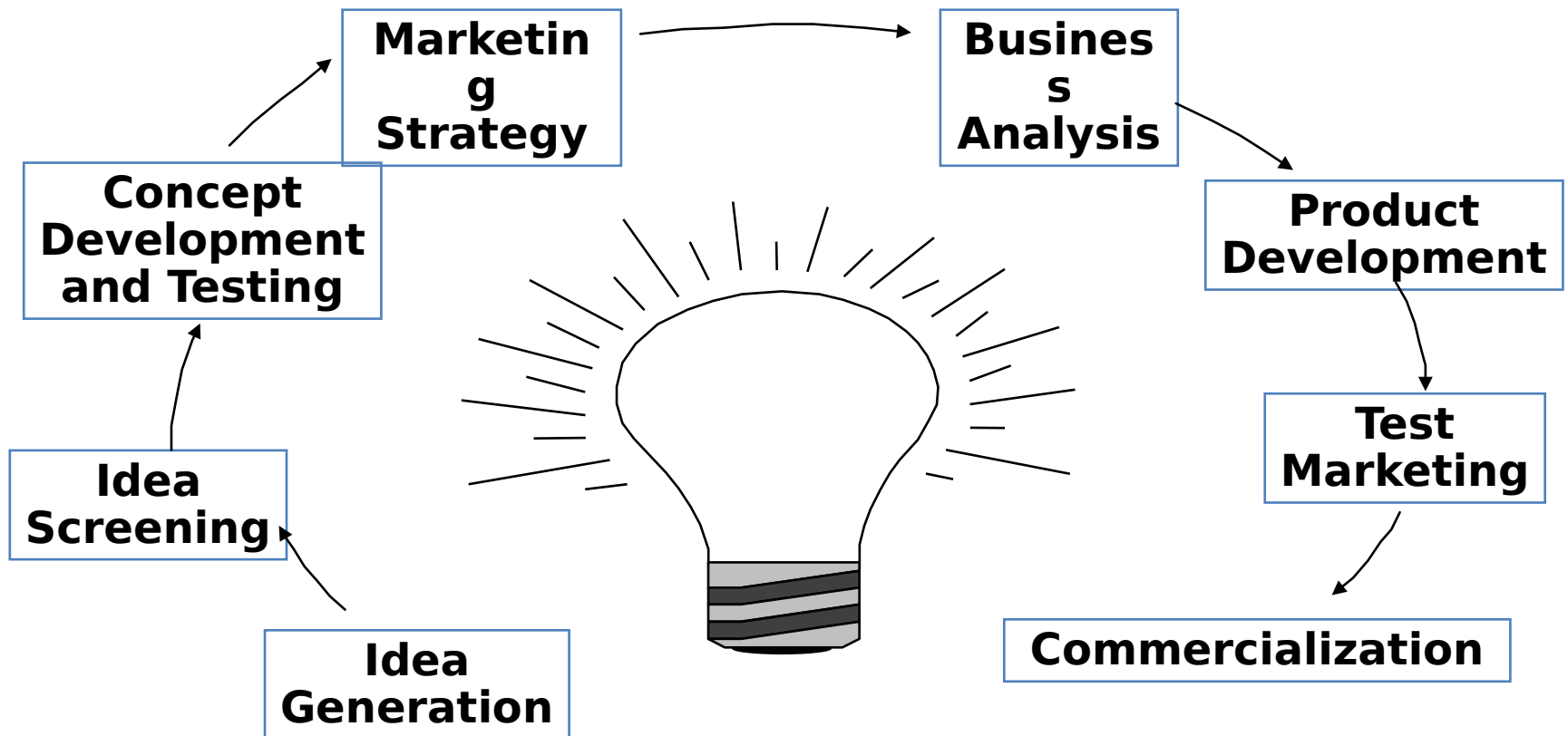


Product Development and Brand Management

2.1.New Product Development Process

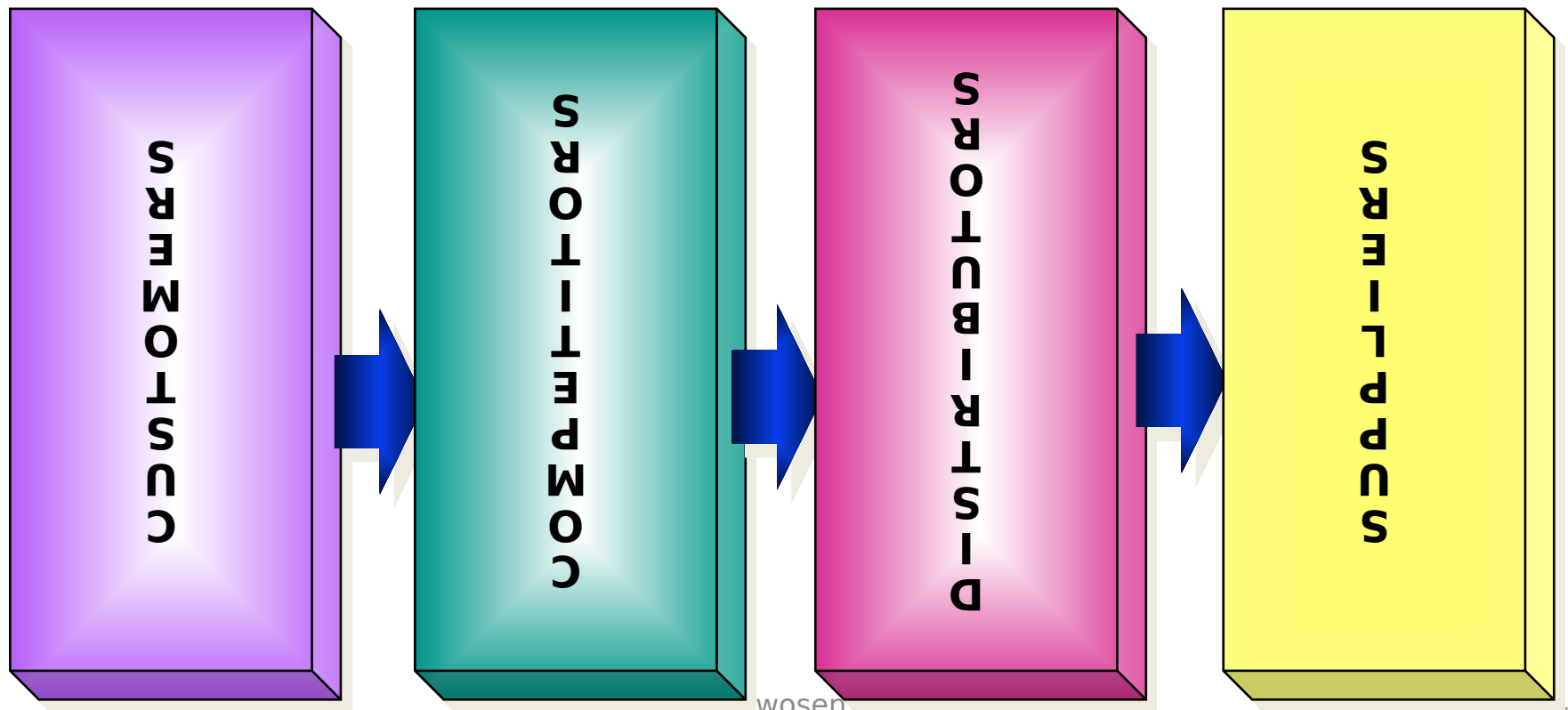
- **Chapter objectives**
- **After reading this chapter, you should be able to:**
 - **Explain how companies find and develop new-product ideas.**
 - **List and define the steps in the new-product development process.**

