

TECHNOLOGICAL

RHYMES WITH ORANGE By Hilary Price



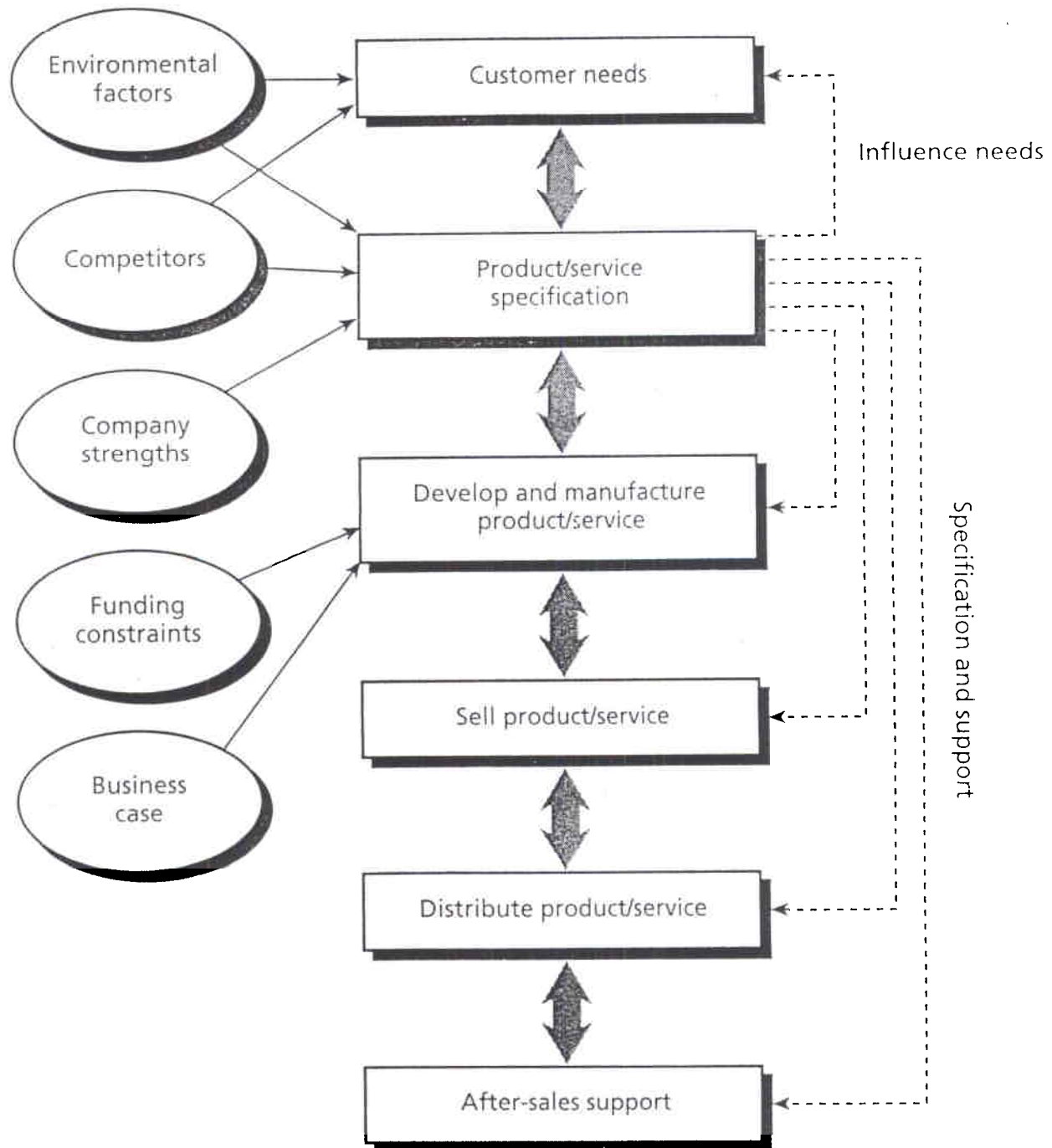
STRATEGY

What is Marketing?

