

**Industry and
Environment Analysis
&
Strategy Formulation**

3 Questions of Industry Analysis

1. Industry Accessible : Is it a realistic place for a new venture to enter?
2. Does industry contain markets that are ripe for innovation or are un-served ?
3. Are there any positions in the industry that will avoid some negative attributes of the industry ?

Critical Issues for Environmental and Industry Analysis

1. What are the major economic, technological, legal, and political trends on a national and an international level?
2. What are total industry sales over the past five years?
3. What is anticipated growth in this industry?
4. How many new firms have entered this industry in the past three years?
5. What new products have been recently introduced in this industry?
6. Who are the nearest competitors?
7. How will your business operation be better than this?
8. Are the sales of each of your major competitors growing, declining, or steady?
9. What are the strengths and weaknesses of each of your competitors?
10. What trends are occurring in your specific market area?
11. What is the profile of your customers?
12. How does your customer profile differ from that of your competition?

The External Assessment

Outline

The Nature of the External Audit & Forces

Competitive Forces

Porter's Five-Forces Model

Sources of External Information

Global Challenge

The External Factor Evaluation (EFE) Matrix

Competitive Profile Matrix (CPM)

External Environment Audit

Identify & Evaluate factors beyond the control of a single firm

- Increased foreign competition
- Population shifts
- Aging society
- Consumer fear of traveling
- Stock market volatility

The Nature of an External Audit

Purpose of External Audit

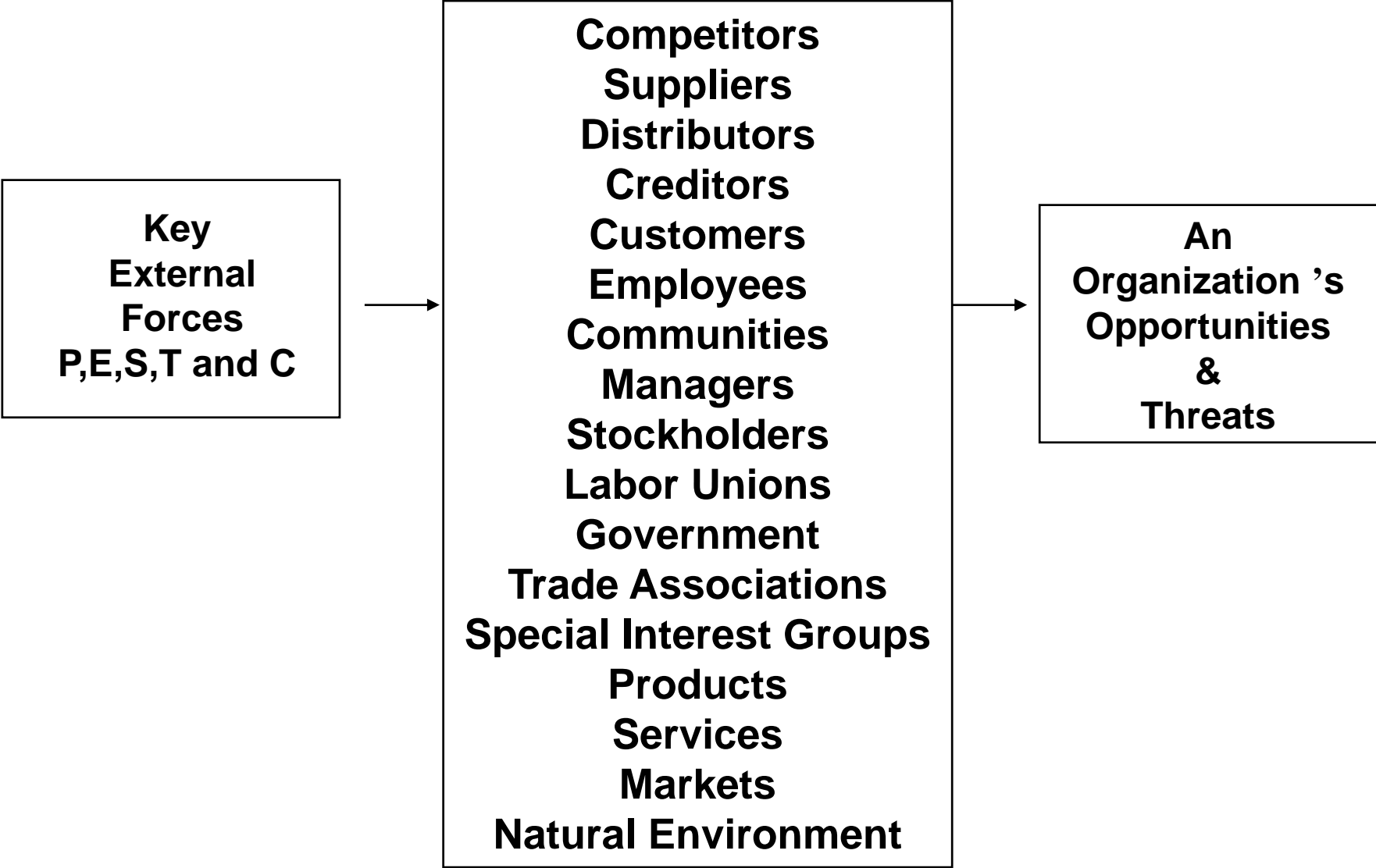
- To develop finite (key) list of
 - Opportunities ,*that could benefit a firm*
 - Threats , *that should be avoided*

- To formulate strategies that take advantage of external opportunities or that minimize the impact of potential threats

Key External Forces

- Economic forces
- Social, cultural, demographic and environmental forces
- Political, governmental and legal forces
- Technological forces
- Competitive forces

Relationships between Key External Forces and an Organization



Sources of Information

- Key Magazines**
- Trade journals**
- Newspaper**
- Internet**
- Libraries**
- Suppliers**
- Distributors**
- Customers**
- Competitors**

Economic Forces

Key Economic Variables

- Availability of Credit
- Level of disposable income
- Propensity of people to spend
- Interest rates
- Inflation rate
- Money market rate
- Consumption patterns
- Unemployment trend
- Worker productivity level
- Value of dollar
- Stock market trend
- Foreign countries' economic condition
- Import/export factors
- Income difference by regions
- Price fluctuations
- Monetary policies
- Fiscal policies
- Tax rates

Social,Cultural,Demographic and Environmental (Key Variables)

- **Childbearing rate**
- **Number of Marriages**
- **Number of Divorces**
- **Number of Deaths**
- **Immigration rates**
- **Social security programs**
- **Per capital income**
- **Location of retailing, manufacturing and service businesses**
- **Attitudes toward business**
- **Lifestyles**
- **Traffic congestion**
- **Trust in government**
- **Value placed on leisure time**
- **Buying habits**
- **Ethical concerns**
- **Attitudes toward saving**
- **Sex roles**
- **Attitudes toward investing**
- **Use of birth control**
- **Average level of education**
- **Government regulation**
- **Attitudes toward retirement**
- **Pollution control**
- **Energy conservation**
- **Waste management**

Political, Governmental, and Legal Forces

Some Political, Governmental, and Legal Variables :

- Government regulations
- Changes in Tax Laws
- Special Tariffs
- Number of Patents
- Change in Patents law
- Environment Protection law
- Nation by nation relationship
- Import export regulations
- Government fiscal and monetary policy changes
- Political conditions in foreign countries
- Lobbying activities
- Size of government budgets
- World oil, currency, and labor market
- Local, state, and national elections

Technological Forces

- **Internet / e- commerce**
 - **Life styles,**
 - **speed of distribution,**
 - **creating new product and service,**
 - **economies of scale,**
 - **changing entry barriers,**
 - **redefining the relationship between industries and suppliers, creditors, customers and competitor**

Competitive Forces

- Collection & evaluation of data on competitors is essential for successful strategy formulation