New Product Development Process



Step 1. Idea Generation

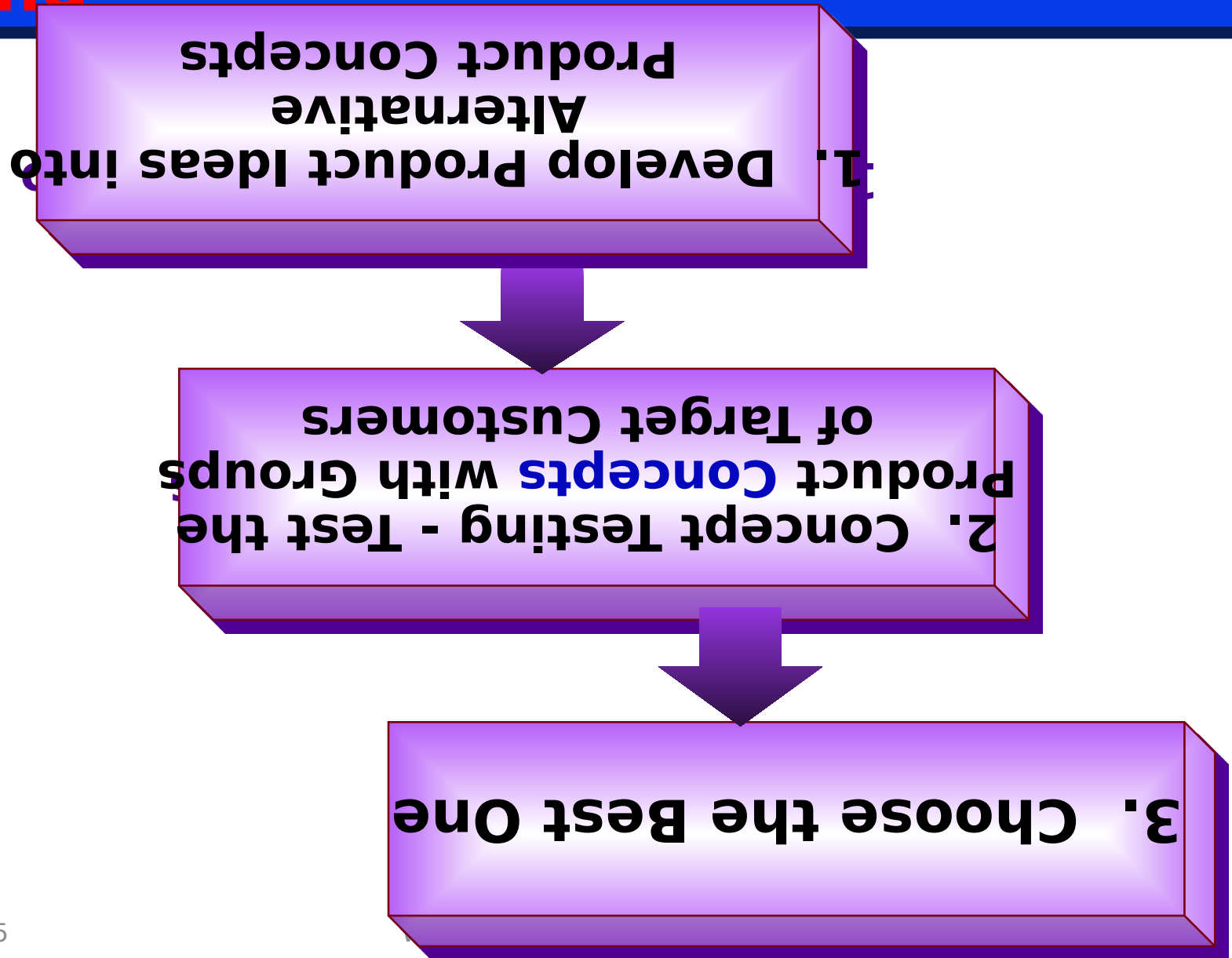
Idea Generation is the Systematic Search for New Product Ideas Obtained Internally and From:



Step 2. Idea Screening

- **Process to spot good ideas and drop poor ones** as soon as possible.
- **Many companies have systems for rating** and screening ideas which estimate:
 - **Market Size**
 - **Product Price**
 - **Development Time & Costs**
 - **Manufacturing Costs**
 - **Rate of Return**
- **Then, the idea is evaluated against a set of general company criteria.**

Step 3. Concept Development & Testing



Step 4. Marketing Strategy Development

Marketing Strategy Statement Formulation

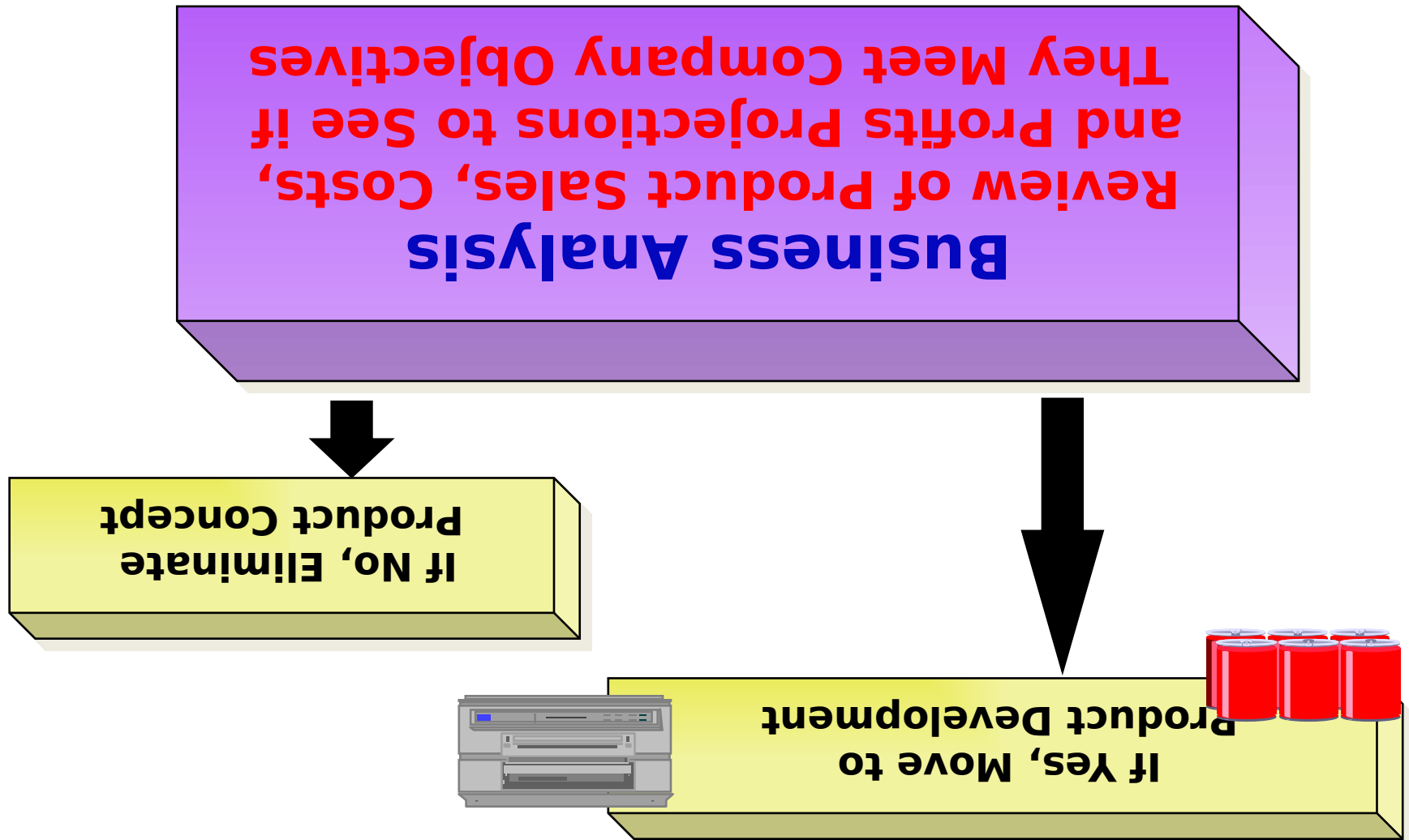
Part One Describes Overall:
Target Market
Planned Product
Positioning
Sales & Profit Goals
Market Share

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Product's Planned Price
Distribution
Marketing Budget

Part Three Describes Long-Term:
Sales & Profit Goals
Marketing Mix Strategy

Step 5. Business Analysis

Step 6. Product Development



Step 7. Test Marketing

Standard Test Market

**Full marketing campaign
in a small number of
representative cities.**

Controlled Test Market

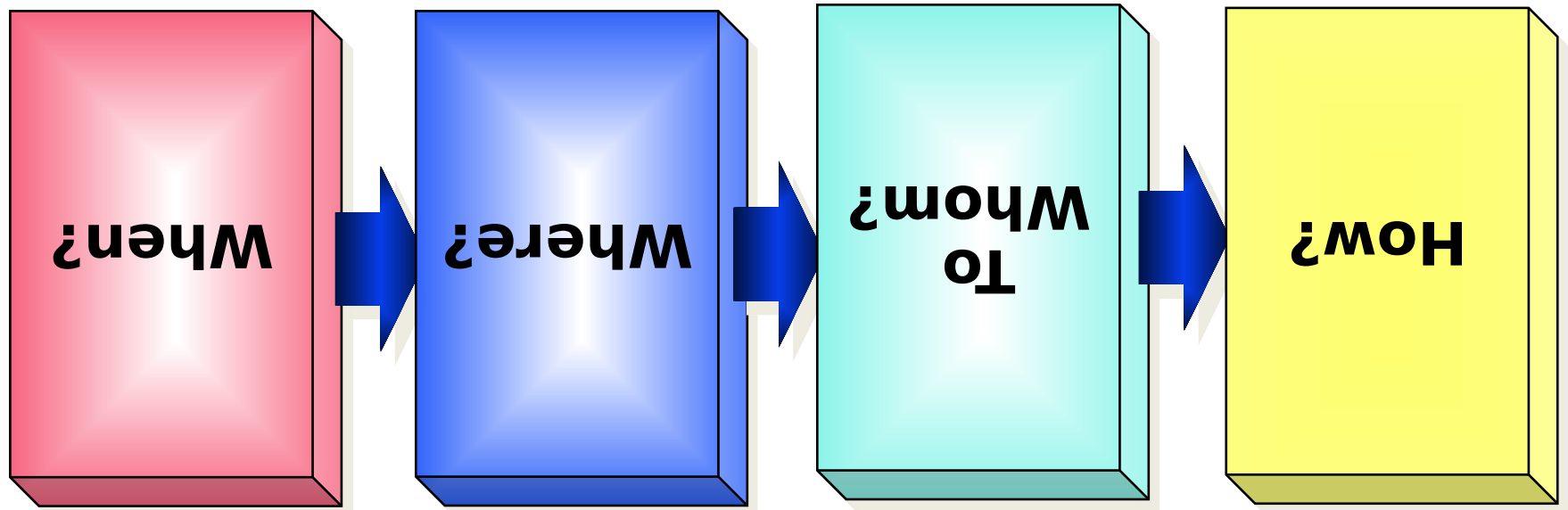
**A few stores that have
agreed to carry new
products for a fee.**

