

Developing Innovation and Creativity for Business Advantage

**Week – 6:
Innovation, Invention & Commercialization
+
New-Product Development and Product Life-Cycle
Strategies**

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Recap

- Week 1 – Introduction to innovation
- Week 2 – Concepts & techniques of innovation & creativity
- Week 3 – Innovative eBusiness / eCommerce
- Week 4 – Developing Innovation and Creativity for Business Advantage
- Week 5 – Creativity, Innovation, and Entrepreneurship

This week – we will look “Innovation, Invention & Commercialization
+
New-Product Development and Product Life-Cycle Strategies

Part 1

Innovation, Invention & Commercialization

- Innovation = Invention + Commercialization
- Are all Innovations Opportunities?

Opposing Views...

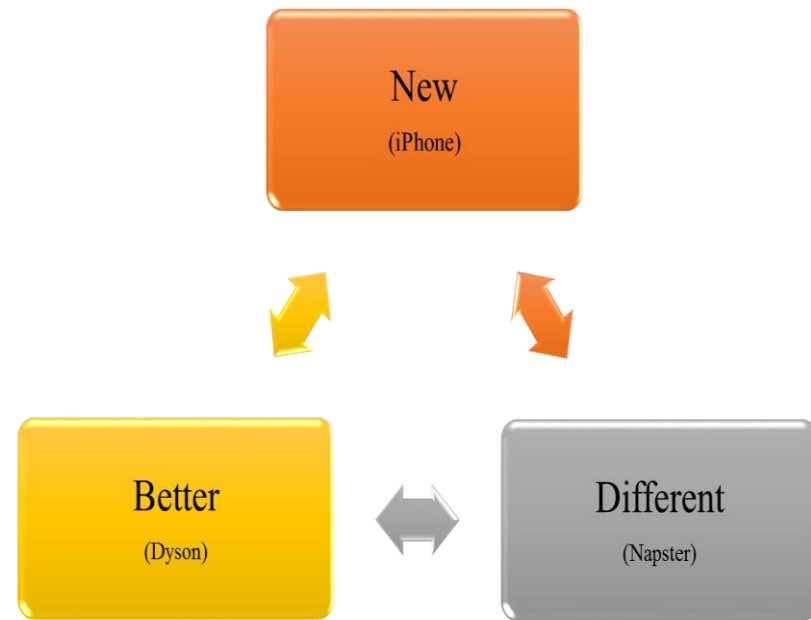
There is a difference between the commonly held definitions of “Creativity and Opportunity” and the definitions used in a business context.

- We may think that creativity is related to artistic or cerebral activity and opportunity is a matter of chance.
- Business management theory suggests that in a commercial context, creativity can be learned or developed and that it need not relate to complete novelty; opportunity can be created or developed.

What's an Opportunity?

An opportunity has the qualities of being attractive, desirable and timely and is anchored in a product or service which creates value for buyer or end user”

- A new or improved product
- A new service
- A new means of production
- A new way of distributing the product or service
- An improved service
- New combinations
- Or a hybrid of the above