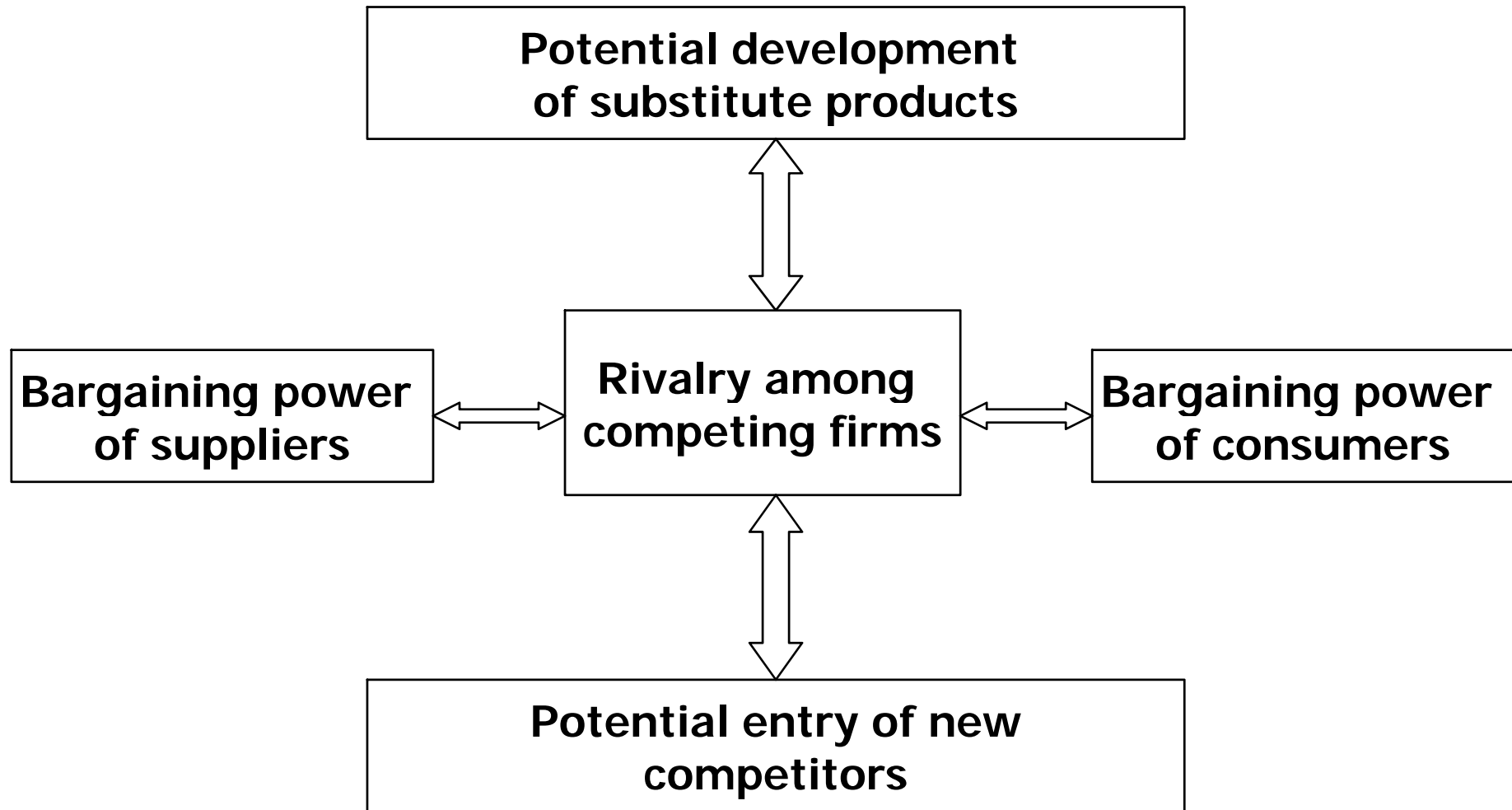
Key Questions About Competitors:

- Major competitor's strengths
- Major competitor's weaknesses
- Major competitor's objectives and strategies
- How they respond to external variables(PEST)
- Their vulnerability to our alternative strategies
- Our vulnerability to strategic counterattack
- Our product/service positioning relative to them
- Entry and exit of firms in the industry
- Key factors for our current position in industry
- Sales/profit rankings of competitors over time
- Nature of supplier & distributor relationships
- The threat of substitute products/services

Competitive Analysis: Porter's Five-Forces Model

- It is widely used approach for developing strategies in many industries**
- The intensity of competition among firms varies widely across industries**

The Five-Forces Model of Competition



1. Rivalry Among Competing Firms

- Most powerful of the five forces
- Focus on competitive advantage of strategies
- Effects from the Strategies Change by one firm
 - Lowering the price
 - Enhancing quality
 - Adding features
 - Providing service
 - Extending warranties
 - Increasing advertising

2. Potential Entry of New Competitors

- **Barriers to entry are important**
 - ❑ **Economies of scale in marketing, production, distribution**
 - ❑ **Need to gain technology and specialized know-how**
 - ❑ **Lack of experience**
 - ❑ **Strong customer loyalty**
 - ❑ **Strong brand preferences, brand equity**
 - ❑ **Large capital requirement**
 - ❑ **Lack of adequate distribution channels**
 - ❑ **Government regulation policies**
 - ❑ **Lack of access to raw materials**
 - ❑ **Possession of patents**
 - ❑ **Undesirable locations**
 - ❑ **Potential saturation of the market**
 - ❑ **Switching cost**
- **Higher-quality, lower prices, and substantial marketing resources can overcome barriers**

3. Potential Development of Substitute Products

- Pressures increase when price of substitute products declines and consumer's switching costs decrease
- Firm's plans for increased capacity & market penetration
 - **Plastic containers with glass, paperboard and aluminum can**
 - **Acetaminophen with other pain and headache remedies**

4. Bargaining Power of Suppliers

- Large number of suppliers & few substitutes affects intensity of competition
- Backward integration can gain control or ownership of suppliers when suppliers are unreliable, too costly, not capable of meeting firm's needs

Bargaining power of suppliers

- Switching costs
- Costs of inputs relative to selling prices
- Customer relationships
- Presence of substitute supply

5. Bargaining Power of Consumers

- Customers are concentrated or buy in volume affects intensity of competition
- Consumer power is higher where products are standard or undifferentiated
 - **Selling price**
 - **Warranty coverage**
 - **Accessory packages**

Bargaining power of consumers

- Switching costs
- Buyer information availability
- Price sensitivity
- Substitute product availability

Sources Of External Information

- Published source
 - Periodicals
 - Journals
 - Reports
 - Government documents
 - Abstracts
 - Books
 - Directories
 - Newspapers
 - Manuals