Simulated Test Market

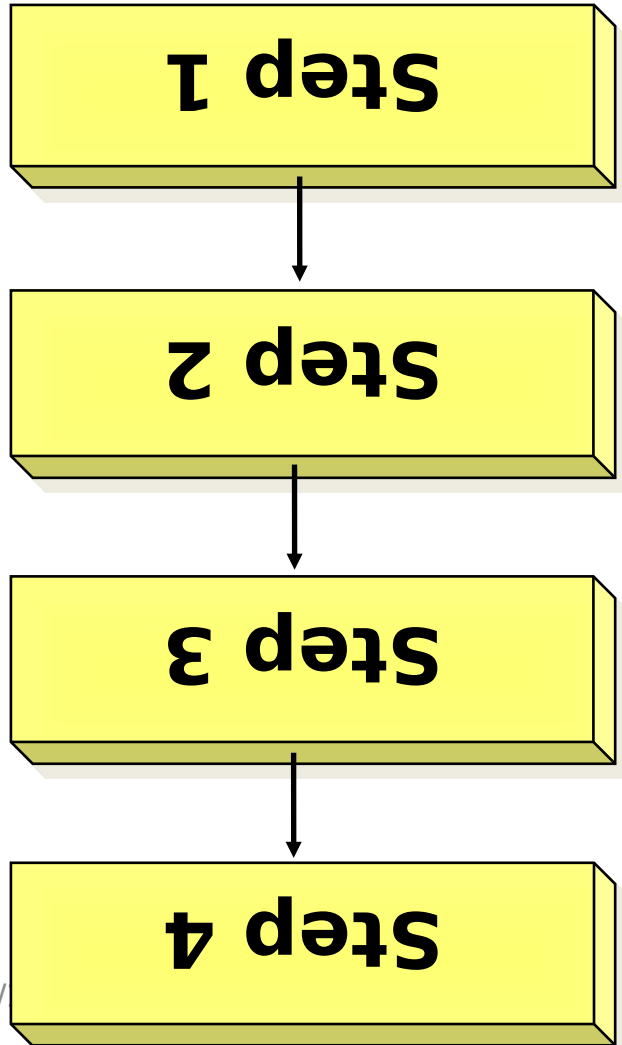
**Test in a simulated
shopping environment
to a sample of
consumers.**

Step 8. Commercialization

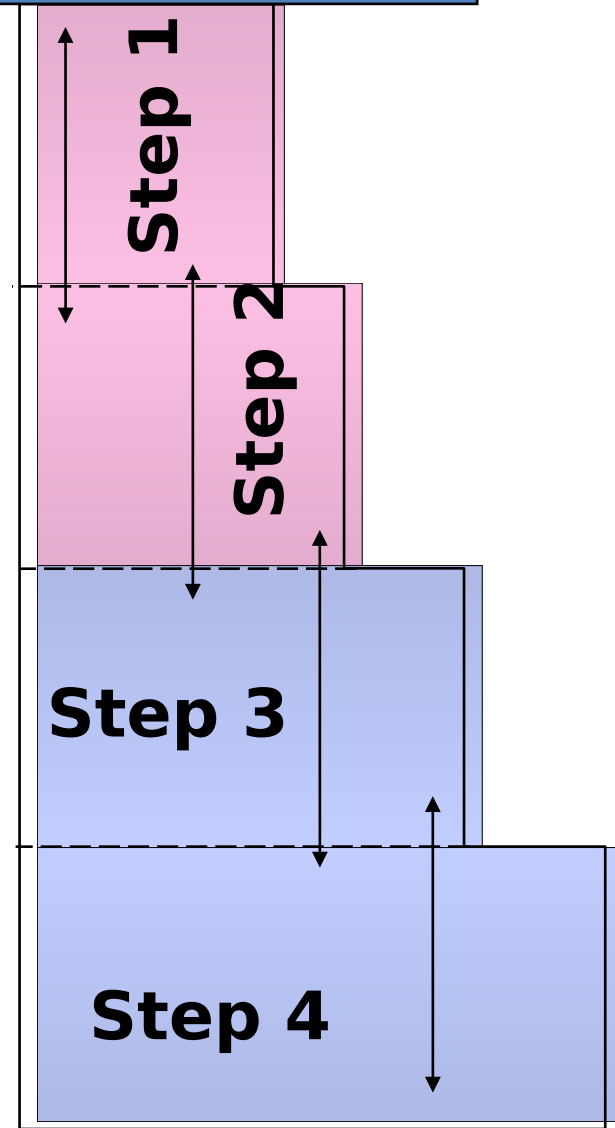
**Commercialization is the
Introduction of the New Product
into the Marketplace.**



Sequential

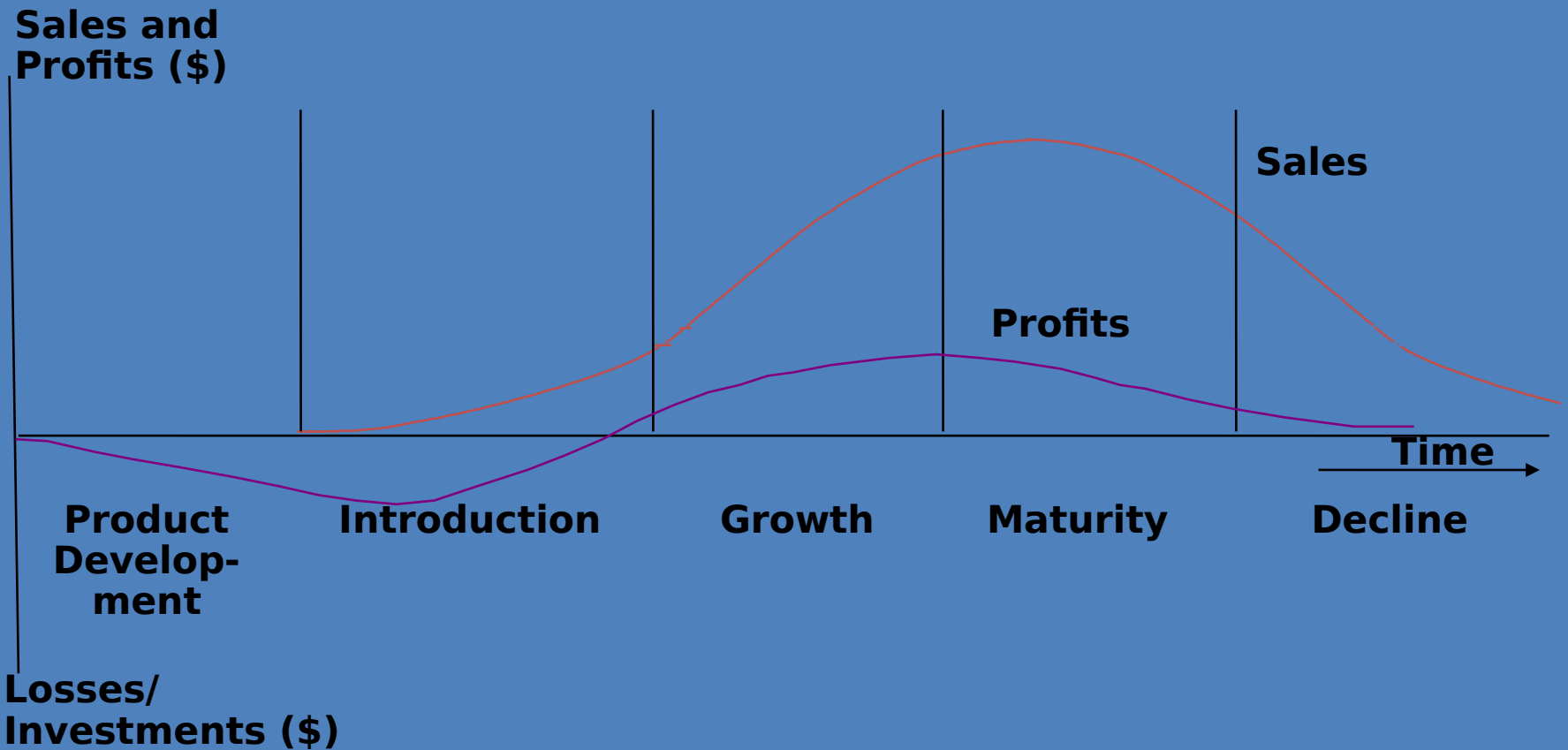


Simultaneous



Product Life Cycle

Sales and Profits Over the Product's Life From Introduction to Decline



Introduction Stage Of PLC

Summary of Characteristics, Objectives, & Strategies

Sales	Low sales
Costs	High cost per customer
Profits	Negative
Marketing Objectives	Create product awareness and trial
Product	Offer a basic product
Price	Use cost-plus
Distribution	Build selective distribution
Advertising	Build product awareness among early adopters and dealers