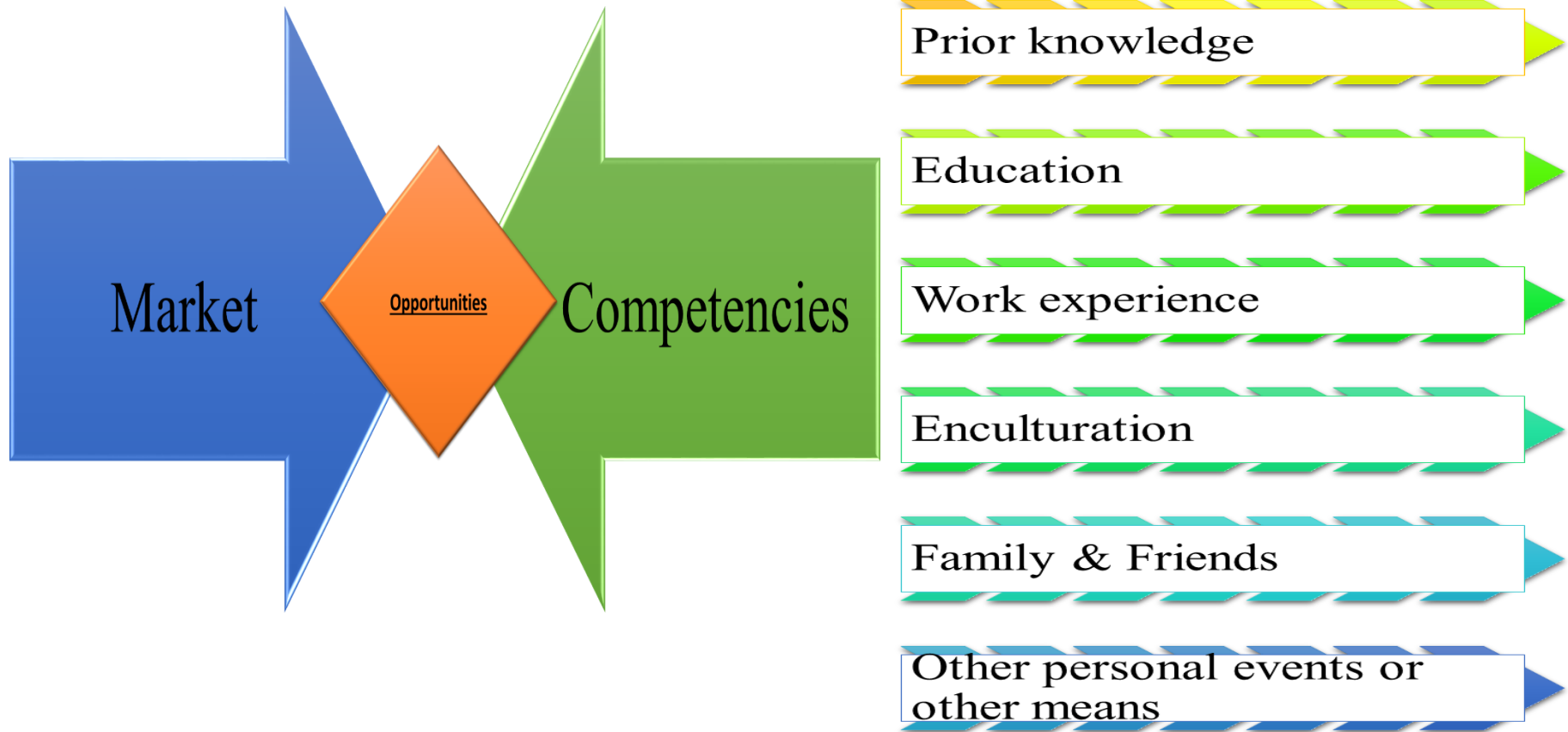
Recognising an Opportunity

- Opportunities are not like raindrops – they do not fall at our feet.
- Well, not usually! From time to time something might just happen which allows an entrepreneur to move forward.
- However, if we wait for an opportunity to turn up, we will probably never succeed.
- As creative business people we seek or develop opportunities.

So...

- Do Ideas = Opportunities?
- Do Problems = Opportunities?
- Reality - An Idea is Only an Opportunity when It:
 - Adds Value to Consumer
 - It Solves a Problem
 - It Can Make Some Money (Communicate Some Value to Other Stakeholders)
 - It is a Good "Fit" with the Entrepreneurial Team
- Timmons & Spinelli (2007)

Factors Influencing the Creation / Discovery of Opportunities



Drucker's Opportunity Scan

Internal

1. The unexpected - can we react to change?
2. Incongruity – can we cope with the difference between what we thought would happen and what actually happened? This could create an opportunity.
3. Inadequacy in underlying processes – can existing processes and procedures be improved?
4. Changes in our industry or our market – can we respond positively?

• External

1. Changes in demographics – age, income, health, etc.
2. Changes in perception, mood, meaning - can we react to changes in fashion, culture, attitudes.
3. New knowledge – science and industry affect our products and processes.

Creative Invention Vs Innovative Opportunity

STRUGGLER	 INNOVATOR
STAGNATOR	COPIER

Creativity and Commerce

So, think of creativity in terms of ways of thinking which support commercial opportunities, whether in developing new processes, services or products.

Ideas Start With Solving Problems

- Remember... Ideas Start With Solving Problems
- Any Problems are Big Opportunities.
- No Problems, No Solutions, & No Reasons for Firms to Exist.
- No One Pays You to Solve a Non-existing Problem

Solving Problems"