Sources Of External Information

■ Unpublished source

- Customer surveys

- Market research

- Speeches at professional and shareholder's meetings

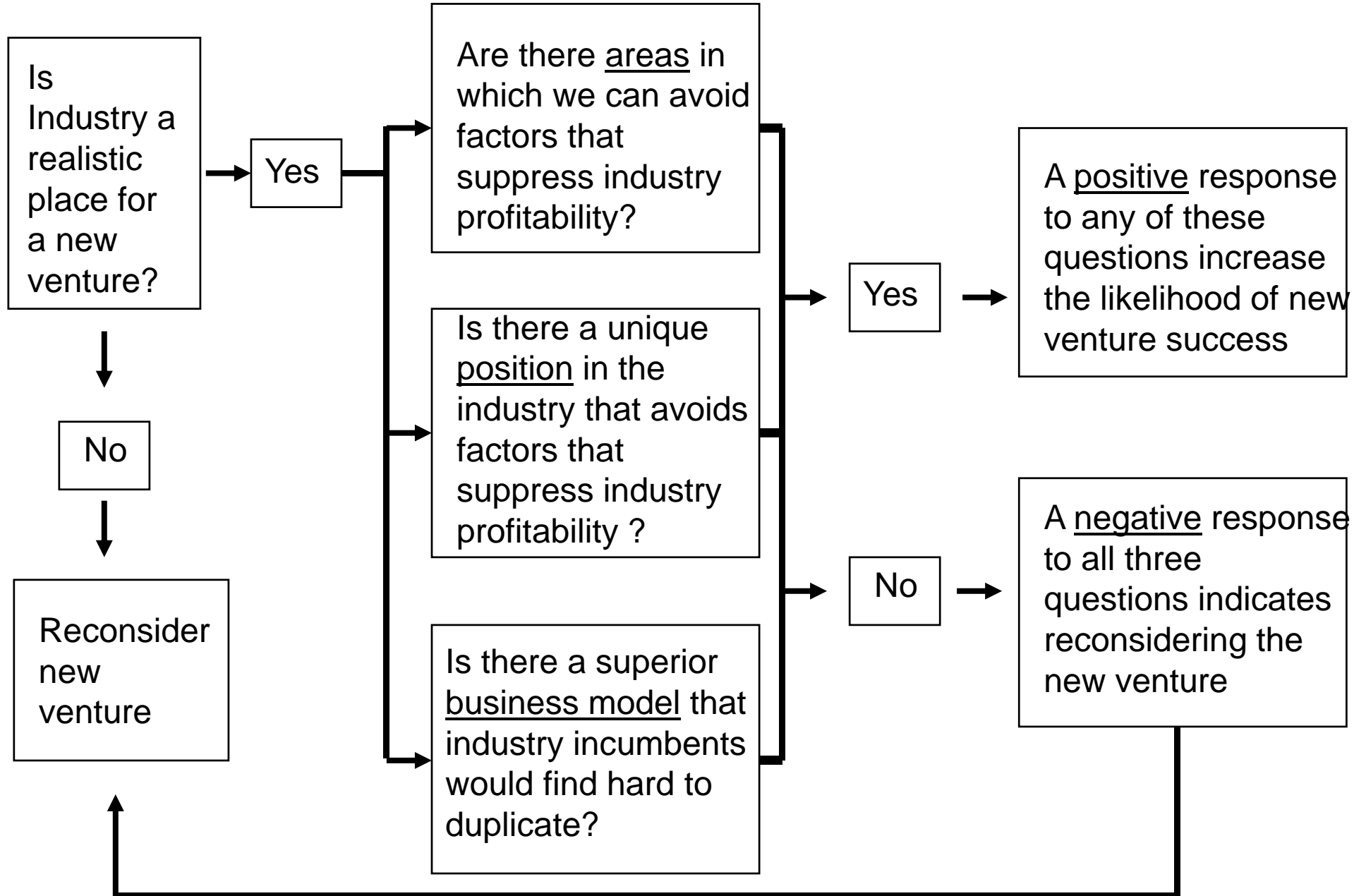
- Television programs

- Interview

- Conversation with stakeholders

■ Internet

Potential Success of Venture



Business Model Components

- Core Strategy (how a firm compete)
- Strategic Resources (how a firm acquires and uses its resources)
- Partnership network (how a firm structure and nurtures its partnership)
- Customer interface (how a firm interface with its customers)

The Global Challenge

- Corporations are taking advantage of opportunity to share in the benefit of world wide economic development**
- Markets are shifting rapidly in tastes,trends and prices**
- Innovative transport systems accelerating transfer of technology**
- More countries are welcome foreign investment**
- Market leaders(East Asian Countries) in labor intensive industries**
- Cost of energy,availability of resources,inflation rates,existing taxes rate,and nature of trade regulation**

5 Steps of EFE matrix development

1. List key external factors including both Opportunities and Threats
2. Assign to each factor a weight that ranges from 0.0 (not important) to 1.0 (very important), sum all weights must equal 1.0
3. Assign a 1 to 4 rating to each key external factor to indicate how effectively the firm's current strategies respond to factor, where 4= the response is superior, 3=above average, 2=average, and 1=poor
4. Multiply each factor's weight by its rating to determine a weighted score
5. Sum the weighted score for each variable to determine the total weighted score for organization

EFE – Gateway Computers

Key External Factors	Weight	Rating	Wtd Score
Opportunities			
1. Global PC market expected to grow 20% in 2004	0.10	3	0.30
2. Cost of PC component parts expected to decrease 10% - 2004	0.10	3	0.30
3. Internet use growing rapidly	0.05	2	0.10
4. China entered WTO; lowered taxes for importing PC's	0.10	1	0.10
5. The average income for PC worker has declined from \$40K/yr to \$30k/yr	0.05	3	0.15

EFE – Gateway Computers (cont'd)

Key External Factors	Weight	Rating	Wtd Score
Opportunities (cont'd)			
6. Modernization of business firms and government agencies	0.05	2	0.10
7. U.S. (& world) economies recovering	0.05	3	0.15
8. 30% of Chinese population can afford a PC; only 10% of homes have a PC	0.05	1	0.05
Threats	0.10	1	0.10
1. Intense rivalry in industry	0.10	1	0.05

EFE – Gateway Computers (cont'd)

Key External Factors	Weight	Rating	Wtd Score
Threats (cont'd)			
2. Severe price cutting in PC industry	0.10	2	0.20
3. Different countries have different reg's and infrastructure for PC's	0.05	1	0.05
4. Palm & PDA becoming substitutes	0.05	3	0.15
5. Demand exceeds supply of experienced PC workers	0.05	4	0.20
6. Birth rate in U.S. declining annually	0.05	3	0.15

EFE – Gateway Computers (cont'd)

Key External Factors	Weight	Rating	Wtd Score
Threats (cont'd)			
7. U.s. consumers and businesses delaying purchase of PC's	0.05	2	0.10
8. PC firms diversifying into consumer electronics	0.05	3	0.15
Total	1.00		2.40

Industry Analysis EFE

Total weighted score of 4.0

- Organization response is outstanding to threats and weaknesses

Total weighted score of 1.0

- Firm's strategies not capitalizing on opportunities or avoiding threats

Industry Analysis EFE

Important --

Understanding the factors used in the EFE Matrix is more important than the actual weights and ratings assigned.

The Competitive Profile Matrix (CPM)

Identifies firm's major competitors and their strengths & weaknesses in relation to a sample firm's strategic positions

		Gateway		Apple		Dell	
CSF's	Wt	Rating	Wt'd Score	Rating	Wt'd Score	Rating	Wt'd Score
Market share	0.15	3	0.45	2	0.30	4	0.60
Inventory sys	0.08	2	0.16	2	0.16	4	0.32
Fin position	0.10	2	0.20	3	0.30	3	0.30
Prod. Quality	0.08	3	0.24	4	0.32	3	0.24
Cons. Loyalty	0.02	3	0.06	3	0.06	4	0.08
Sales Distr	0.10	3	0.30	2	0.20	3	0.30
Global Exp.	0.15	3	0.45	2	0.30	4	0.60
Org. Structure	0.05	3	0.15	3	0.15	3	0.15

Industry Analysis CPM

Important --

Just because one firm receives a 3.2 rating and another receives a 2.8 rating, it does not follow that the first firm is 20 percent better than the second.