Growth Stage of the PLC

Summary of Characteristics, Objectives, & Strategies

Sales	Rapidly rising sales
Costs	Average cost per customer
Profits	Rising profits
Marketing Objectives	Maximize market share
Product	Offer product extensions, service, warranty
Price	Price to penetrate market
Distribution	Build intensive distribution
Advertising	Build awareness and interest in the mass market

Maturity Stage of the PLC

Summary of Characteristics, Objectives, & Strategies

Sales	Peak sales
Costs	Low cost per customer
Profits	High profits
Marketing Objectives	Maximize profit while defending market share
Product	Diversify brand and models
Price	Price to match or best competitors
Distribution	Build more intensive distribution
Advertising	Stress brand differences and benefits

Decline Stage of the PLC

Summary of Characteristics, Objectives & Strategies

Sales	Declining sales
Costs	Low cost per customer
Profits	Declining profits
Marketing Objectives	Reduce expenditure and milk the brand
Product	Phase out weak items
Price	Cut price
Distribution	Go selective: phase out unprofitable outlets
Advertising	Reduce to level needed to retain hard-core loyal customers

2.1.Introduction

- **New products are the lifeblood of an organization.**
- However, **new-product development is risky** and **many new products fail.**
- The main part of this chapter therefore looks at the **process for finding** and **growing successful new products.**
- Once **introduced**, marketers want their products to **enjoy a long** and **profitable life.**
- **In competitive markets,**
 - the best and strongest firms **sustain growth** and **maintain profitability** over the longer term through **successfully developing** and **launching a steady stream of new products or services.**

- **Firms must develop new products or services** because of the **rapid changes** in
 - **Customer tastes,**
 - **Technology** and
 - **Competition**
- Moreover, products have **a finite life** which is **determined**
 - **by the overall pace of new-product innovation taking place in the product market**
 - **by how well the marketing manager manages the brand during all stages of the product life-cycle.**

2.2. Innovation & New-Product Development Strategy

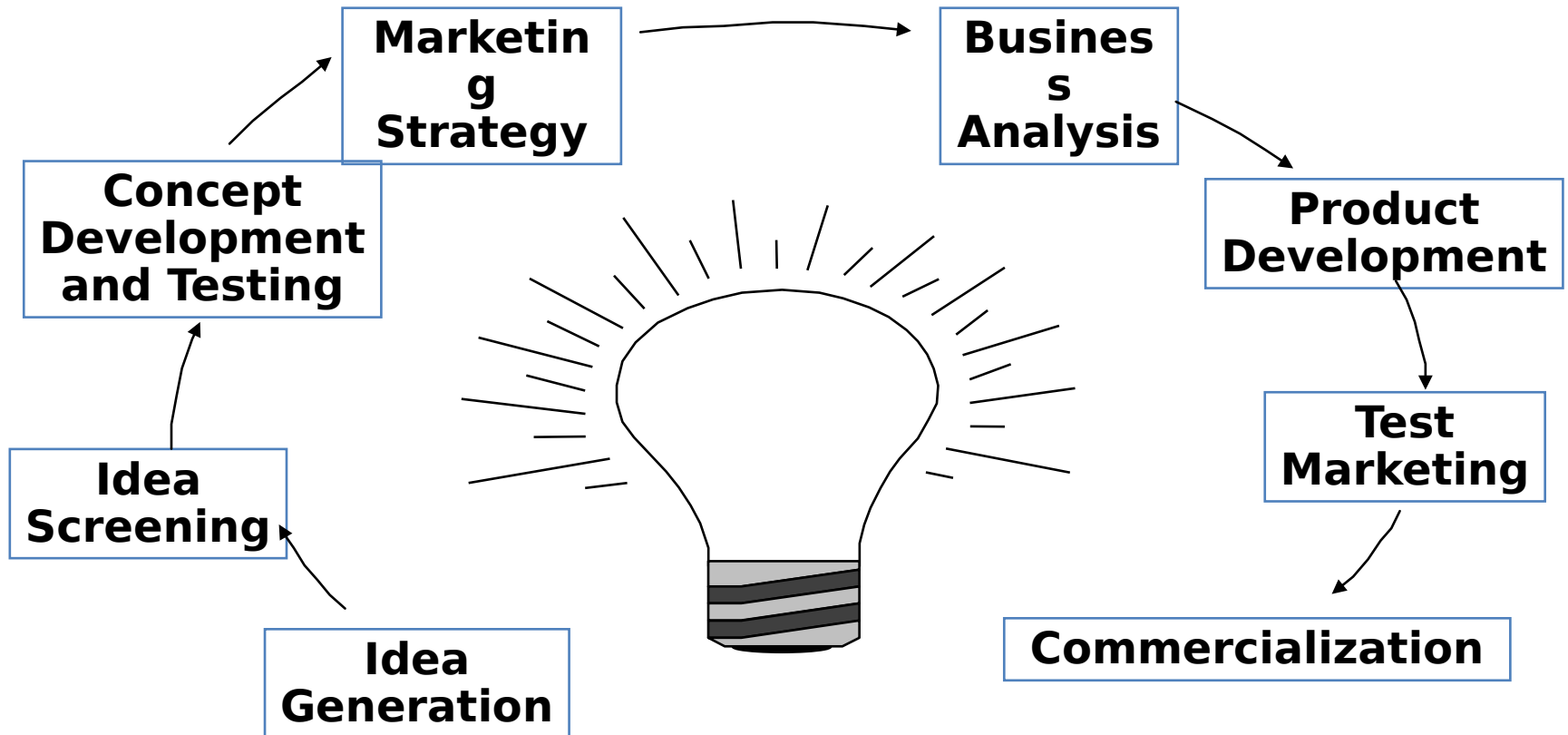
- **Product innovation** encompasses a variety of product development activities – **product improvement, development of entirely new products, and extensions** that increase the range or number of lines of product the firm can offer.
- **Product innovations** are not to be confused with **inventions**.
- *The **Invention** is new technologies or products which*
 - *May or may not be **commercialized** and*
 - *May or may not **deliver benefits to customers**.*
- *An **Innovation** is defined as an idea, service, product or piece of technology that has been developed and marketed to customers who perceive it as novel or new.*

- **New-Product Development** is an **act of innovation** which entails a process of **identifying, creating** and **delivering new-product** values or benefits that were not offered before in the marketplace.
- **A firm can obtain new products in two ways.**
 - **Acquisition** –by buying a whole company, a patent or a license to produce someone else's product.
 - **New-product development** in the company's own R&D department.
 - By new products we mean **original products, product improvements, product modifications** and **new brands** that the firm develops through its own research-and-development efforts.

2.3.New Product Development Process

- 1.New-Product Strategy**
- 2.Idea generation**
- 3.Idea screening**
- 4.Concept development and testing**
- 5.Marketing strategy development**
- 6.Business analysis**
- 7.Product development**
- 8.Test marketing**
- 9.Commercialization**

