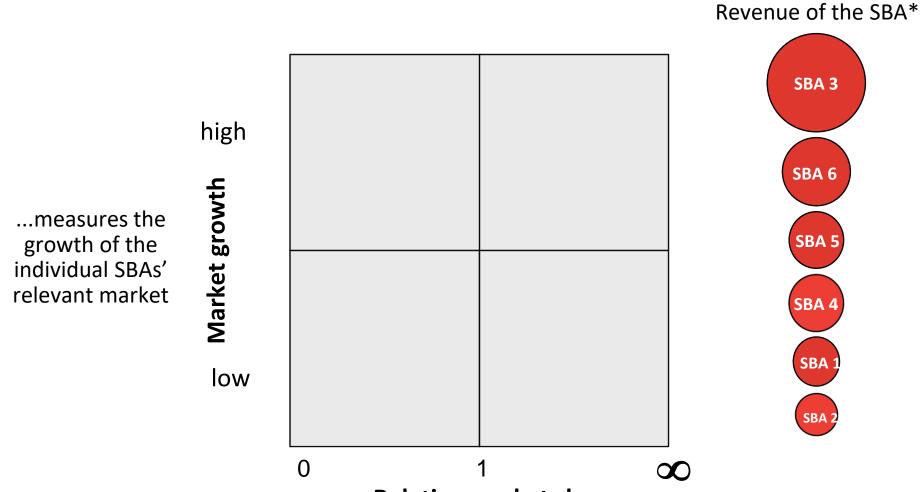
Size of the circle:



Relative market share

... measures the SBA's market share in comparison to its strongest competitor (competitor with the biggest market share), **not** in comparison to the total market

#### Building a BCG Portfolio – Step 4: Distribute the SBAs to portfolio according the market growth and relative market share



**Relative market share** 

... measures the SBA's market share in comparison to its strongest competitor (competitor with the biggest market share), **not** in comparison to the total market

Size of the circle:

#### Building a BCG Portfolio – Step 4: Distribute the SBAs to portfolio according the market growth and relative market share

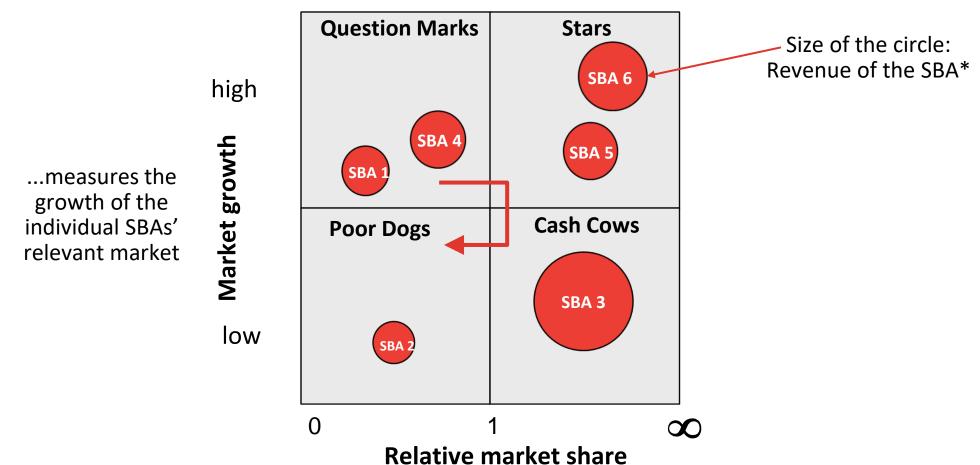
Revenue of the SBA\* SBA 3 SBA 6 high SBA 4 Market growth ...measures the growth of the individual SBAs' relevant market SBA<sub>3</sub> low  $\infty$ 

Relative market share in comparison to its

... measures the SBA's market share in comparison to its strongest competitor (competitor with the biggest market share), **not** in comparison to the total market