The Internal Assessment

Outline

The Nature of an Internal Audit
The Resource-Based View (RBV)

Management
Marketing

Finance/Accounting

Production/Operations

Research & Development

Management Information Systems

The Internal Factor Evaluation (IFE) Matrix

Nature of an Internal Audit

- Basis for establishing Objectives & Strategies
 - **Internal strengths/weaknesses**
 - **External opportunities/threats**
- **Intention of capitalizing upon internal strengths and overcoming weaknesses**

The process of Performing an Internal Audit

- Parallels process of external audit
- Managers and employees need to be involved
- Gathering ,assimilating and evaluating information
 - Management**
 - Marketing**
 - Finance/accounting**
 - Production/operations**
 - Research & Development**
 - Management information Systems**

The process of Performing an Internal Audit

- Being an excellent vehicle for improving the process of understanding nature and effect of decision makings and communication in the organization

Resource Based

Internal resources can be grouped into 3 categories

1. Physical resources: plants and equipment, location, technology, raw materials, machines
2. Human resources: training, experience, intelligence, knowledge, skills, abilities
3. Organizational resources : firm structure, planning processes, information systems , patents, trademarks, copyrights, data bases

Management

Functions of Management

1. Planning
2. Organizing
3. Motivating
4. Staffing
5. Controlling

Marketing

Marketing Functions

- 1. Customer analysis**
- 2. Selling products/services**
- 3. Product & service planning**
- 4. Pricing**
- 5. Distribution**
- 6. Marketing research**
- 7. Opportunity analysis**

Finance/Accounting

- Determining financial strengths & weaknesses key to strategy formation

Finance/Accounting

Finance/Accounting Functions

- 1. Investment decision (Capital budgeting)**
- 2. Financing decision**
- 3. Dividend decision**

Production/Operations

Production/Operations Functions

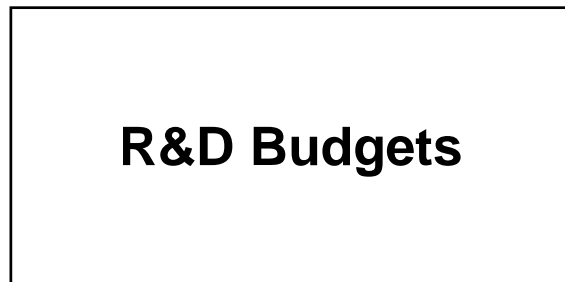
- **Process**
- **Capacity**
- **Inventory**
- **Workforce**
- **Quality**

Research & Development

Research & Development Functions

- **Development of new products before competitors**
- **Improving product quality**
- **Improving manufacturing processes to reduce costs**

Research & Development



**Financing as many
projects as possible**

**use percent-of-sales
method**

**Budgeting relative to
competitors**

**How many successful
new products are
needed**

Management Information Systems

Purpose

- **Improve performance of an enterprise by improving the quality of managerial decisions**
- **Effective information system : collect, codes, stores, synthesizes, and present information**
- **Logical flow of material from input to output : printouts, written reports, table, graphs, charts, purchase order, invoice, inventory records, payroll**

The Internal Factor Evaluation (IFE) Matrix

- To summarize and evaluates the major strengths and weaknesses in the functional area of a business
- To provide a basis for identifying and evaluating relationships among those area
- Understanding of the factors included is more important than the actual numbers

5 Steps of EFE matrix development

1. List key internal factors as identified in the internal-audit process
2. Assign to each factor a weight that ranges from 0.0 (not important) to 1.0 (all- important),sum all weights must equal 1.0
3. Assign a 1 to 4 rating to each key internal factor to indicate whether that factor represent ,where 4= major strength,3=minor strength,2=minor weakness,and 1=major weakness
4. Multiply each factor's weight by its rating to determine a weighted score for each variable
5. Sum the weighted score for each variable to determine the total weighted score for organization

The Internal Factor Evaluation (IFE) Matrix

IFE– Gateway Computers			
Key Internal Factors	Weight	Rating	Wtd Score
Strengths			
1. Several new senior executive with world-class skills and leadership experience	0.05	4	0.40
2. Continuous decline in operating costs and cost of goods sold	0.05	3	0.15
3. Well-known brand name	0.05	3	0.15
4. Consumer Reports (Sept 2002) recommended Gateway 500X as #1	0.10	4	0.40
5. As a direct seller, Gateway holds high brand recognition	0.05	3	0.15

IFE– Gateway Computers

Key Internal Factors	Weight	Rating	Wtd Score
Strengths (cont'd)			
6. Gateway is diversifying into non-PC products	0.10	3	0.30
7. Good relationship with its suppliers.	0.05	4	0.20
8. Economies of scale, the 6 th largest PC maker I the world	0.05	4	0.20
9. Gateway retails stores excellent	0.05	3	0.15

IFE– Gateway Computers

Key Internal Factors	Weight	Rating	Wtd Score
Weaknesses			
1. High operating expense (22% of revenue vs. 10% for Dell)	0.05	3	0.15
2. Almost no budget for R&D vs. Dell's 18% of revenue	0.10	1	0.05
3. Low return on assets ratio	0.025	1	0.10
4. No niche market	0.025	2	0.05

IFE– Gateway Computers

Key Internal Factors	Weight	Rating	Wtd Score
Weaknesses (cont'd)			
5. Shortage of cash due to successive losses	0.10	2	0.20
6. Limited number Gateway stores	0.05	2	0.10
7. Weak performance in overseas market	0.10	2	0.20
TOTAL	1.00		2.85

- The total weighted score can range from 1.0 to a high of 4.0
- Total weighted score below 2.5 characterize organizations that are weak internally
- Score above 2.5 indicate a strong internal position

Strategy Analysis & Choice

- The Input Stage
- The Matching Stage
- The Decision Stage

Nature of Strategy Analysis & Choice :

Seeks to determine alternative courses of action that could best enable the firm to achieve its mission and objectives