New Product Development Process



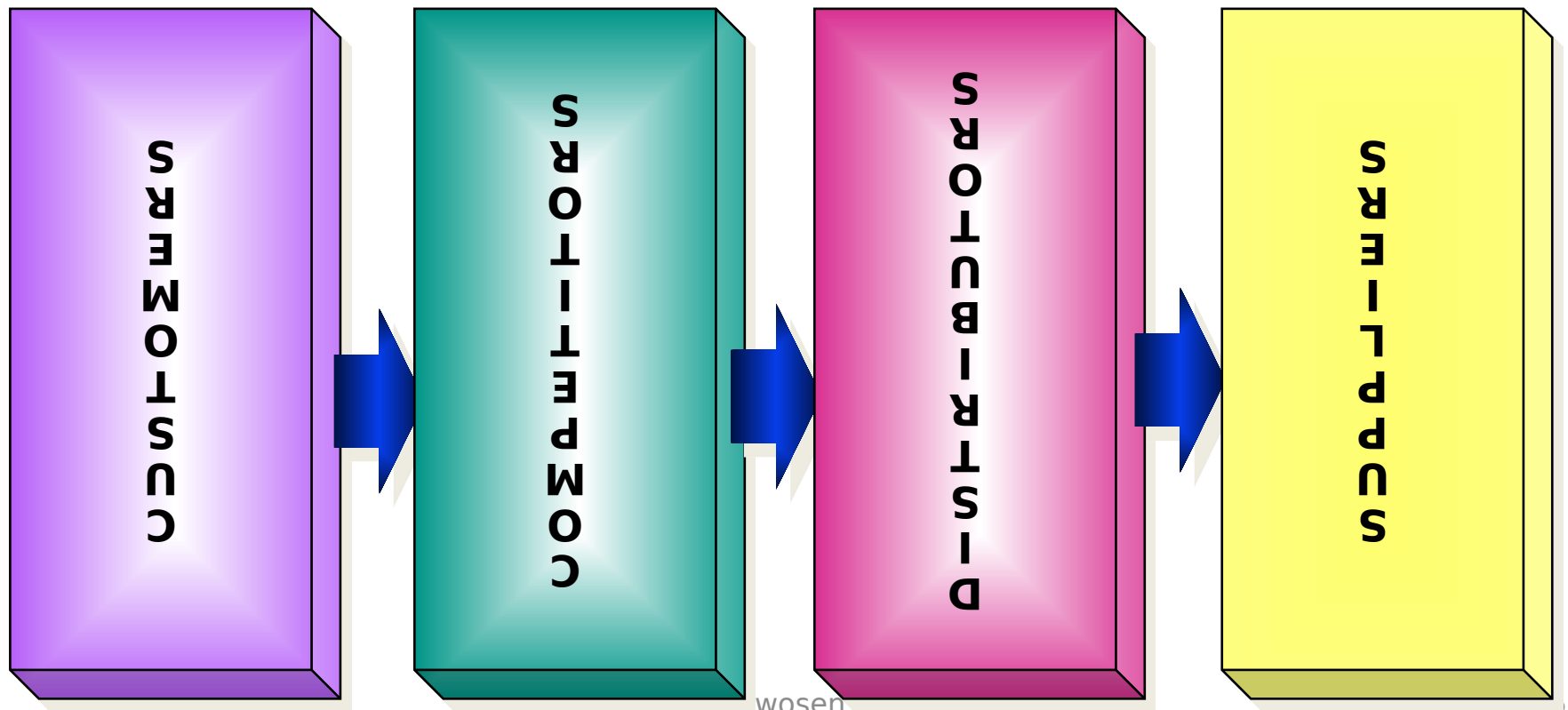
1-New-Product Strategy

- Effective product innovation is guided by a well-defined **new-product strategy**.
- The new product strategy achieves four main goals:
 - It gives direction to the **new-product team** and **focuses team effort**;
 - It helps to **integrate** functional or departmental efforts;
 - It allows tasks to be **delegated** to team members, who can be left to operate independently;
 - The very act of producing and getting managers to agree on a strategy requires **proactive**, not reactive, management, which increases the likelihood of a more thorough search for innovation opportunities.

2-Idea Generation

- **Idea generation** should be **proactive** and **systematic rather than haphazard**.
- This ensures that the company will find not only many ideas, but also ones that are good for its type of business.
- A recent survey of product managers found that of
 - **100 proposed new-product ideas,**
 - **39 begin the product development process,**
 - **17 survive the development process,**
 - **8 actually reach the marketplace and**
 - **1 eventually reaches its business objectives.**
- To obtain a flow of new-product ideas, the company can tap many sources.
- **internal sources**, customers, competitors, distributors and suppliers.

Idea Generation is the Systematic Search for New Product Ideas Obtained Internally and From:



• **Internal Sources**

- The company can find new ideas through its own formal **R&D** efforts.
- It can pick the brains of its **executives, scientists, engineers, designers, manufacturing** and **salespeople**.
- Some companies have established
 - **Intrapreneurial Programmes** that encourage employees to think up and develop new product ideas.
 - **Formal or informal** suggestion schemes can also be used to tap staff's ideas
- **TOYOTA claims that employees submit**
 - **2 million ideas annually,**
 - **35 suggestions per employee,**
 - **More than 85% of these ideas are implemented.**

- **Customers**

- **Good new-product ideas also come from watching and listening to customers.**
 - The **company can analyze customer questions** and **complaints** to find new products,
 - It can **conduct surveys** or **focus groups** to learn about consumer needs and wants.
 - **Company engineers** or **salespeople can meet** with or work alongside customers to get suggestions and ideas.
- **For example,** companies such as **Hewlett-Packard, Sony, Toyota** and **others** have their design engineers talk with final consumers to get ideas for new products

- **Customers often create new products on their own**, and **companies** can benefit by finding these products and putting them on the market.
- About **one-third** of all the software **IBM** leases for its computers are **developed by outside users**.
- **Customers, however, may not always know their future needs and wants.**
- If **Philips** had questioned consumers 30 years ago about what new audio technology they wanted, they would **never have said a personal stereo - the idea would not have occurred to them.**

- **Competitors:**
- **Companies watch competitors' ads and other communications** to get clues about their new products.
- They can **research competing competitors' products and services.**
- **For example**
 - **they can find out what customers like and dislike about competitors' products.**
 - **they can buy competitors' new products,** take them apart to see **how they work, analyze their sales,** and decide whether the company should bring out a new product of its own.

• **Distributors, Suppliers and Others**

- **Resellers** are close to the market and can pass along information about consumer problems and new-product possibilities.
- **Suppliers** can tell the company about new concepts, techniques and materials that can be used to develop new products.
- **Other** idea sources include
 - **Trade magazines,**
 - **Shows and seminars,**
 - **Government agencies,**
 - **Advertising agencies,**
 - **Marketing research firms,**
 - **University and commercial laboratories,**
 - **Science parks, and**
 - **Inventors**

- **Ideas Management System**

- **Companies may also turn to new-product consultants to find new ideas and problem solutions to serve customer needs better.**
 - **The search for new-product ideas should be systematic in order to ensure that many good ideas will surface, not pop in and die.**
- **Top management can avoid these problems by installing an ideas management system that directs the flow of new ideas to a central point where they can be**
 - **Collected,**
 - **Reviewed and**
 - **Evaluated.**

- **The company may set up an ideas management system in a number of ways:**
 - 1. Appoint a respected senior person to be the company's ideas manager;**
 - 2. Create a multidisciplinary ideas management committee, who meet regularly and evaluate proposed new-product ideas;**
 - 3. Set up a free phone number for anyone who wants to volunteer new ideas to the ideas manager;**
 - 4. Encourage all of the company's stakeholders - employees, suppliers, distributors, dealers and so forth - to send their ideas to the ideas manager; and**
 - 5. Set up a formal recognition programme to reward those who contribute the best ideas.**

3-Idea Screening

- The purpose of **idea generation is to create a large number of ideas.**
- The **first idea-reducing stage** is **idea screening.**
- The purpose of screening is **to spot good ideas** and **drop poor ones as soon as possible.**
- As **product development costs** rise greatly in later stages.
- **It is important** for the **company to go ahead only** with those **product ideas that will turn into profitable products.**

- Companies require their executives **to report new-product ideas on a standard form** that can be reviewed by a new-product committee.