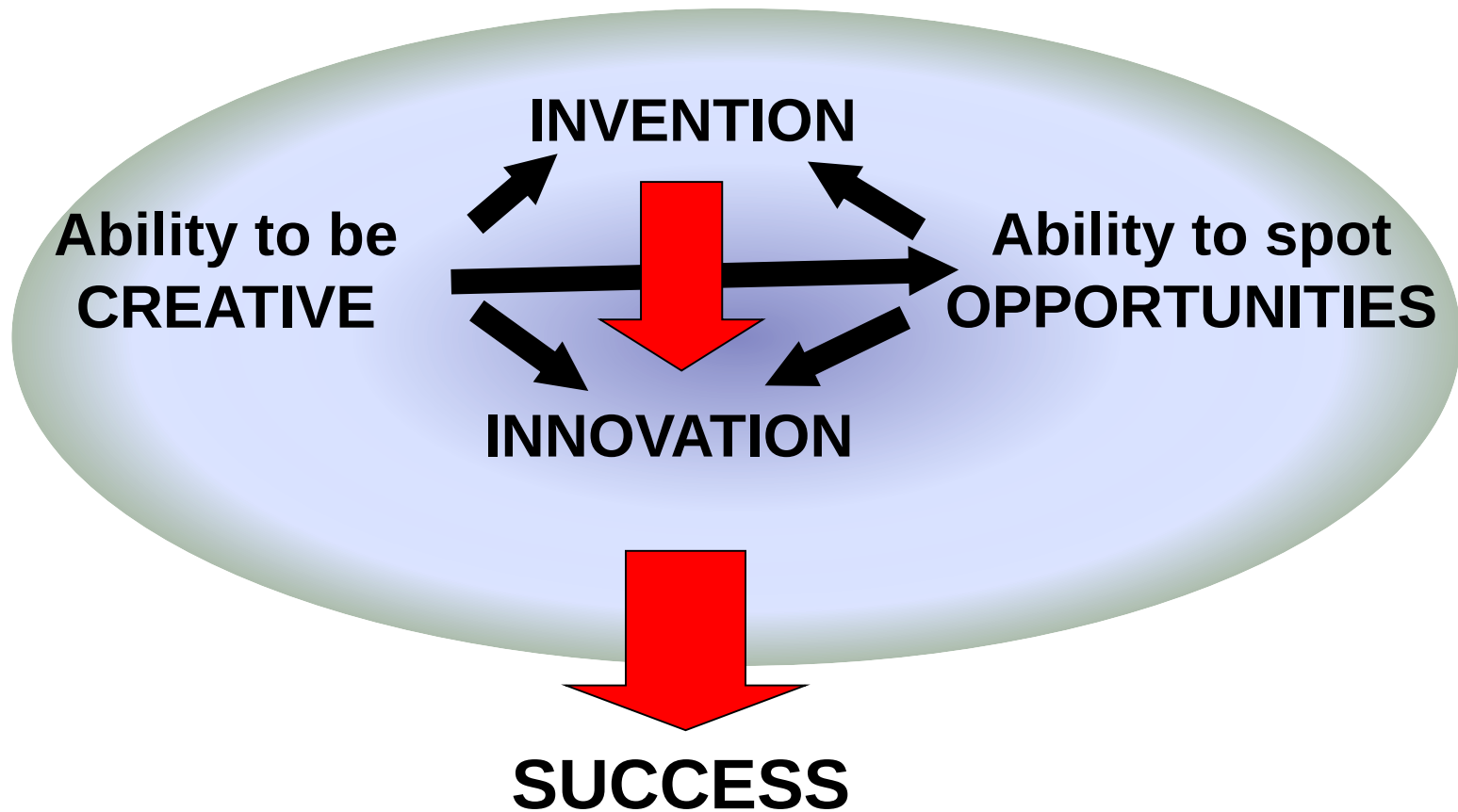
The word “problem”...

- The normal use of this word might suggest that there is something wrong
- In a business context, we might use the word simply to represent something which makes the customer's activities less efficient/enjoyable/simple
- So, a “problem” might be something quite trivial, everyday or simple – however, by providing a cost effective solution, we please our customer and make money
- Examples
 - Velcro – a simple alternative to the shoelace.
 - A keyring that beeps – you can find your keys anywhere in the room
 - Goretex – water resistant jackets.

Attributes of Creative Thinking

- Flexibility – willing to look at an issue from many angles, not set in our ways.
- Originality – attempts to find non-typical responses to problems.
- Non-judgemental – not rejecting a potential solution without giving it appropriate consideration

Creativity, Invention, Opportunity & Entrepreneurship



Creating Creativity

- Creative Individuals don't just sit waiting for the "lightbulb moment"



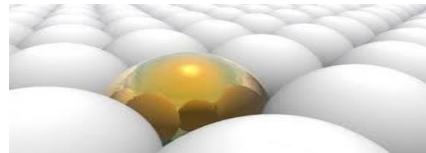
- They approach a problem systematically

Stages in Creative Thought

- Preparation



- Incubation



- Insight



- Evaluation



- Elaboration



Preparing the idea

Incubation of the key skills and resources required

The gathering of insight from the market research

Evaluation of the consumer feedback

And the elaboration of the idea in order to ensure successful development

What Stops Business Creativity?

Barriers are understandable, but nevertheless can prevent or slow the development of new ideas:

- Fear – change is always frightening.
- Risk – am I risking my established business?
- Convention – we've always done it this way.
- Self-doubt – if it's that good, surely somebody else would have made it by now?
- Fear of failure

Problems to tackle

Pitch what you think is the greatest problem that must be solved.

- 1) Vote on which problems to tackle.
- 2) The class then breaks up into teams of ?
- 3) The teams develop innovative solutions to a problem, and pitch your ideas along with your value proposition, market opportunities, revenue model, etc.

Another round of voting and cuts take place.