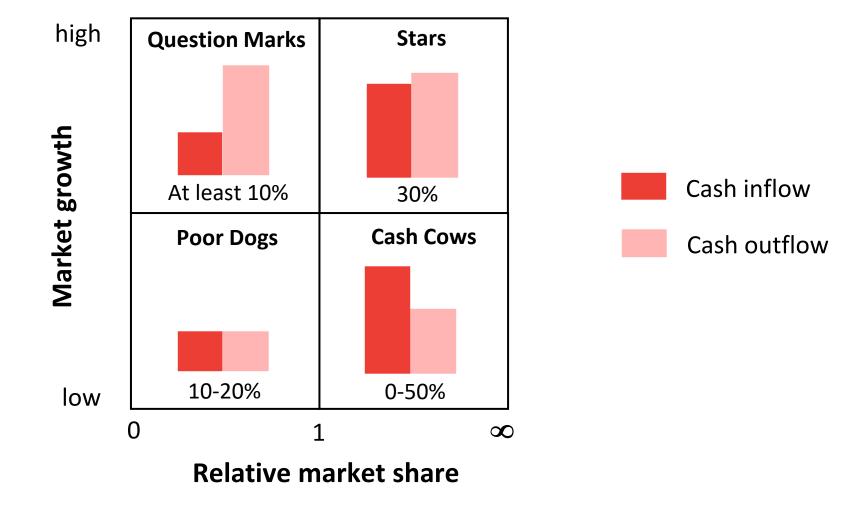
Size of the circle:

#### Building a BCG Portfolio – Step 5: Assign Portfolio Categories and Interpret Portfolio



... measures the SBA's market share in comparison to its strongest competitor (competitor with the biggest market share), **not** in comparison to the total market

#### The BCG Portfolio: Cash Inflow and "Ideal" Distribution of the Products



#### **BCG Portfolio Overview**

#### **4 Quadrants Explained**









Cash cows are units with high market share in a slow-growing industry. These units typically generate cash in excess of the amount of cash needed to maintain the business. They are regarded as staid and boring, in a "mature" market, and every corporation would be thrilled to own as many as possible. They are to be "milked" continuously with as little investment as possible, since such investment would be wasted in an industry with low growth.

Dogs, or more charitably called pets, are units with low market share in a mature, slow-growing industry. These units typically "break even", generating barely enough cash to maintain the business's market share. Though owning a break-even unit provides the social benefit of providing jobs and possible synergies that assist other business units, from an accounting point of view such a unit is worthless, not generating cash for the company. They depress a profitable company's return on assets ratio, used by many investors to judge how well a company is being managed. Dogs, it is thought, should be sold off.

Question marks (also known as problem child) are growing rapidly and thus consume large amounts of cash, but because they have low market shares, they do not generate much cash. The result is a large net cash consumption. A question mark has the potential to gain market share and become a star, and eventually a cash cow when the market growth slows. If the question mark does not succeed in becoming the market leader, then after perhaps years of cash consumption it will degenerate into a dog when the market growth declines. Question marks must be analyzed carefully in order to determine whether they are worth the investment required to grow market share.

Stars are units with a high market share in a fast-growing industry. The hope is that stars become the next cash cows. Sustaining the business unit's market leadership may require extra cash, but this is worthwhile if that's what it takes for the unit to remain a leader. When growth slows, stars become cash cows if they have been able to maintain their category leadership, or they move from brief stardom to dogdom.

#### Assumptions Underlying the BCG-Portfolio and Problems in Its Application

- The BCG portfolio assumes that a life cycle as outlined in classical marketing theory exists for single products as well as for whole "Strategic Business Areas"
- It is assumed that the cost position in the operating business compared to competitors is better if the Corporation has a favorable competitive position which is depicted by the relative market share
- The definition of the strategic business area is crucial to the derivation of a valid BCG portfolio;
   every change in SBA-definition will change the resulting picture of the portfolio
- The BCG portfolio necessarily requires a split on both of the defined axes in order to ensure the interpretation of the portfolio; however, there is no precise definition on how to do the split on the growth axis