- **The write-up:-**

- **Describes**

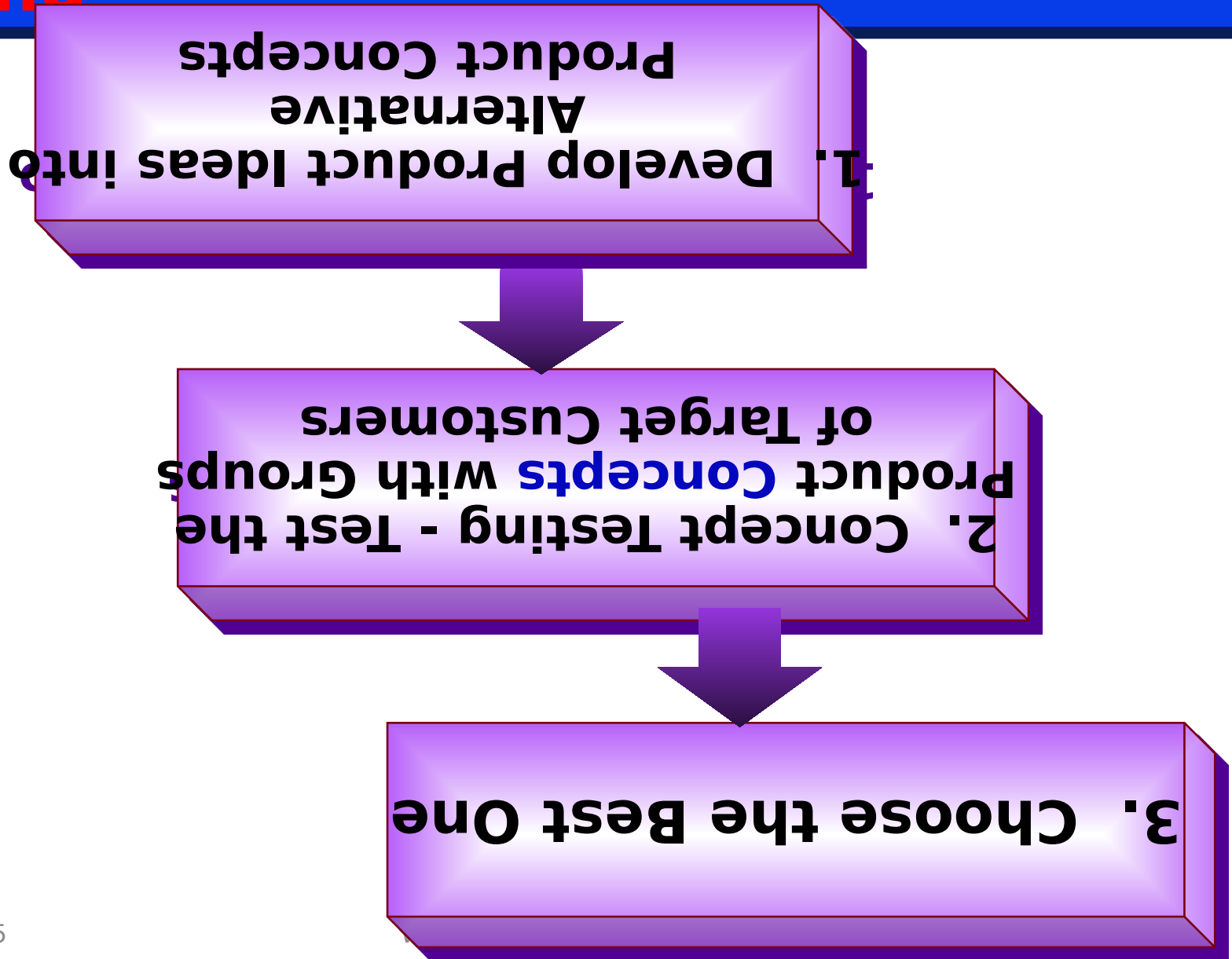
- The product,
 - The target market,
 - The competition,

- **Rough estimates of**

- Market size,
 - Product price,
 - Development time and costs,
 - Manufacturing costs and
 - Rate of return.

- **The committee then evaluates the idea against a set of general criteria.**
 - **Is the product truly useful to consumers and **society**?**
 - **Is this product good for our particular **company**?**
 - **Is the product engage well with the company's **objectives** and strategies?**
 - **Do we have the **people, skills and resources** to make it succeed?**
 - **Does it deliver more **value to customers** than competing products?**
 - **Is the product easy to **advertise and distribute**?**

Step 4. Concept Development & Testing



4-Concept Development and Testing

- Attractive ideas must be developed into product concepts.
- **It is important to distinguish between:-**
 - **A product idea** is an idea for a possible product that the company can see itself offering to the market.
 - **A product concept** is a **detailed version** of the idea stated in meaningful **consumer terms**.
 - **A product image** is the way consumers perceive an actual or potential product.

- **Concept Development:**

- To increase the likelihood of concept acceptance, some firms involve the customer or potential customer in concept development.

- **For example,**

- Customers be invited to the Daimler Chrysler's design reviews in the early stages of the new-product process.

- **The following product concepts for the fuel-cell electric car might be created:**
- **Concept 1.**
 - **A moderately priced subcompact**
 - **Designed as a second family car to be used around town.**
 - **The car is ideal for running errands and visiting friends.**
- **Concept 2.**
 - **A medium-cost**
 - **Sporty compact**
 - **Appealing to young people.**

- **Concept 3.**

- **An inexpensive**
 - **Subcompact ‘green’ car**
 - **Appealing to environmentally conscious people who want practical transportation and low pollution.**

- **Concept 4.**

- **A high-end sports utility vehicle (SUV)**
 - **Appealing to those who love the space SUVs provide but lament the poor petrol mileage.**

• Concept Testing

- It is **testing new-product concepts** with a **group of target consumers**.
- **The concepts may be presented to consumers symbolically or physically.**
- For some concept tests, a **word or picture description might be sufficient**.
- **However, a more concrete and physical presentation of the concept will increase the reliability of the concept test.**

- **Today, marketers are finding innovative ways to make product concepts more real to consumer subjects.**
- **For example, some are using virtual reality to test product concepts.**
 - **Virtual reality programmes use computers and sensory devices (such as goggles or gloves) to simulate reality.**
- **After being exposed to the concept, consumers may then be asked to react to it by answering the following questions**

1. *Do you understand the concept of a fuel-cell-powered electric car?*
2. *Do you believe the claims about the car's performance?*
3. *What are the main benefits of the fuel-cell-powered electric car compared with a conventional car?*
4. *What are its advantages compared with a battery-powered electric car?*
5. *What improvements in the car's features would you suggest?*
6. *For what uses would you prefer a fuel-cell-powered electric car to a conventional car?*
7. *What would be a reasonable price to charge for the car?*
8. *Who would be involved in your decision to buy such a car? Who would drive it?*
9. *Would you buy such a car? (Definitely, probably, probably not, definitely not)*

Step 5. Marketing Strategy Development

Marketing Strategy Statement Formulation

Part One Describes Overall:
Target Market
Planned Product
Positioning
Sales & Profit Goals
Market Share

Part Two Describes Short-Term:
Product's Planned Price
Distribution
Marketing Budget

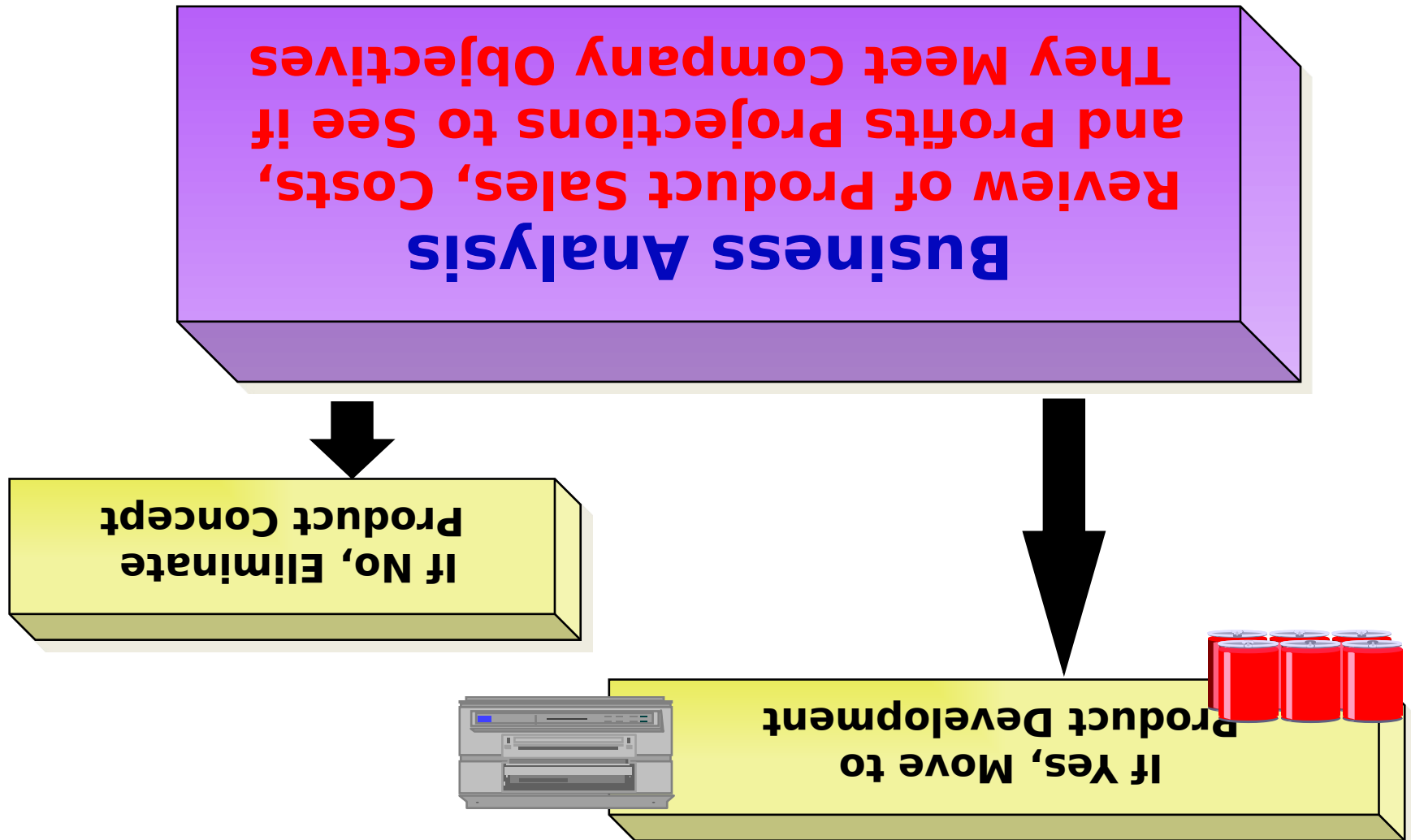
Part Three Describes Long-Term:
Sales & Profit Goals
Marketing Mix Strategy