- Then form teams of ? to further refine their solutions.

Simple Criteria's:

- a) Ease of implementation
- b) Expected degree of impact

Part 2

New-Product Development and Product Life-Cycle Strategies

Objectives:

- Understand how companies find and develop new-product ideas.
- Learn the steps in the new-product development process.
- Know the stages of the product life cycle.
- Understand how marketing strategies change during the product's life cycle.

Microsoft

- \$50 billion in profits over 27 years
- Early new product development relied heavily on copying the competition
- \$4.2 billion annually invested in R & D
- Innovation is critical to Microsoft's future success
- Much of R & D efforts are Internet related
- Many new products and services are in development

Definition

- New Product Development
 - Development of original products, product improvements, product modifications, and new brands through the firm's own R & D efforts.

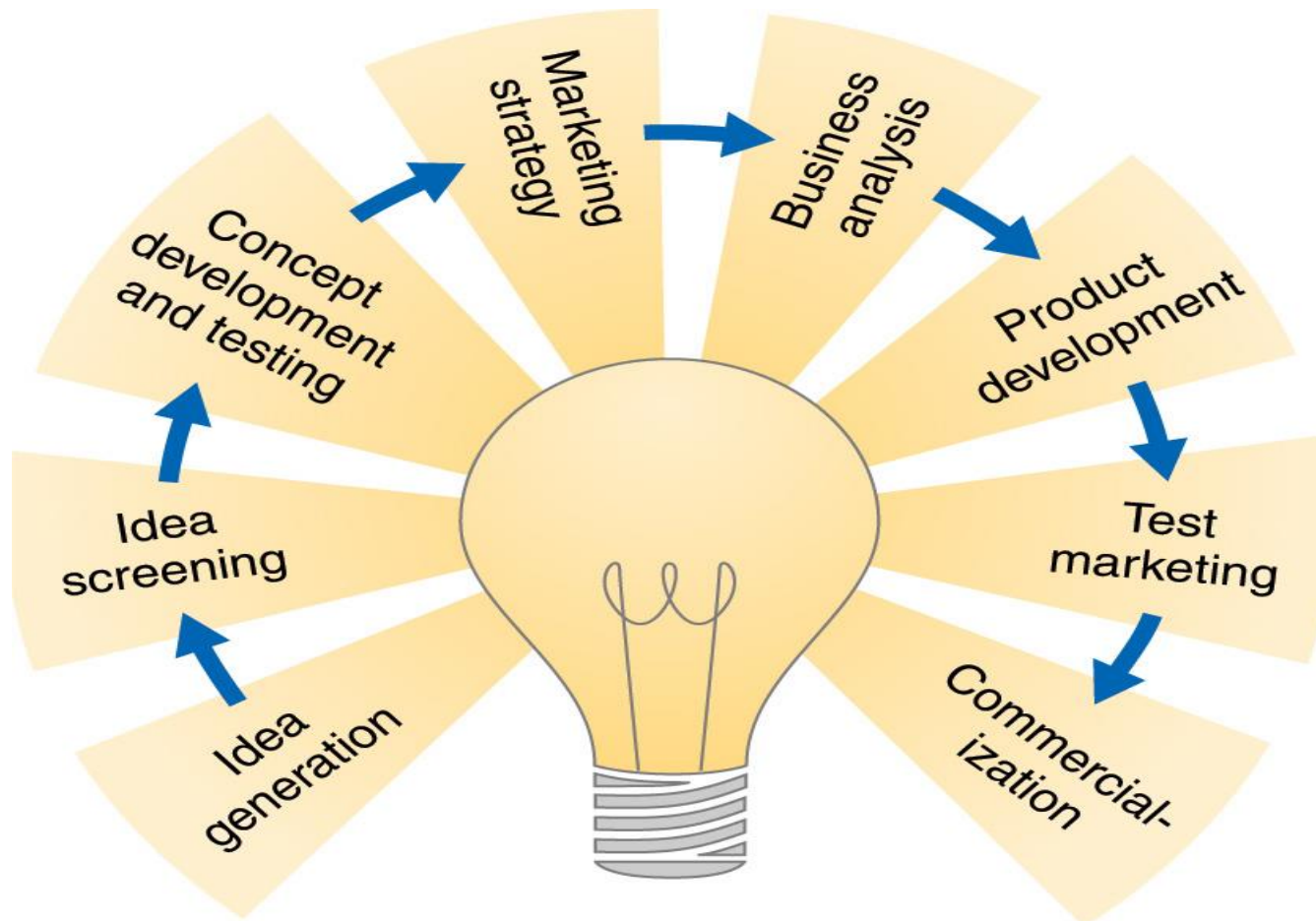
New Product Development Strategy

- New products can be obtained via acquisition or development.
- New products suffer from high failure rates.
- Several reasons account for failure.