Chapter I: Foundations of Strategic Management and the Strategy Process

Chapter II: Corporate Governance

Chapter III: Mission, Vision, and Goals of the Corporation

Chapter IV: Internal Strategic Analysis Chapter V: External Strategic Analysis

Chapter VI: Joint Analysis: From Portfolio Analysis to SWOT

Chapter VII: Strategy Formulation Chapter VIII: Strategy Evaluation

Chapter IX: Strategy Implementation & Control Chapter X: Corporate Social Responsibility

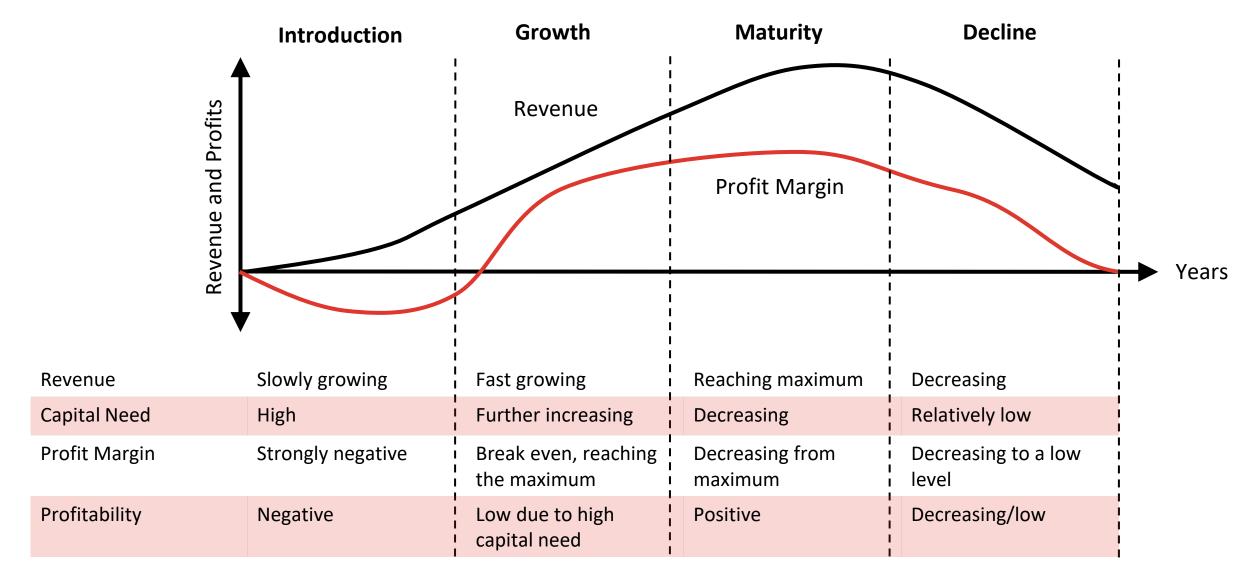




## **Chapter V: Joint Analysis: From Portfolio Analysis to SWOT**

- 1 BCG Portfolio
- 2 Product Life Cycle
- 3 Experience Curve
- 4 McKinsey GE-Matrix
- 5 SWOT Analysis

#### **Basics of the BCG Portfolio: The Product Lifecycle Concept**



Chapter I: Foundations of Strategic Management and the Strategy Process

Chapter II: Corporate Governance

Chapter III: Mission, Vision, and Goals of the Corporation

Chapter IV: Internal Strategic Analysis Chapter V: External Strategic Analysis

Chapter VI: Joint Analysis: From Portfolio Analysis to SWOT

Chapter VII: Strategy Formulation Chapter VIII: Strategy Evaluation

Chapter IX: Strategy Implementation & Control Chapter X: Corporate Social Responsibility