Marketing defines what to provide, how to ensure that customers know about it and buy it, and how to get it to the customers

It is important to realize that customers do not buy products or services; they buy perceived benefits

Marketing Roles



The Marketing Mix

- **PRODUCT**
- **PRICE**
- **PROMOTION**
- **PLACE**

Types of Markets

CONSUMER

INDUSTRIAL

Consumer Market

Categories of Consumer Goods/Services

- **Convenience goods/services**
purchased frequently, without much thought or research (e.g., household supplies)
- **Shopping goods/services**
purchased infrequently, making careful comparisons (e.g., refrigerator)
- **Specialty goods/services**
unique characteristics; no substitutes; select target markets

Industrial Market - 1

Categories of Users

operations

product/service incorporation (OEMs)

resale

Industrial Market - 2

Categories of Goods

raw materials

fabricated parts

capital goods

accessory equipment

operating supplies

badged products

Industrial Market - 3

DISTINCTIVE CHARACTERISTICS

derived demand

less pricing flexibility

market changes magnified

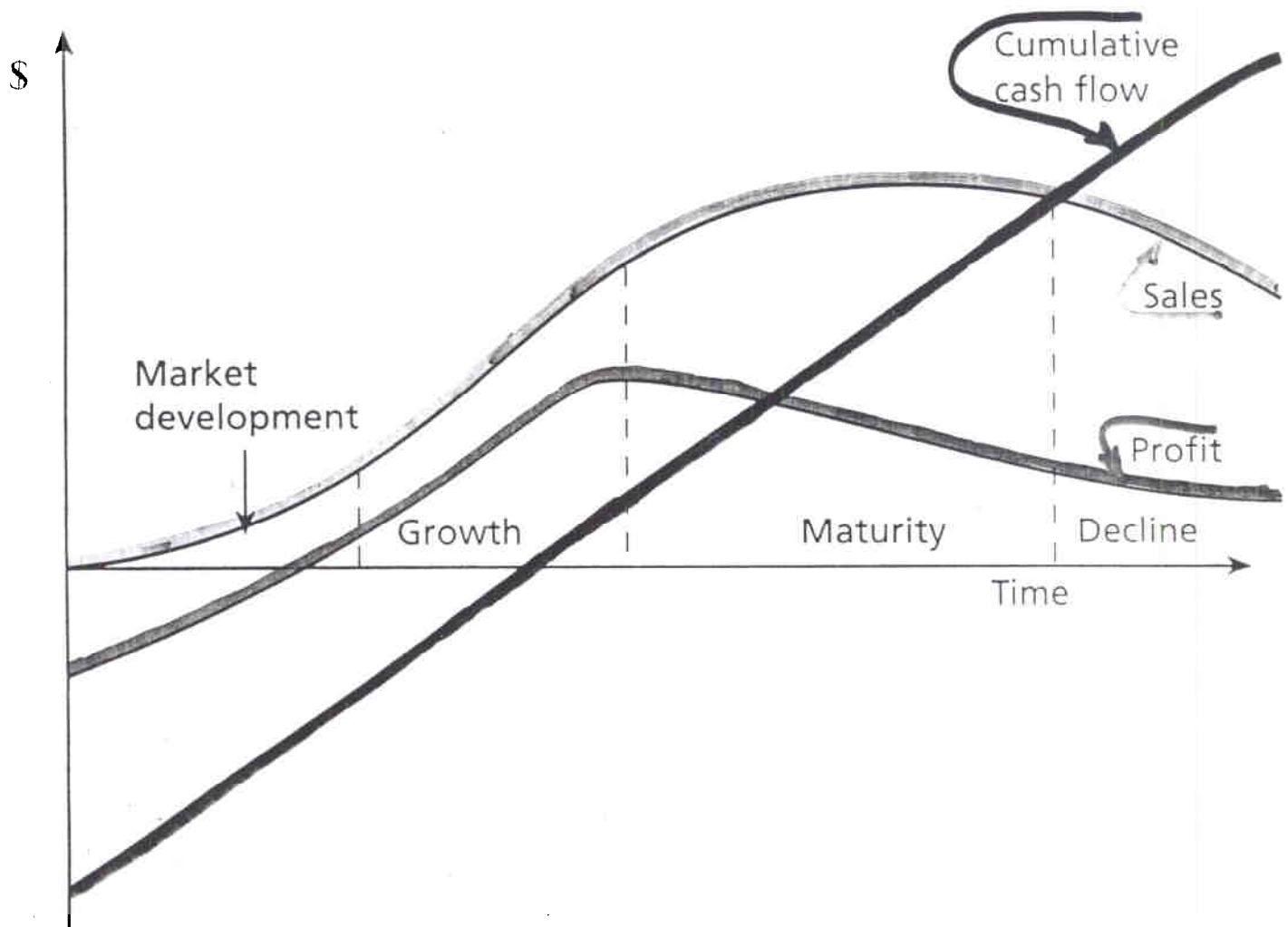
fewer buyers

sophisticated buyers

**diffused buying
responsibility**

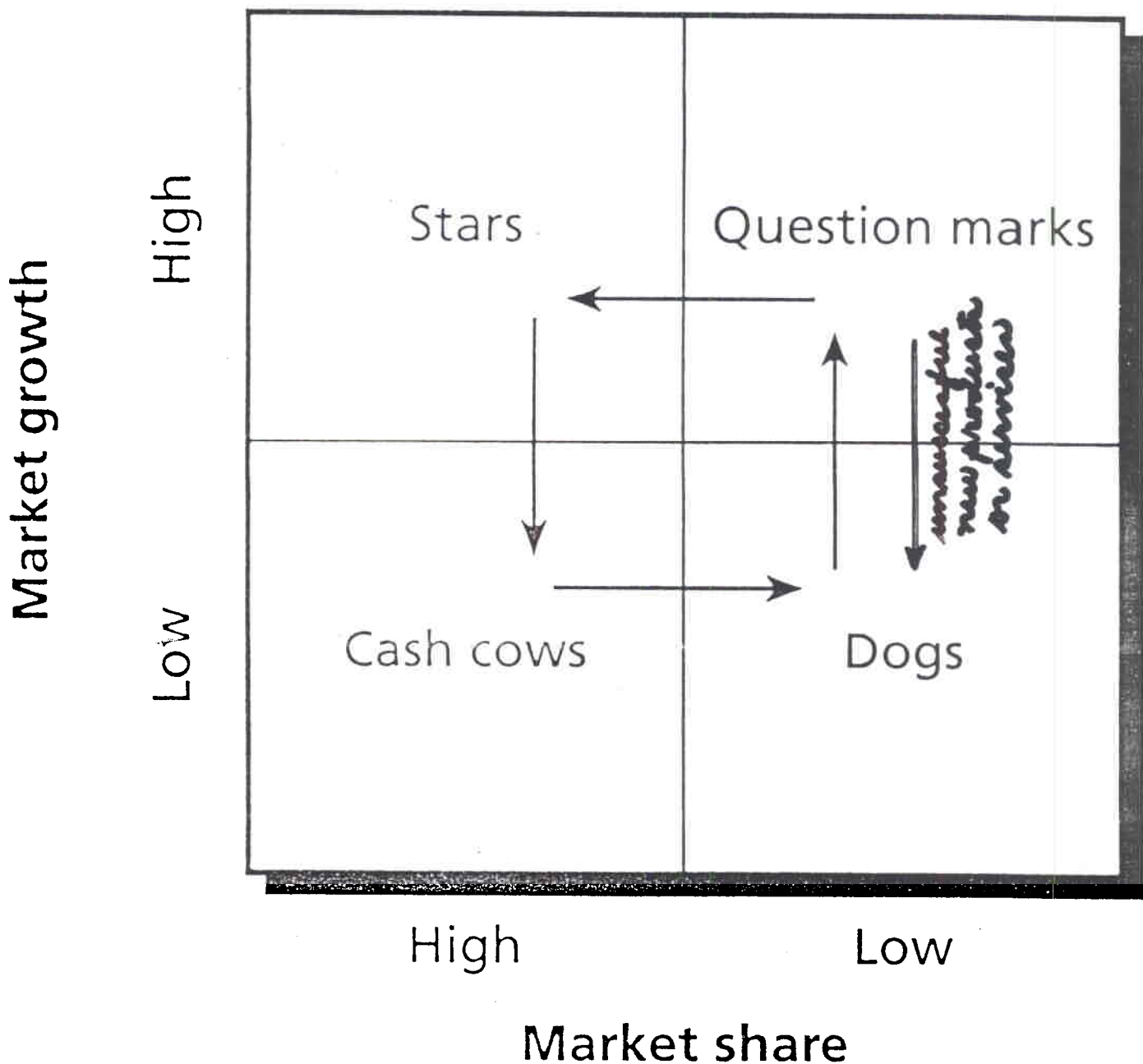
**smaller geographical
distribution**

Product Life Cycle



Product Portfolio

Boston Matrix Portfolio Analysis