Discussion Question

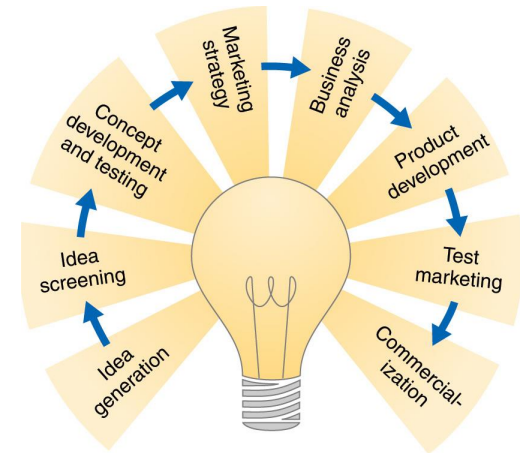
Why do products fail?

Major Stages in New-Product Development



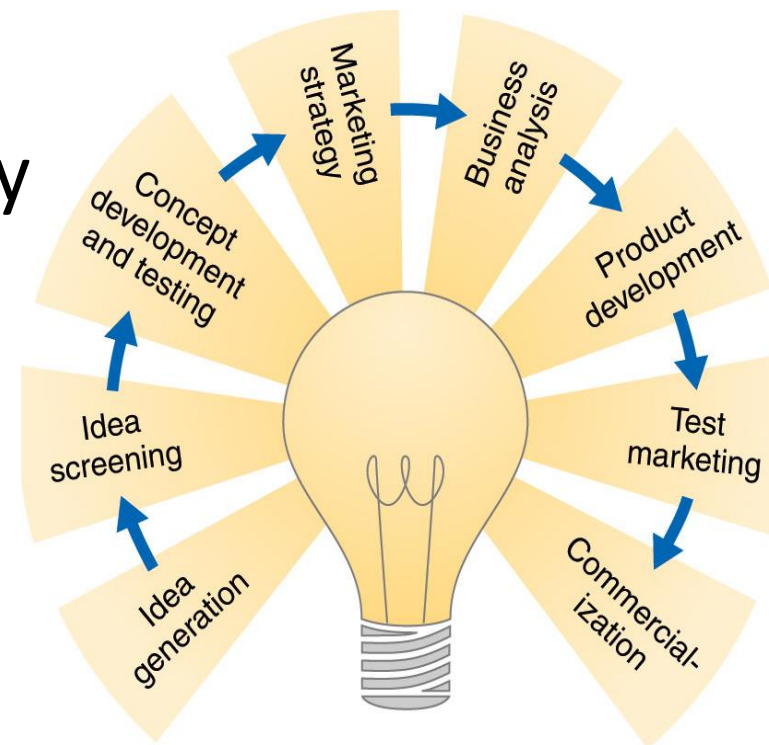
New Product Development Strategy

- New Product Development Process:
 - Stage 1: Idea Generation
 - Internal idea sources:
 - R & D
 - External idea sources:
 - Customers, competitors, distributors, suppliers



New Product Development Strategy

- New Product Development Process:
 - Stage 2: Idea Screening
 - Product development costs increase dramatically in later stages.
 - Ideas are evaluated against criteria; most are eliminated.



New Product Development Strategy

- New Product Development Process:
 - Stage 3: Concept Development and Testing
 - Product concepts provide detailed versions of new product ideas.
 - Consumers evaluate ideas in concept tests.

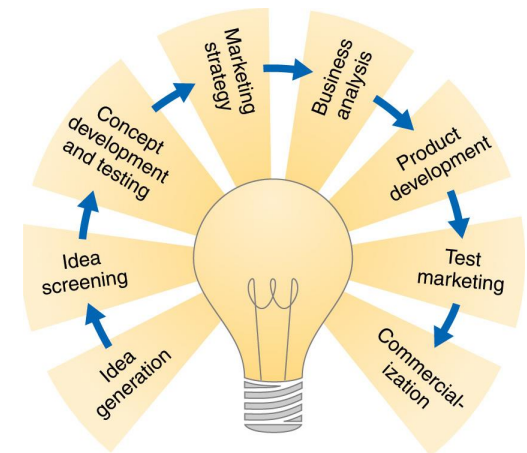


New Product Development Strategy

- New Product Development Process:
 - Stage 4: Marketing Strategy Development
 - Strategy statements describe:
 - The target market, product positioning, and sales, share, and profit goals for the first few years.
 - Product price, distribution, and marketing budget for the first year.
 - Long-run sales and profit goals and the marketing mix strategy.