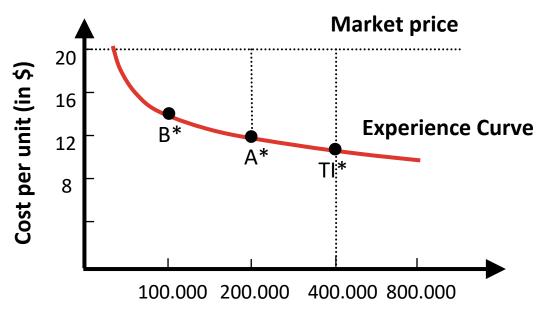


### **Chapter V: Joint Analysis: From Portfolio Analysis to SWOT**

- 1 BCG Portfolio
- 2 Product Life Cycle
- 3 Experience Curve
- 4 McKinsey GE-Matrix
- 5 SWOT Analysis

#### **Basics of the BCG Portfolio: The Experience Curve Concept**

The production cost per unit will decrease (e.g. by 20-30% each time the cumulated production quantity is doubled).



**Cumulated production quantity (in units)** 

\*B: Starting Point

\*A: First doubling of output

\*TI: Second doubling of output

#### **Scale effects:**

Company size effects fixed cost degression

#### **Learning curve effects:**

Technological and organizational learning increasing experience

Fix 500

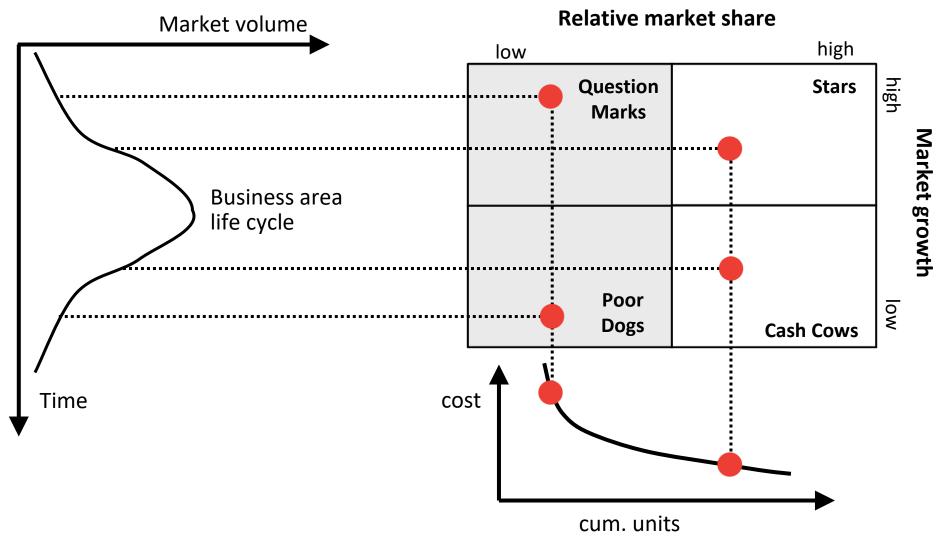
Variable 200/piece

Cost per unit@ 1: 700

Cost per unit@ 2: 450 (FK/VAR\*X)

Cost per unit@ 3: 366,666

#### Integration of Lifecycle and Experience Curve Concepts in the BCG Portfolio



Source: Müller-Stewens

Chapter I: Foundations of Strategic Management and the Strategy Process

Chapter II: Corporate Governance

Chapter III: Mission, Vision, and Goals of the Corporation

Chapter IV: Internal Strategic Analysis Chapter V: External Strategic Analysis

Chapter VI: Joint Analysis: From Portfolio Analysis to SWOT

Chapter VII: Strategy Formulation Chapter VIII: Strategy Evaluation

Chapter IX: Strategy Implementation & Control Chapter X: Corporate Social Responsibility