Comprehensive Strategy-Formulation Framework

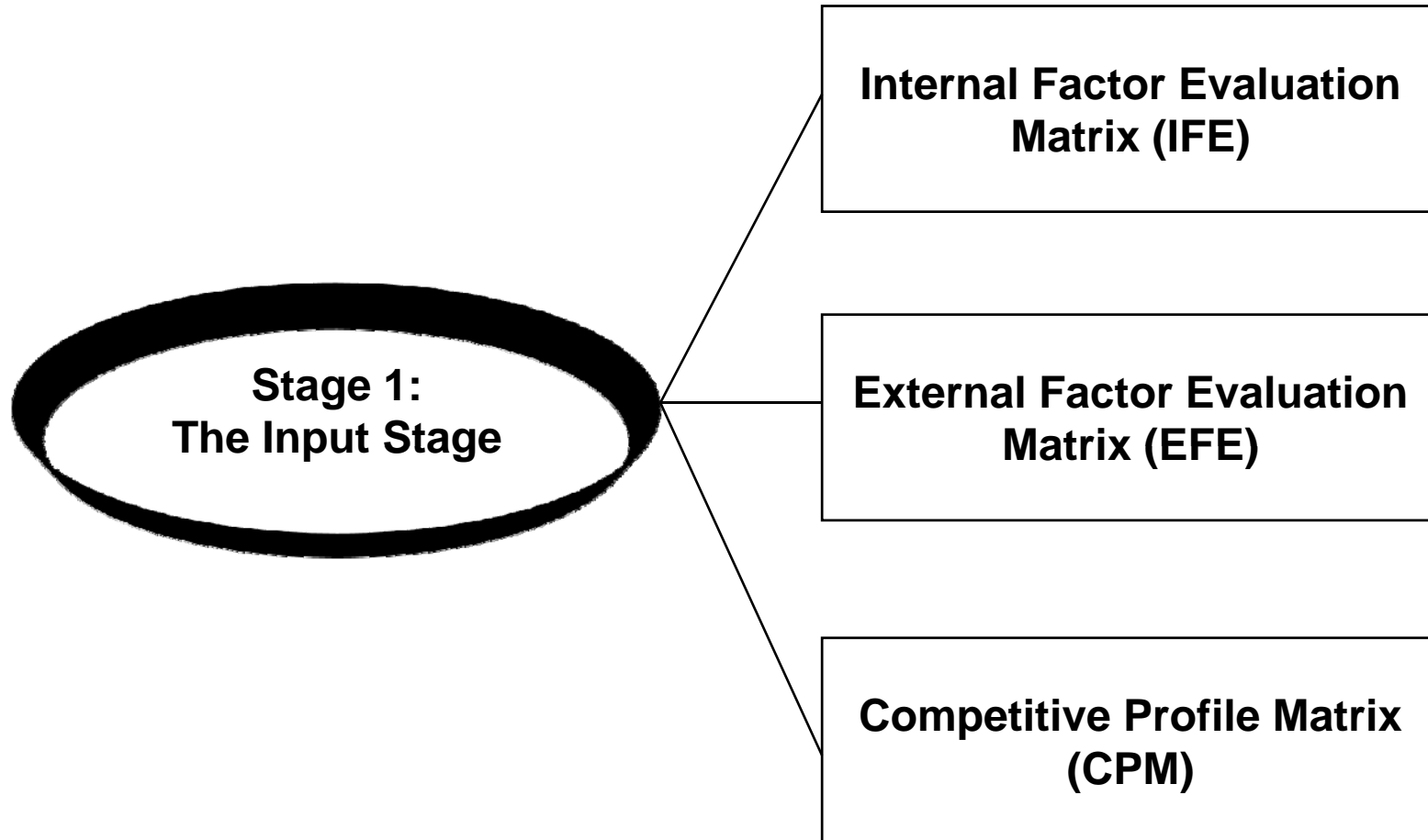


**Stage 1:
The Input Stage**

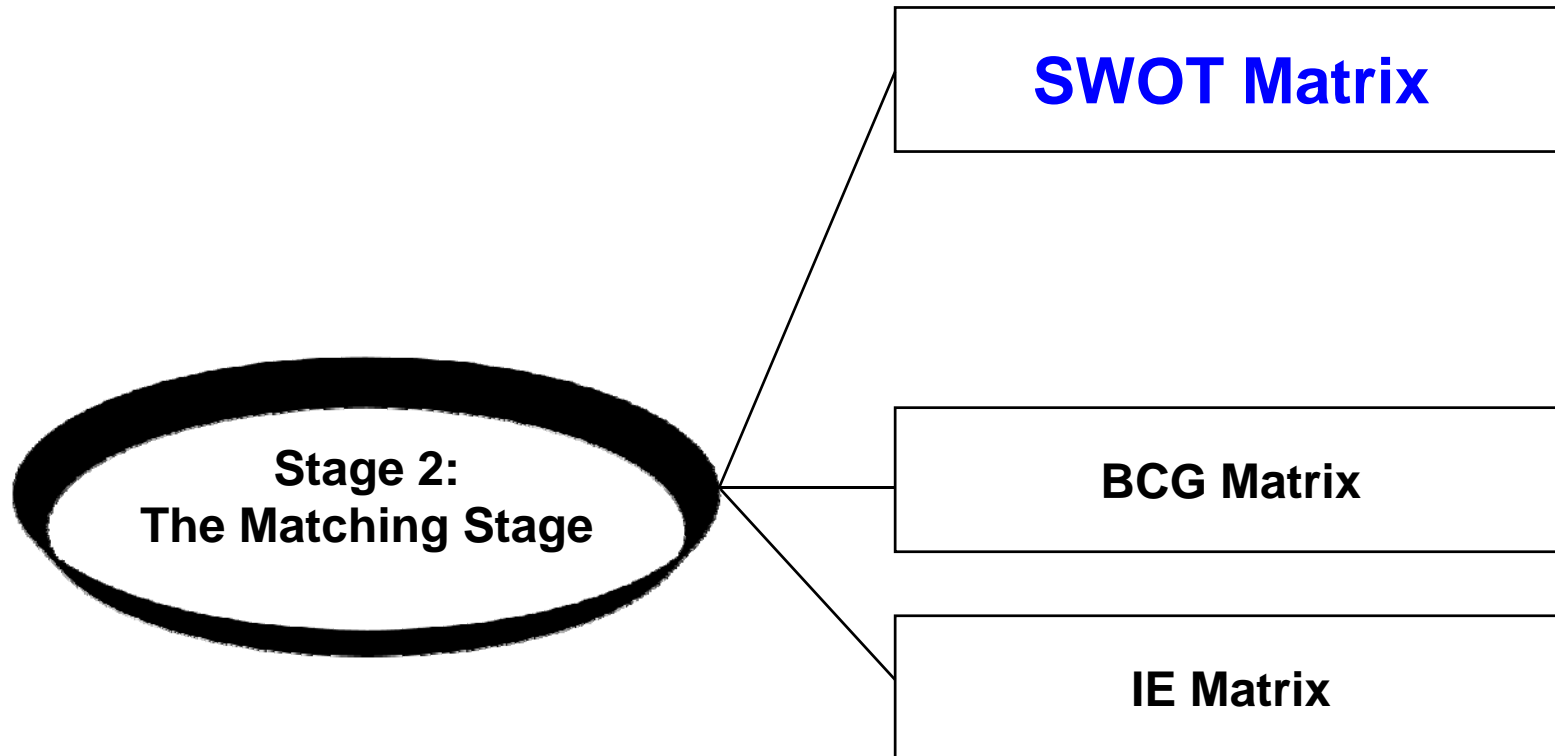
**Stage 2:
The Matching Stage**

**Stage 3:
The Decision Stage**

Strategy-Formulation Analytical Framework



Strategy-Formulation Analytical Framework



SWOT Matrix (TOWS matrix)

Four Types of Strategies

- Strengths-Opportunities (SO)
- Weaknesses-Opportunities (WO)
- Strengths-Threats (ST)
- Weaknesses-Threats (WT)

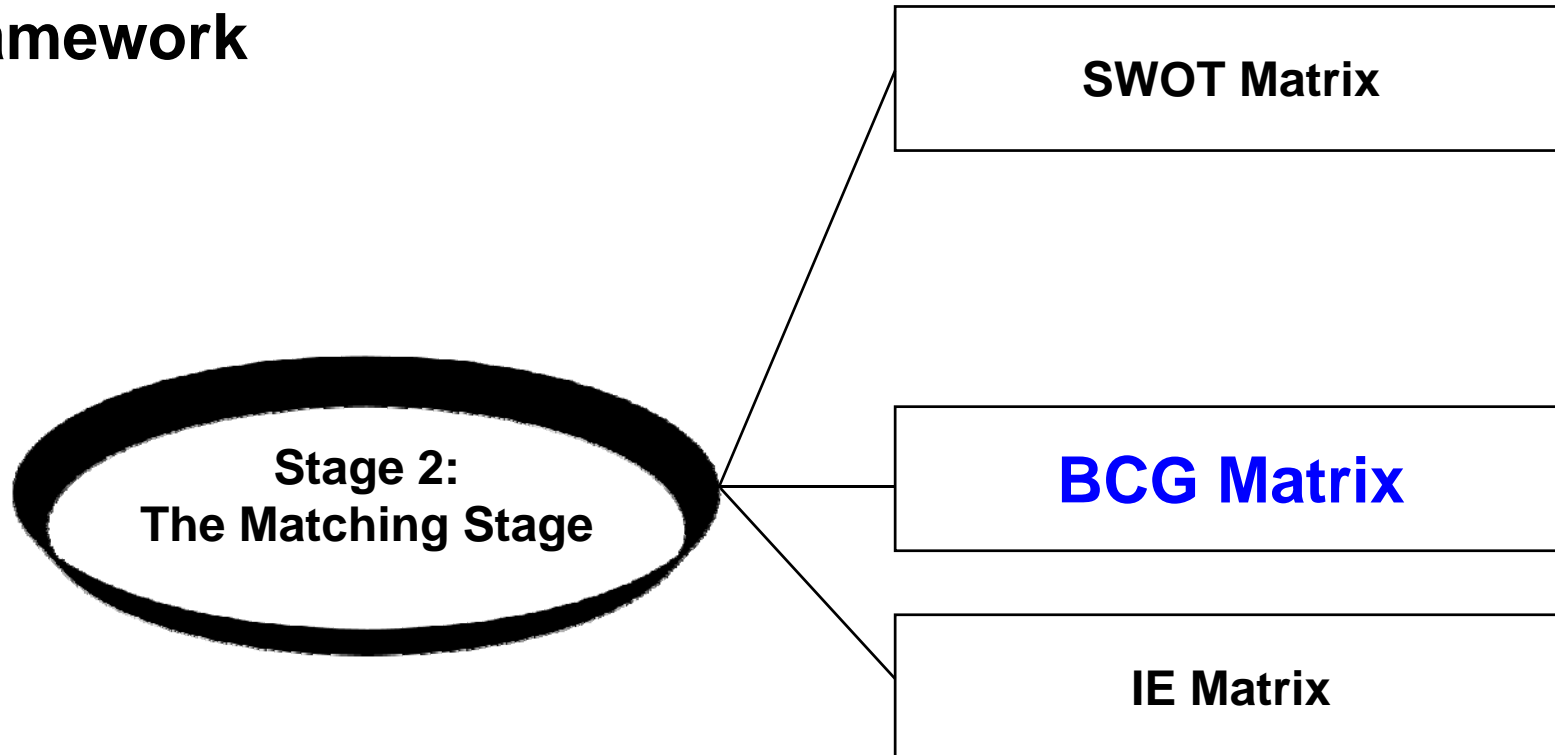
SWOT Matrix(TOWS matrix)