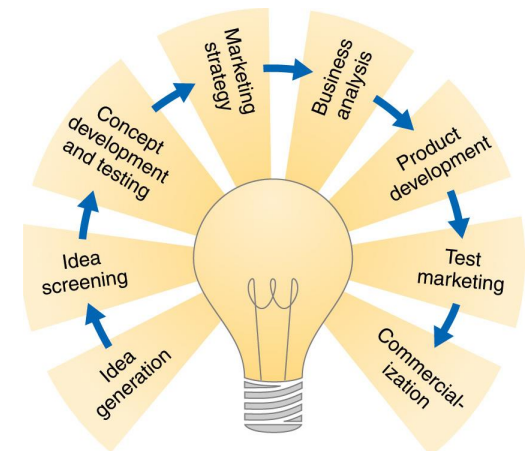
New Product Development Strategy

- New Product Development Process:
 - Stage 5: Business Analysis
 - Sales, cost, and profit projections
 - Stage 6: Product Development
 - Prototype development and testing



New Product Development Strategy

- New Product Development Process:
 - Stage 7: Test Marketing
 - Standard test markets
 - Controlled test markets
 - Simulated test markets
 - Stage 8:
Commercialization



Simulated Test Markets (STM) In-Depth

• *Model Inputs:*

- The market's size
- Copy testing results
- Advertising budget for the test product and competitors.
- Media schedule, Consumer promotion, Trade promotion by month.

Model Inputs:

- Price
- The proportion of stores carrying the test product and the number of shelf facings by month.
- Expected marketing costs and margin contribution.

Simulated Test Markets (STM) In-Depth

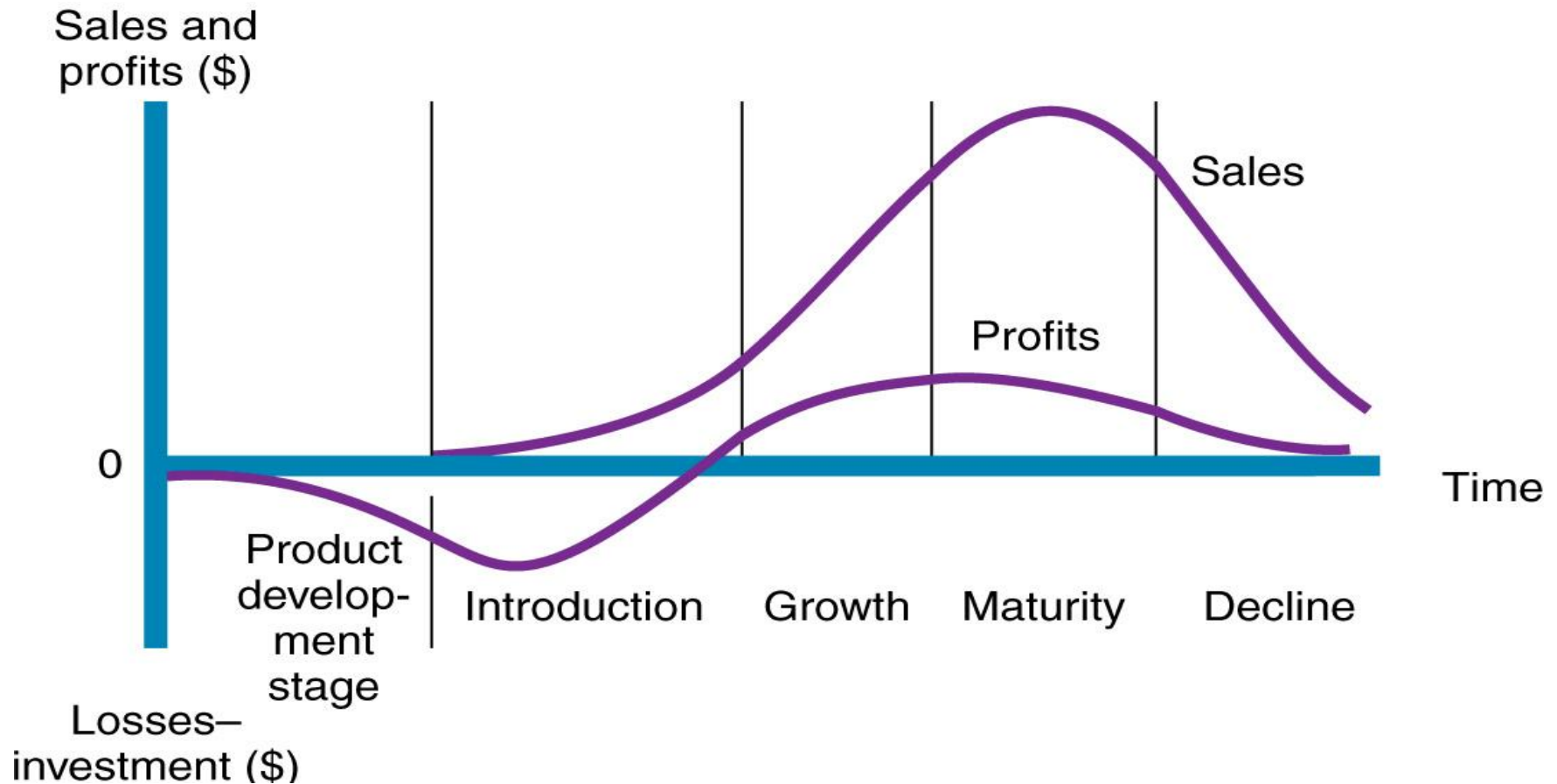
• *Do's & Don'ts of STMs*

- Be a champion for your new product--but be objective
- Choose the proper sample.
- Expose people to your product and its advertising in a way that best simulates the real world.
- Use proven research technology to forecast market behavior and sales.