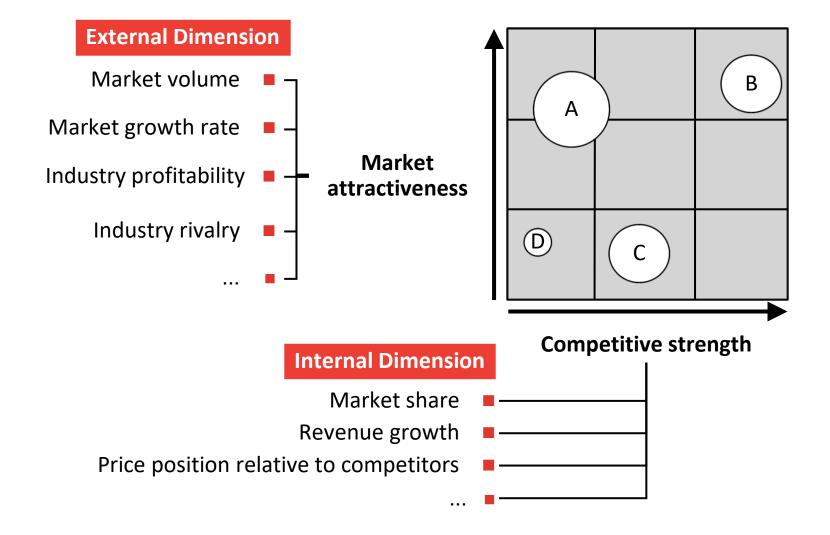




### **Chapter V: Joint Analysis: From Portfolio Analysis to SWOT**

- 1 BCG Portfolio
- 2 Product Life Cycle
- 3 Experience Curve
- 4 McKinsey GE-Matrix
- 5 SWOT Analysis

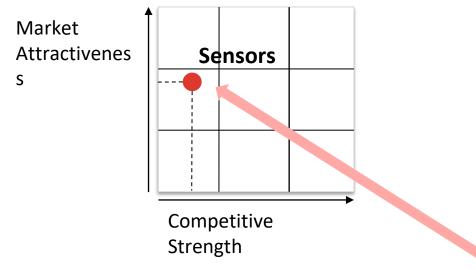
#### The GE Matrix Incorporates both External and Internal Elements



# **GE-Matrix Analysis of Market Attractiveness - Example**

	Weight	Score	Weighted score	S Weighted scores		
Market profitability	25,6%	4	1,03		S .	
Market growth	20,5%	3	0,62		Veness	Sensor
Competitive intensity	17,9%	1	0,18	3,49	Attractiv	
Market volume (Mio. Euro)	23,1%	5	1,15			
Synergies with other segments	12,8%	4	0,51		Market	
						Competitive St

### **GE-Matrix: Analysis of Competitive Strength**



	Weight	Score	Weighted score	S Weighted scores
Market share	17%	1	0,17	
Sales growth	19%	1	0,19	
Development competence	21%	1	0,21	1,64
Marketing-/ sales-competence	21%	2	0,43	
Logistics and service quality	21%	3	0,64	7

#### **GE Matrix Interpretations**

		A-Market	A-Market	A-Market
	high	Develop for income	Invest selectively for growth	Invest heavily for growth
		B-Market	B-Market	A-Market
Market Attractiveness	medium	Harvest or divest	Develop selectively for income	Invest selectively for growth
		C-Market	B-Market	A-Market
	low	Divest	Harvest or divest	Harvest
		low	medium	high