<p><i>Leave Blank</i></p>	<p><u>Strengths – S</u></p> <p><i>List Strengths</i></p>	<p><u>Weaknesses – W</u></p> <p><i>List Weaknesses</i></p>
<p><u>Opportunities – O</u></p> <p><i>List Opportunities</i></p>	<p>SO Strategies</p> <p><i>Use strengths to take advantage of opportunities</i></p>	<p>WO Strategies</p> <p><i>Overcoming weaknesses by taking advantage of opportunities</i></p>
<p><u>Threats – T</u></p> <p><i>List Threats</i></p>	<p>ST Strategies</p> <p><i>Use strengths to avoid threats</i></p>	<p>WT Strategies</p> <p><i>Minimize weaknesses and avoid threats</i></p>

Matching Key Factors to Formulate Alternative Strategies

Key Internal Factor	+	Key External Factor	=	Resultant Strategy
Excess working capacity (strength)	+	20% annual growth in the cell phone industry (opportunity)	=	Acquire Cellfone, Inc.
Insufficient capacity (weakness)	+	Exit of two major foreign competitors from the industry (opportunity)	=	Pursue horizontal integration by buying competitor's facilities
Strong R&D (strength)	+	Decreasing numbers of young adults (threat)	=	Develop new products for older adults
Poor employee morale (weakness)	+	Strong union activity (threat)	=	Develop a new employee benefits package

Strategy-Formulation Analytical Framework



BCG Matrix

Boston Consulting Group Matrix

- **Enhances multi-divisional firm in formulating strategies**
- **Autonomous divisions(profit center)= business portfolio**
- **Divisions may compete in different industries**
- **Focus on market-share position & industry growth rate**

BCG Matrix

- **Relative Market Share Position and Industry growth rate**

- **Relative Market share** : Ratio of a division's own market share in a particular industry to the market share held by the largest rival firm in that industry.

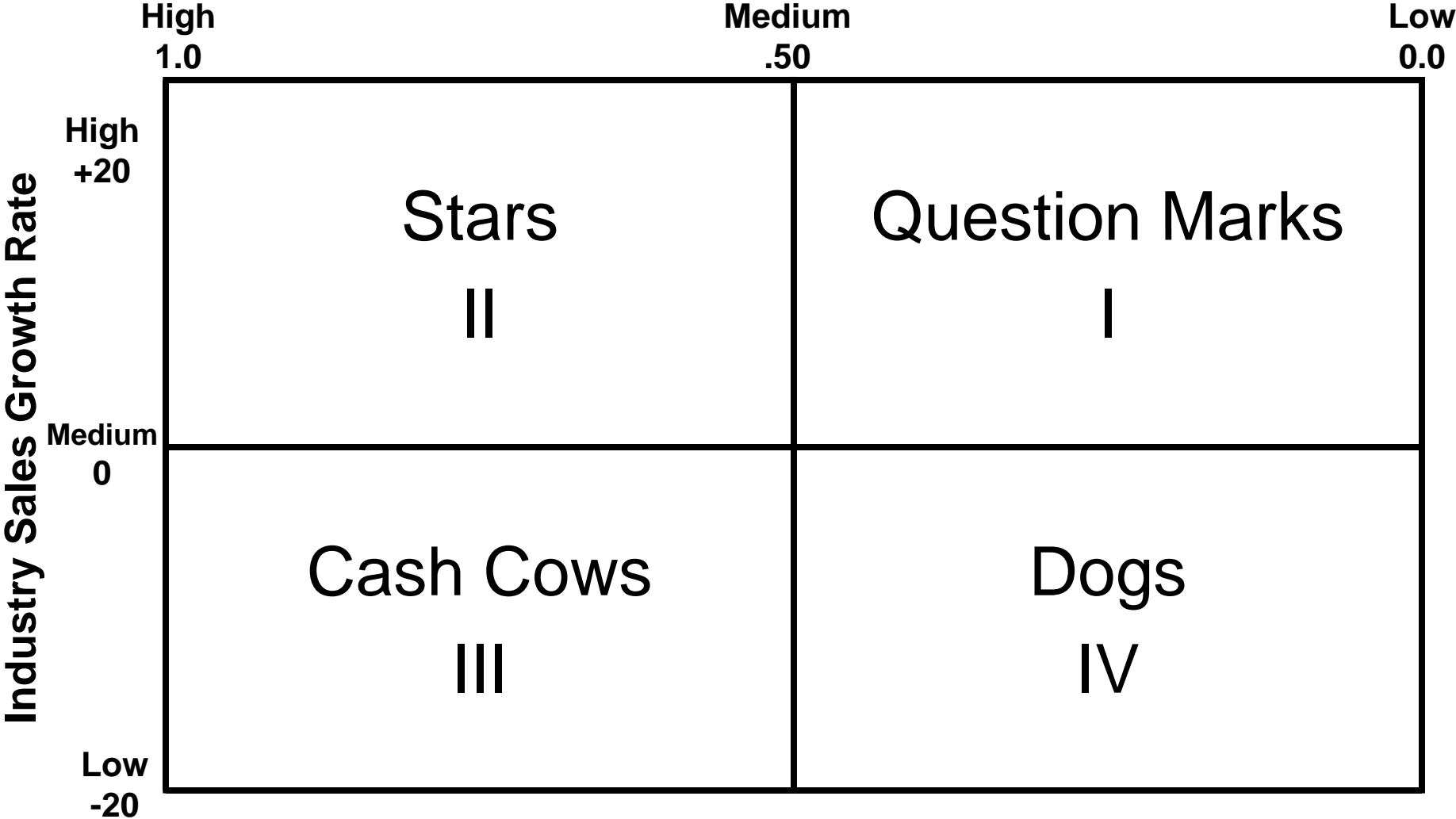
- mid point on X-axis is set at 0.5, corresponding to a division has half market share of leading firm

- **Industry Growth rate**

- Y- axis represents industry growth rate could range from – 20 to + 20 percent with 0.0 being mid point