✱ Do's & Don'ts of STMs

- Calculate different levels of competitive response.
- Don't estimate a level of support in a simulated market that you would not maintain nationally.
- Be very careful in estimating all marketing input factors—the more you guess incorrectly, the less accurate the forecast.

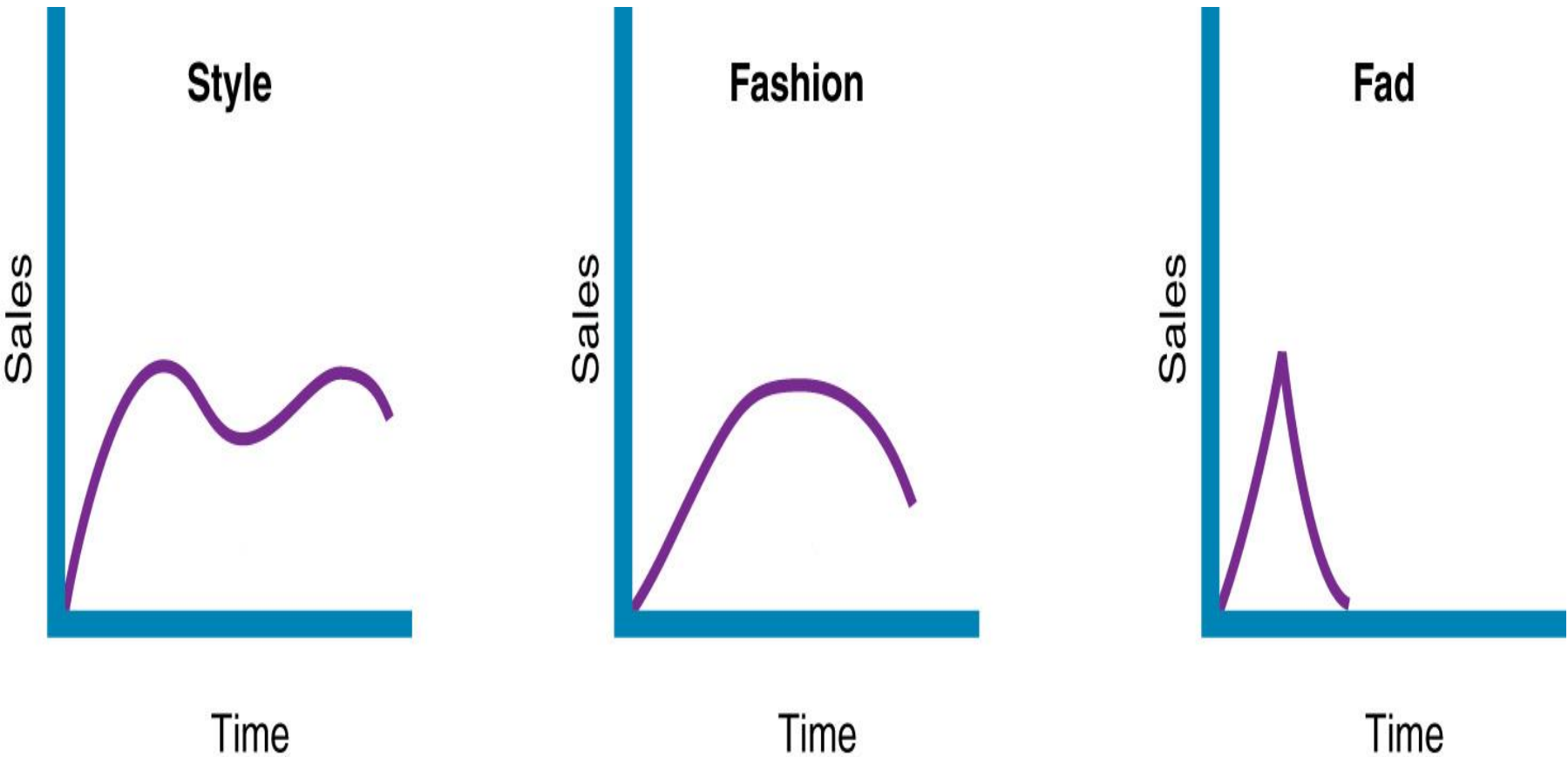
Sales and Profits Over A Product's Life



Product Life-Cycle Strategies

- The Typical Product Life Cycle (PLC) Has Five Stages
 - Product Development, Introduction, Growth, Maturity, Decline
- Not all products follow this cycle:
 - Fads
 - Styles
 - Fashions