**Competitive Strength** 

#### **GE Matrix – Possible Criteria of Market Attractiveness**

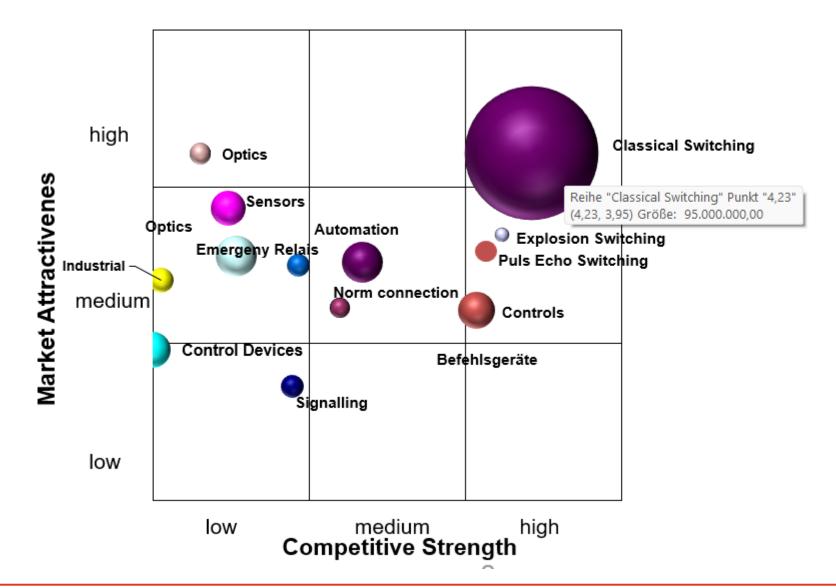
Criteria	Definition & Measure		
Market volume [% of European ∅]	<u>Countries</u> : Market potential in % to European average. Important: Not the market potential of but of the total market <u>Europe</u> : Market volume of the business segments in % of the total market volume in Europe		
Market growth rate [%, Ø last 5 years]	Average growth of the market volume (in €, <u>not in units</u> ) over the last 5 years (historical growth as <u>one</u> indicator for future growth)		
Market price level [in % of European ∅]	Countries: Market price level in % of the European average. Important: Not the market price level of but the one of the total market (historical price level as one indicator for the future price level)  Europe: Profitability level of the market by business area (derived from weighted European $\emptyset$ )		
Estimated market growth in the next 5 years [% p.a.]	Management estimate considering current trends (economic cycle, political influences, structural changes at target customers, etc.)		
Estimated change in the market price level [% p.a., next 5 years]	Management estimate considering current trends (economic cycle, political influences, structural changes at target customers, etc.)		
Available market potential	100% minus market share of relevant competitors (Linde, Still, BT, Toyota); Rationale: From established competitors, market share can only be gained through crowding out. However, the market share of smaller competitors is easier to obtain. Thus, a high market share held by companies of this kind, indicates an attractive market for (chance to gain momentum or become equal in comparison to the classic competitors)		

#### **GE Matrix – Possible Criteria of Competitive Strength**

Criteria	Definition & Measure
Relative market share [%]	Relative market share: Revenue biggest competitor Significance: the relative market share states, how big is in the corresponding market in comparison to the biggest competitor (in %) Example: Revenue € 20 Mill., Linde € 25 Mill. → Relative market share: 80% (= is equivalent to 80% of Linde in the analyzed market)
Revenue growth [%]	
Profitability [%]	according PC Erg; Trucks: brutto profit; Other: EBIT Rate of Return (The brutto profits shown for the mentioned truck segments are corrected by the difference to the average market price level for the country comparison → happens automatically in the template)
Known need [%]	Share of the demand in the market that is known to and therefore is accessible for the further acquisition processes
Trucks: Realization quota [%] Services: Contract quota [%]	Realization quota: That share of the known demand which successfully leads to revenue Contract quota: Closed contracts in % of the known demand in the market (=realization quota)

HOCHSCHULE MAINZ - UNIVERSITY OF APPLIED SCIENCES

# **Example of a German Corporation Specialized in Security Technology for Machines**



# **Example of a German Corporation Specialized in Security Technology for Machines (Detailed Analysis)**



Chapter I: Foundations of Strategic Management and the Strategy Process

Chapter II: Corporate Governance

Chapter III: Mission, Vision, and Goals of the Corporation

Chapter IV: Internal Strategic Analysis Chapter V: External Strategic Analysis

Chapter VI: Joint Analysis: From Portfolio Analysis to SWOT

Chapter VII: Strategy Formulation Chapter VIII: Strategy Evaluation

Chapter IX: Strategy Implementation & Control Chapter X: Corporate Social Responsibility