BCG Matrix

Relative Market Share Position

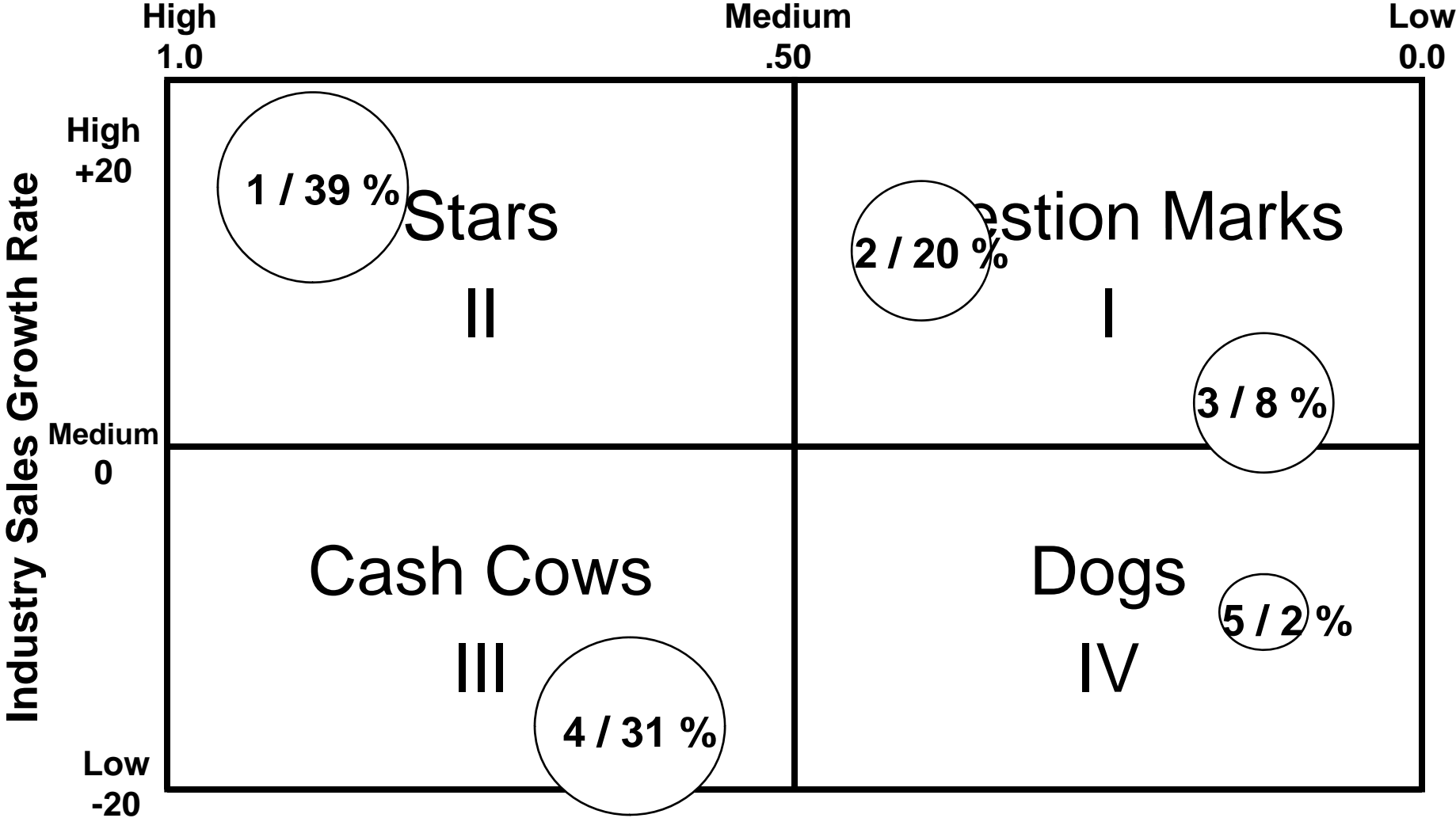


An Example BCG Matrix

Division	Revenue	Revenue %	Profit	Profit %	market Share %	Growth Rate %
1	60,000	37	10,000	39	80	+15
2	40,000	24	5,000	20	40	+10
3	40,000	24	2,000	8	10	+1
4	20,000	12	8,000	31	60	-20
5	5,000	3	500	2	5	-10
Total	165,000	100	25,500	100		

BCG Matrix

Relative Market Share Position



BCG Matrix

Question Marks

- **Low relative market share – compete in high-growth industry**
 - **Cash needs are high**
 - **Cash generation is low**

- **Decision to strengthen by pursuing intensive strategies (market penetration, market development, or product development) or to sell them**

BCG Matrix

Stars

- **High relative market share and high industry growth rate**
 - **Best long-run opportunities for growth & profitability**

- **Should receive substantial investment to maintain or strengthen their dominant positions**
 - **Forward, Backward, and Horizontal Integration, market penetration, market development, product development and joint ventures are appropriate strategies**

BCG Matrix

Cash Cows

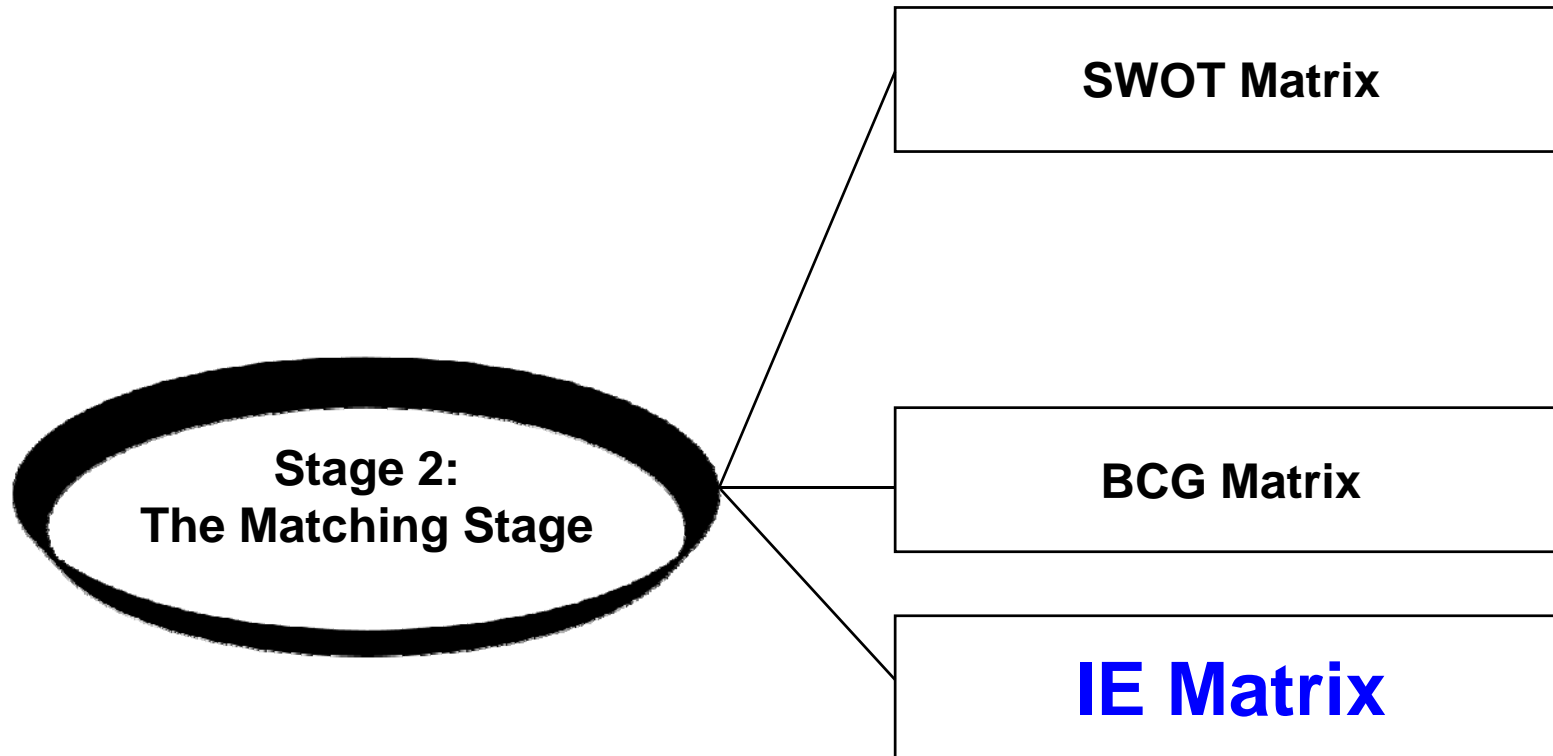
- **High relative market share position, competes in low-growth industry**
 - **Generate cash in excess of their needs**
 - **Milked for other purposes**
- **Maintain strong position as long as possible**
 - **Product development, concentric diversification**
 - **If cash cow weakens—retrenchment or divestiture can be more appropriate**

BCG Matrix

Dogs

- **Low relative market share & compete in slow or no market growth industry**
 - **Weak internal & external position**
- **Liquidation, divestiture, or trimmed down to retrenchment**