Styles, Fashions, and Fads





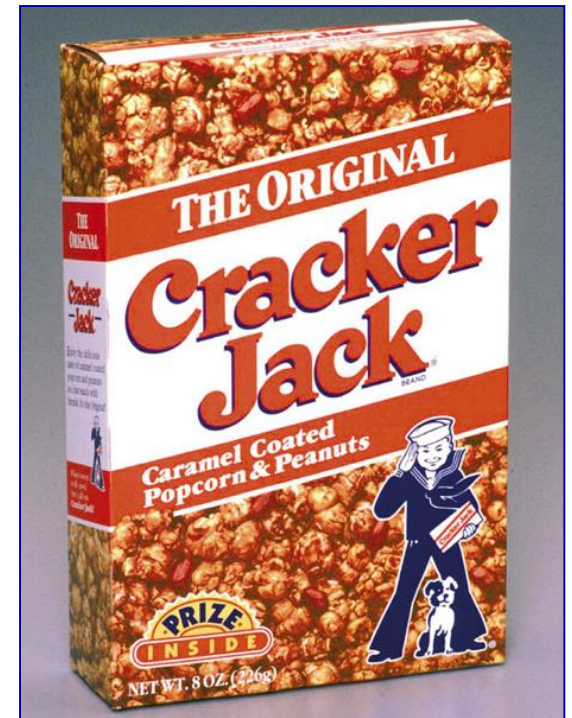
CHANGE IS BAD

UNCHANGED **HERSHEY'S** SINCE 1899
MILK CHOCOLATE

***Companies
want their
products to
enjoy a long
life cycle.
Hershey's
actively
promotes
the fact that
it has been
“unchanged
since 1899”***

Product Life-Cycle Strategies

- Additional marketing investments can move a product back into the growth stage, as in the case of Cracker Jack.



Product Life-Cycle Strategies

- The product life cycle concept can be applied to a:
 - Product class (soft drinks)
 - Product form (diet colas)
 - Brand (Diet Dr. Pepper)
 - Using the PLC to forecast brand performance or to develop marketing strategies is problematic

Product Life-Cycle Strategies

PLC Stages

- **Product development**

- *Introduction*

- *Growth*

- *Maturity*

- *Decline*

- Begins when the company develops a new-product idea
- Sales are zero
- Investment costs are high
- Profits are negative

Product Life-Cycle Strategies

PLC Stages

- *Product development*
- **Introduction**
- *Growth*
- *Maturity*
- *Decline*

- Low sales
- High cost per customer acquired
- Negative profits
- Innovators are targeted
- Little competition

Marketing Strategies: Introduction Stage

- *Product* – Offer a basic product
- *Price* – Use cost-plus basis to set
- *Distribution* – Build selective distribution
- *Advertising* – Build awareness among early adopters and dealers/resellers
- *Sales Promotion* – Heavy expenditures to create trial

Product Life-Cycle Strategies

PLC Stages

- *Product development*
- *Introduction*
- **Growth**
- *Maturity*
- *Decline*

- Rapidly rising sales
- Average cost per customer
- Rising profits
- Early adopters are targeted
- Growing competition

Marketing Strategies: *Growth Stage*

- *Product* – Offer product extensions, service, warranty
- *Price* – Penetration pricing
- *Distribution* – Build intensive distribution
- *Advertising* – Build awareness and interest in the mass market
- *Sales Promotion* – Reduce expenditures to take advantage of consumer demand

Product Life-Cycle Strategies

PLC Stages

- *Product development*
- *Introduction*
- *Growth*
- *Maturity*
- *Decline*

- Sales peak
- Low cost per customer
- High profits
- Middle majority are targeted
- Competition begins to decline

Marketing Strategies: *Maturity Stage*

- *Product* – Diversify brand and models
- *Price* – Set to match or beat competition
- *Distribution* – Build more intensive distribution
- *Advertising* – Stress brand differences and benefits
- *Sales Promotion* – Increase to encourage brand switching

Product Life-Cycle Strategies

PLC Stages

- *Product development*
- *Introduction*
- *Growth*
- *Maturity*
- *Decline*

- Declining sales
- Low cost per customer
- Declining profits
- Laggards are targeted
- Declining competition

Marketing Strategies: Decline Stage

- *Product* – Phase out weak items
- *Price* – Cut price
- *Distribution* – Use selective distribution: phase out unprofitable outlets
- *Advertising* – Reduce to level needed to retain hard-core loyalists
- *Sales Promotion* – Reduce to minimal level