Product and Market Strategies

Product	Market	
	Existing	New
Existing	Penetrate market further Displace competition Increase market share Expand market	Develop new market Create demand 'Tweak' product Sell company image
New	Build on existing brands Build on reputation	High risk Diversification Needed for growth

Technological Strategy Approaches

Technological Strategies

OFFENSIVE STRATEGY

First-to-Market Policy

DEFENSIVE STRATEGY

Follow-the-Leader Policy

IMITATIVE STRATEGY

Me-Too Policy

INTERSTITIAL STRATEGY

Applications Engineering Policy

Technological Strategies

PRODUCT INNOVATION	HIGH	PRODUCT INNOVATOR MARKET FOCUS Technology intuitive in introduction/growth stage PRODUCT FOCUS Radical designs using new technologies PROCESS FOCUS Flexibility with limited volume	INTEGRATOR MARKET FOCUS Market perceptive in all stages. Emphasis on new market applications. PRODUCT FOCUS Incremental and radical new products PROCESS FOCUS Incremental and radical process improvements
	LOW	REACTOR MARKET FOCUS Competition reactive in maturity/decline stage PRODUCT FOCUS Imitative products PROCESS FOCUS Cost reduction with minimal investment	VALUE LEADER MARKET FOCUS Customer responsive with strong customer service PRODUCT FOCUS Quality and value with improved products PROCESS FOCUS Quality and productivity through process refinement
		LOW	HIGH
		PROCESS INNOVATION	