5. Marketing Strategy Development

- The next step is to develop a **marketing strategy** for **introducing the product to the market**.
- The **marketing strategy statement** consists of three parts.
 - 1.Describes the target market**, the planned product positioning, and the sales, market share and profit goals for the first few years.
 - 2.Outlines the product's planned price, distribution and marketing budget** for the first year.
 - 3.Describes the planned long-run sales, profit goals and marketing mix strategy:**

Step 6. Business Analysis

Step 7. Product Development



6. Business Analysis

- Once management has decided on its **product concept and marketing strategy**,
- It can **evaluate the business attractiveness of the proposal.**
- **Business analysis** involves a review of the **sales, costs** and **profit** projections for a new product
 - **to find out whether they satisfy the company's objectives.**
- If they do, **the product proceeds to the product development stage.**

- **To estimate sales, the company**
 - **Looks at the sales history** of similar products and
 - **Conducts surveys of market opinion.**
 - It then estimates **minimum and maximum** sales to assess the **range of risk.**
- **Estimate the expected costs and profits** for the product, including
 - **Marketing,**
 - **R&D,**
 - **Manufacturing,**
 - **Accounting and finance costs.**
- The company then uses the sales and costs figures to analyze the new **product's financial attractiveness.**

7-Product Development

- So far, for many new-product concepts, **the product may have existed** only as
 - **A word description,**
 - **A drawing or**
 - **A crude mock-up.**
- If the product concept passes the business test, it moves into **product development.**
- Here,
 - R&D or engineering develops the **product concept into a physical product.**
 - It calls for a **large jump in investment.**
 - It will show whether the **product idea can be turned into a workable product.**

- **R&D hopes to design a **prototype** that functions i**
 - **Able to satisfy and excite consumers,**
 - **Can be produced quickly and**
 - **At budgeted costs.**
- **Then the prototypes undergo rigorous **functional tests under the conditions of****
 - **laboratory and**
 - **field**
- **To make sure that the product performs safely and effectively.**
- **The prototype must**
 - **Have the required functional features and**
 - **Convey the intended psychological characteristics.**

- Companies may minimize production problems by adopting an approach towards product development called *design for manufacturability and assembly* (DFMA).
- Using this approach, companies work to fashion products that are *both* satisfying *and* easy to manufacture.
- This often results not only in lower costs but also in higher-quality and more reliable products.

Step 8. Test Marketing

Standard Test Market

**Full marketing campaign
in a small number of
representative cities.**

Controlled Test Market

**A few stores that have
agreed to carry new
products for a fee.**

Simulated Test Market

**Test in a simulated
shopping environment
to a sample of
consumers.**

8-Test Marketing

- In this stage the **product and marketing programme** are **introduced into more realistic market settings**.
- It gives the **marketer experience with marketing the product** before going to **the great expense of full introduction**.
- The company **test the product and its entire marketing programme** -
 - **Positioning strategy,**
 - **Advertising,**
 - **Distribution,**
 - **Pricing,**
 - **Branding and packaging and**
 - **Budget levels.**

- **The company uses test marketing to learn how consumers and dealers will react.**
 - Its results can be used to make better **sales and profit forecasts.**
 - It can **provide a wealth of information** about the **potential success of the product** and **marketing programme.**
- Its costs can be enormous.
- It takes time that may allow competitors to gain advantages.
- Companies often **do not test market**
 - **Simple line extensions,**
 - **Minor modifications of current products or**
 - **Copies of successful competitor products.**

- However, when the new-product introduction requires a big investment, or when management is not sure of the product or marketing programme, the company may do a lot of test marketing.
- A company **decides to test market**, and **the amount of testing it does**, depend on
 - **the cost and risk of introducing the product and**
 - **the testing costs and time pressures on the other.**
- Consumer-products companies usually choose one of three approaches –
 - 1. Standard test markets,**
 - 2. Controlled test markets or**
 - 3. Simulated test markets.**

- **Standard Test Markets:**

- The company finds a small number of **representative test cities**,
 - **Conducts a full marketing campaign in these cities and**
 - **Uses store audits, consumer and distributor surveys and other measures to gauge product performance.**
- It then **uses the results**
 - **to forecast national sales and profits,**
 - **to discover potential product problems and**
 - **to fine-tune the marketing programme.**

- **Drawbacks of Standard market tests**

- a. It can be costly and may take a long time – some last as long as **3-5 years**.

- b. Competitors can monitor test-market results or even interfere with them by

- **Cutting their prices in test locations,**

- **Increasing their promotion or**

- **Even buying up the product being tested.**

- c. It give competitors a look at the company's new product well before it is introduced.

- However, standard test markets are still **the most widely used approach for major market testing.**

• **Controlled Test Markets:**

- Several research firms agreed to carry this type of test market for a fee.
- The company with the new product
 - **Specifies the number of stores and geographical locations it wants.**
- The research firm

1.Delivers the product to the participating stores

2.Controls

- **Shelf location,**
- **Amount of shelf space,**
- **Displays and point-of-purchase promotions, and**
- **Pricing according to specified plans.**

- **Merits of controlled test markets**

- Its cost less than standard test markets and
- It take less time than them (six months to a year).

- **Demerit of controlled test markets**

- It may not be representative of their products' markets or target consumers.
- It allow competitors to get a look at the company's new product.

• **Simulated Test Markets**

- Companies also can test new products **in a simulated shopping environment.**
 - *The company or research firm shows, to a sample of consumers, ads and promotions for a variety of products, including the new product being tested.*
- It gives consumers a small amount of money and **invites them to a real or laboratory store, where they may keep the money or use it to buy items.**
- The researchers note how many consumers buy the
 - **new product and competing brands.**

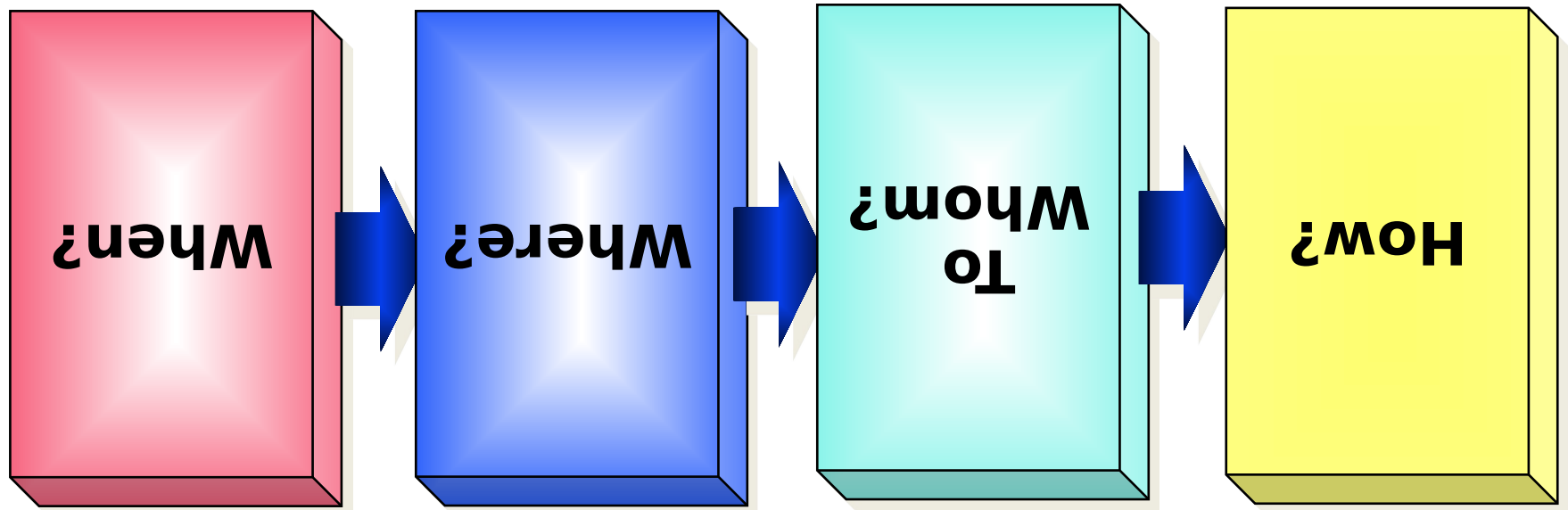
- The researchers then ask consumers the reasons for their purchase or non-purchase.
- Some weeks later, they interview the consumer by phone to determine
 - **Product attitudes,**
 - **Usage, and**
 - **Satisfaction and repurchase intentions.**
- **Using sophisticated computer models to** project **national sales** from results of the simulated test market.
- Recently, some marketers use new high-tech approaches to simulated test market research, such **as virtual reality and the Internet.**

• **Simulated test markets**

- **Cost much less,**
- **Can be run in eight weeks and**
- **Keep the new product out of competitors' view.**
- **It is not representative to the whole market,** because of their small samples and simulated shopping environments,
- **It is fast and inexpensive;**
- They can be run to assess quickly a new product or its marketing programme

Step 9. Commercialization

**Commercialization is the
Introduction of the New Product
into the Marketplace.**



9-Commercialization

- It is introducing the new product into the market – it will face high costs.
- It may have to spend, a hundreds of millions for
 - Advertising,
 - Sales promotion and
 - Other marketing efforts in the first year.
- It must have sufficient funds to gear up production to meet demand.
- Failure to do so can leave an opening in the market for competitors to step in.