Strategy-Formulation Analytical Framework

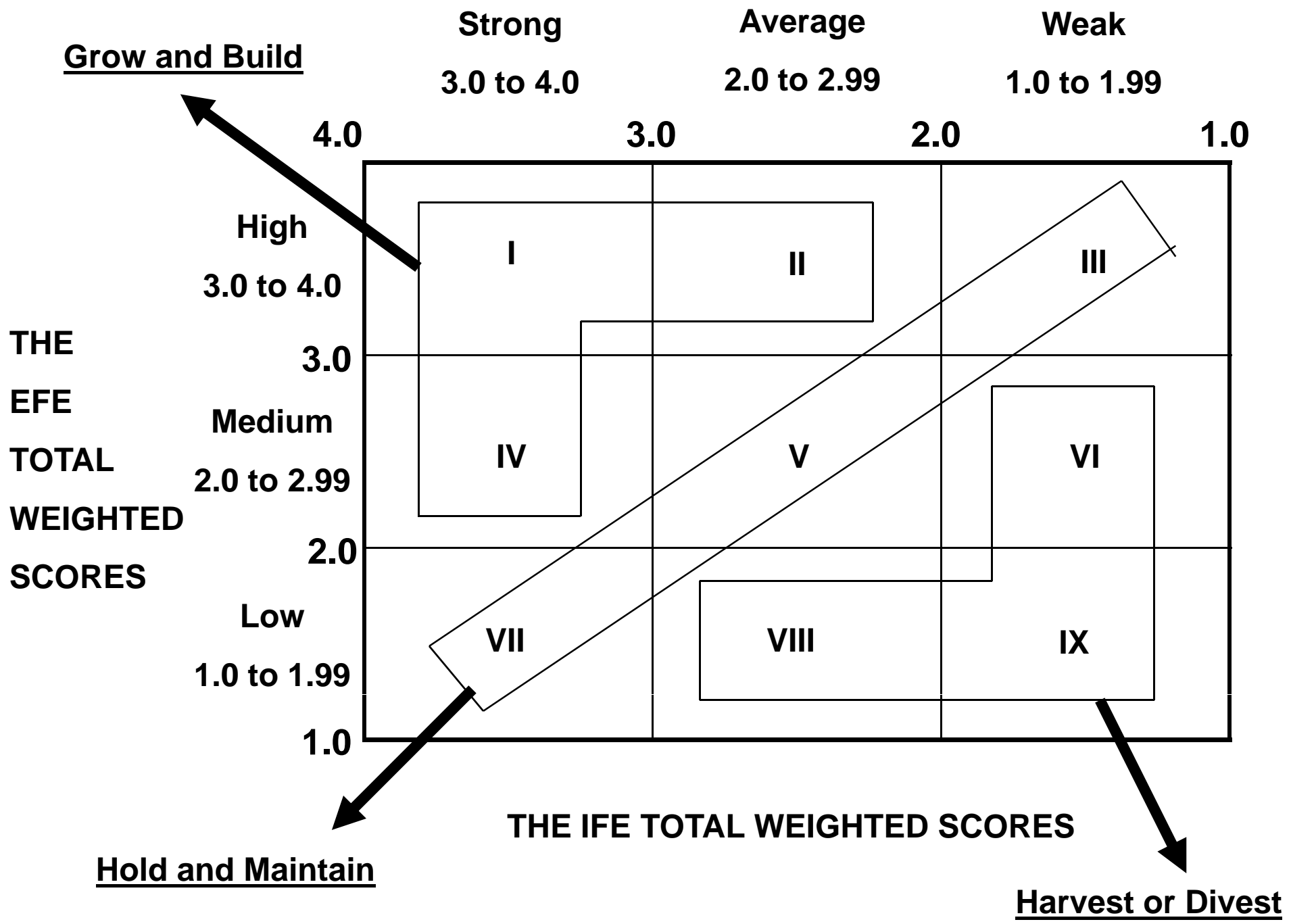


The Internal-External (IE) Matrix

- It positions an organization's various divisions in a nine-cell display
- It is similar to BCG in plotting organization division in diagram
- It is also call portfolio matrix
- Each circle represents percentage sales contribution of each division and pie slices reveal the percentage profit contribution

		Strong 3.0 to 4.0	Average 2.0 to 2.99	Weak 1.0 to 1.99	
		4.0	3.0	2.0	1.0
THE EFE TOTAL WEIGHTED SCORES	High 3.0 to 4.0	I	II	III	
	Medium 2.0 to 2.99	IV	V	VI	
	Low 1.0 to 1.99	VII	VIII	IX	

THE IFE TOTAL WEIGHTED SCORES



Recommended Strategies

■ Grow and Build

- Intensive (market penetration ,market development and product development)
- Integrative (backward integration,forward integration and horizontal integration)

■ Hold and Maintain

- Market penetration and product development

■ Harvest or Divest

Segment	Revenue	Profit	EFE	IFE	
1 Western	31%	25%	3	2	(II)
2 Central	48%	50%	3	3	(I)
3 Eastern	19%	21%	2	2	(V)
4 Property	2%	4%	2.5	2.5	(V)

**THE
EFE
TOTAL
WEIGHTED
SCORES**

		Strong		Average		Weak	
		4.0	3.0 to 4.0	3.0	2.0 to 2.99	2.0	1.0 to 1.99
		4.0	3.0 to 4.0	3.0	2.0 to 2.99	2.0	1.0 to 1.99
High 3.0 to 4.0	I	II		III			
	2/50%	1/25%					
	3.0	V		VI			
Medium 2.0 to 2.99	IV	3/21%		4/4%			
	2.0	VII		VIII		IX	
Low 1.0 to 1.99	VII		VIII		IX		
1.0	VII		VIII		IX		

THE IFE TOTAL WEIGHTED SCORES

Strategy-Formulation Analytical Framework



QSPM

Quantitative Strategic Planning Matrix

- **Technique designed to determine the relative attractiveness of feasible alternative actions**

QSPM

Strategic Alternatives

Key External Factors

Weight

Strategy 1

Strategy 2

Strategy 3

Economy

Political/Legal/Government

Social/Cultural/Demographic/
Environmental

Technological

Competitive

Key Internal Factors

Management

Marketing

Finance/Accounting

Production/Operations

Research and Development

Computer Information

Systems

6 Steps to develop QSPM

1. Make a list of O,T,S, and W in the left column
2. Assign weights to each key of O,T,S, and W
3. Examine the Stage 2, and identify alternative strategies that organization should consider
4. Determine Attractiveness score (AS) by asking question “Does this factor affect the choice of strategies being made?”
5. Compute Total Attractiveness Scores
6. Compute the Sum Total Attractiveness Scores

		Strategy 1		Strategy 2	
Key Factors	Weight	AS	TAS	AS	TAS
Opportunities					
1.	0.20	4	0.80	3	0.60
2.	0.15	4	0.60	3	0.45
3.	0.25	-	-	1	0.25
Threats					
1.	0.20	3	0.60	-	0.12
2.	0.10	2	0.20	3	0.30
3.	0.05	-	-	3	-
4.	0.05	1	0.05	4	0.20
Strengths					
1.	0.20	3	0.60	-	-
2.	0.20	4	0.80	3	0.60
3.	0.15	-	-	1	0.15
4.	0.10	2	0.20	4	0.40
Weaknesses					
1.	0.10	4	0.40	3	0.30
2.	0.05	-	-	4	0.20
3.	0.20	2	0.40	-	-
Sum Total Attractiveness Score			4.65		3.57

Types of Corporate Strategies

■ Integration Strategies

- Forward Integration
- Backward Integration
- Horizontal Integration

■ Intensive Strategies

- Market penetration
- Market development
- Product development

■ Diversification Strategies

- Concentric diversification
- Conglomerate diversification

■ Defensive Strategies

- Retrenchment
- Divestiture
- Liquidation

Functional Strategy

- **Marketing Strategy**
- **Financial Strategy**
- **Operations Strategy**
- **Human Resources Strategy**
- **Research & Development Strategy**
- **Information Systems Strategy**