Technological Strategies

Types and degrees of functional capability that an organization must have

<div>Strategy</div> <div>Function</div>	Offensive.	Defensive.	Imitative.	Applied Engring. /Interstitial.
Nondirected Fundamental Research.	M	M	N	N
Applied Directed Research.	H	M	N	N
Experimental Development and Design.	H	H	N	L/M
Advanced Development and Design.	H	H	H	H
Pilot/Prototype to Full Production.	M	M	H	M
Quality Control/ Product Design.	M	M	H	M
Patents and Licenses.	H	M	L	M
"After-Sales" Services.	H	M	H	H
Education and Advisory Services.	H	M	L	H
Long-Term Planning.	H	M	L	H

Key: None.
Low.
Medium.
High.

Technological Functional Deployment Process

W. Dale Compton - 1997

- **analogous to quality functional deployment (QFD) process tool used in concurrent engineering**
- **creates a technological road map for the enterprise**
- **objectives are:**
 - (1) the development of a consensus understanding of a technology strategy that fully supports the business strategy**
 - (2) the commitment of the necessary resources in the business plan to support development of the technologies**

Engineering and System Needs

-5-

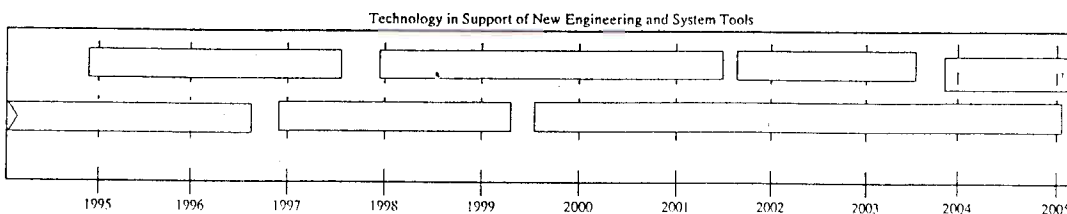
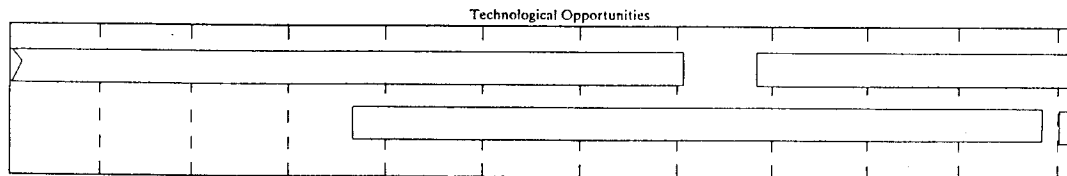
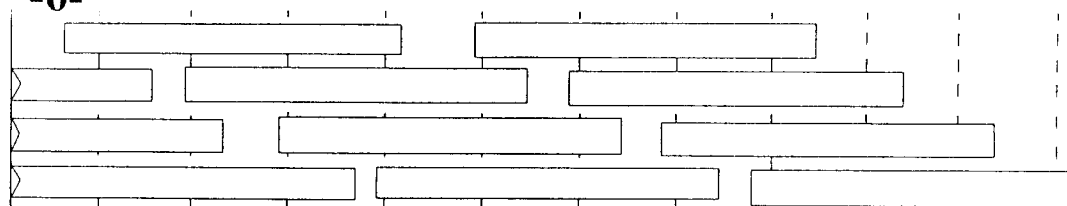
MATRIX IV

NEED for NEW ENGINEERING
and
SYSTEM TOOL

ENGINEERING and SYSTEM NEEDS	NEW TOOLS NEEDED to SATISFY NEEDS	TASKS REQUIRED to PROVIDE the NEW TOOLS	RANKING LOW = 1 TO HIGH = 10				Sum of Rankings	Desirability Further Consideration	Detailed Assessment? If Yes, by Whom?	Expected Date of Completion	Mode of Exploration Int. (I), Ext. (E), Joint (J)	Recommended Action Approve (A), Consider Further (P) or Delay (D)	Action Plan (If Yes, By Whom?)	Final Responsibility for Program	Review Authority
			Adequacy of Technology	Availability of Technology	Expected Lifetime of Tool										

Technology Roadmap for the Enterprise

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Technology roadmap for the enterprise