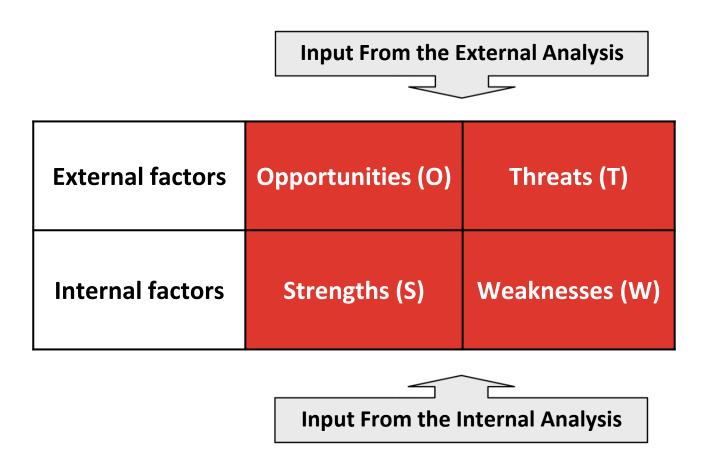


## **Chapter V: Joint Analysis: From Portfolio Analysis to SWOT**

- 1 BCG Portfolio
- 2 Product Life Cycle
- 3 Experience Curve
- 4 McKinsey GE-Matrix
- 5 SWOT Analysis

# SWOT Analysis (= Strengths/Weaknesses/Opportunities/Threats Analysis): Summarizing the Results from Internal and External Analysis

The strengths/ weaknesses and opportunities/ threats that were identified in the analysis phase are summarized in the following schema.



# Example: Result SWOT Analysis Europe (Example of a German Forklift Company, 12 Countries)

#### Internal

#### **Strengths**

- Positioning understanding consistent throughout the organization
- Sole forklift manufacturer with project business (= ability for One Stop Shop business model)
- Europe-wide Key Account Management
- Sales strength Warehouse Trucks and System Trucks
- Outstanding competitive strength at Warehouse Trucks / System trucks
- STAR Market: Spare Parts

#### Weaknesses

- Europe-wide competency Financial Services, especially contract flexibility and pricing structure
- Europe Competency Marketing
- Europe Competency Sales: Sales weakness
   IC-CB, EC-CB, Leasing, Used Trucks, Financial Services, weak
   continuous market coverage of customer groups
- Competitive strength IC-CB (--) and EC-CB (-)
- Market share Logistics
- Low cross selling quota within the customer groups

### Opportunities

- Unique selling position against competition (customer leadership/ solution orientation)
- Different positioning of competitors in all countries -> EU accounts
- Above average growth potential for Fin. Services
- Future/Baby market project business
- Leasing as Cash-Cow and Used Trucks as Star market
- Penetration Potential IC-CB/EC-CB
- Growth of After Sales with IC-CB/EC-CB
- Development Racks to Star, cross selling project business
- European rental pool for Logistics industry?
- Stronger customer penetration by different organization of the Sales unit?

#### **Threats**

- Brand integration of the competitors
- After Sales: Spare Parts price policy and price structure
- Negative price development Forklift Trucks and After Sales
- Neglecting Warehouse Trucks & System Trucks while strengthening IC-CB/EC-CB
- With sinking life cycle costs -> slow erosion of the After Sales business

Market/ Environment

#### **SWOT Analysis - Overview**

- The SWOT Analysis (also called SWOT Matrix) is one of the earliest strategy frameworks. It was developed in the 1960s at Harvard Business School by Learned, Christensen, Andrews, and Guth.
- The name is an acronym for Strengths, Weaknesses, Opportunities, and Threats.
- This framework provides basic directions for structuring strategic analysis.
- The underlying theory is that assessment of competitive position should combine both an external and an internal analysis. The internal factors are Weaknesses and Strengths, whereas the external factors are Opportunities and Threats.
- We can conduct SWOT analyses for our own organization in addition to our competitors, so that we gain added insight into our company's competitive position.
- The output of this analysis is often displayed in the form of a 2x2 matrix.
- SWOT Analysis is often conducted in conjunction with PEST Analysis.

Many market research firms routinely publish SWOT analyses for public companies.