- **The company launching a new product must make four decisions.**
- **When?**
- The **first decision is introduction timing** – whether **the time is right to introduce** the new product.
- If it **cannibalizes the sales of the company's other products**, its introduction may be delayed.
- If it can be **improved further**, or if the **economy is down**, the company may wait until the following year to launch it.

- **How?**

- The company also must develop an **action plan for introducing the new product** into the selected markets.
- It must **spend the marketing budget** on the
 - **Marketing mix** and
 - **Various other activities.**

• Where?

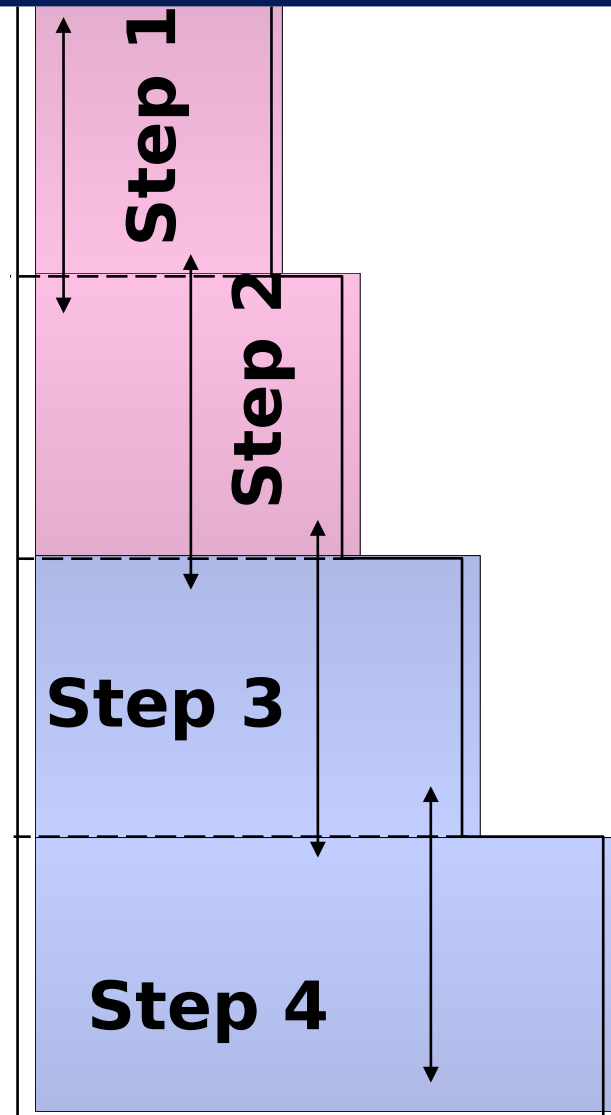
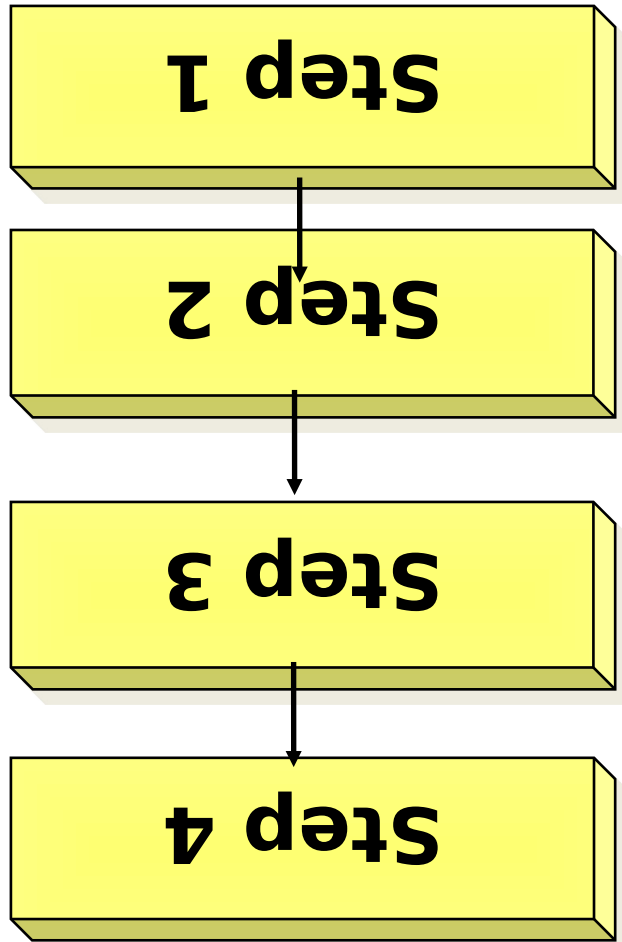
- Should it be in
 - a **single location**, or **region, several regions**,
 - the **national market** or the **international market?**
- Few companies have the confidence, capital and capacity to launch new products into full national or international distribution.
- They will develop a planned market rollout over time.
- In particular, **small companies may enter attractive cities or regions one at a time.**

- **To Whom?**

- The company must **target its distribution and promotion**
 - **to customer groups who represent the best prospects.**
- These prime prospects **profiled by**
 - **the firm in earlier research and test marketing.**
- Generally, **firms must fine-tune their targeting efforts :-**
 - To the **innovators, early adopters, heavy users and opinion leaders.**
- **Opinion leaders** are particularly important as **their endorsement of the new product** has a powerful impact upon adoption by other buyers in the marketplace.

2.3.Organizing for New-product Development

Sequential



- Companies have organized their NPD processes in

a.Sequential product development approach,

b.Simultaneous Product Development
approach,

1.Sequential product development approach,

- *One company department works individually to complete its phase of the development process before passing the new product on to the next department, as in a kind of relay race.*

•The sequential process

- It helps **bring order and control** to risky and complex development projects.
- **It can be fatally slow.**

- In **fast-changing, highly competitive markets**, such slow-but-sure product dev't may result in
 - **Product failures,**
 - **Lost sales and profits and**
 - **Crumbling market positions.**
- Today,
 - **'Speed to market'** and
 - **'Reducing NPD cycle time'** have become pressing concerns to companies in all industries.
- **Study shows that that a six-month delay** in introducing a new product
 - **Cut its lifetime** profits by **1/3**
 - Spending **10%** over the development **budget**
 - **It will reduce profits by only 2%**

2.Simultaneous Product Development

- In order to get new products to market more quickly, companies are adopting
 - **Faster,**
 - **More flexible,**
 - **Team-oriented** or
 - **Collaborative approach**
- The company departments work closely together through **cross-functional teams**,
 - **Overlapping the steps in the product development process to save time and increase effectiveness.**
- The company **assembles a team of people from various departments** that stay with the new product **from start to finish.**

- These **teams include people from**
 - **Finance,**
 - **Marketing,**
 - **Design,**
 - **Manufacturing or operations,**
 - **Legal departments,** and
 - **Even supplier and customer companies.**
- Simultaneous development is more like a **rugby match** than **a relay race.**
- Top management gives the product development team general strategic direction but no clear-cut product idea or work plan.

- **In a sequential process**, a bottleneck at one phase can seriously slow or even halt the entire project.
- **In the simultaneous approach**, if one function hits snags, it works to resolve them while the team moves on.
- **Limitations of simultaneous approach:-**
 - It can be **riskier and more costly** than the slower, more orderly sequential approach.
 - It can often **create increased organizational tension** and **confusion**.

- The company must **ensure rushing a product** to market does **not adversely affect its quality.**
- **Rapidly changing industries facing** shorter **Product Life Cycles,**
 - the rewards of fast and flexible product development far **exceed the risks.**
- Companies that **get new and improved products faster than competitors** gain a **dramatic competitive edge.**
 - They can **respond more quickly to emerging** consumer tastes and
 - Charge higher prices for more advanced designs.

- Their **vision** for innovation is clearly communicated to, and its **value shared** by, staff at all levels of the organization.
- A clear **strategy** as guiding force, backed by top management support, ensures that teams consistently perform.

- Furthermore, information and communication **systems** are designed to facilitate learning and to ensure that information flows quickly to critical individuals responsible for making or implementing **NPD** decisions.
- Real innovation is a risky activity, so firms must foster an **entrepreneurial culture** and **climate** for innovation, with planning, control and reward systems encouraging risk-taking as opposed to its avoidance.

- Last, but not least, to innovate effectively, firms must build customer-focused, functionally well-integrated organizations.
- In successful innovative firms, new-product development is seldom left to chance.
- There may be an element of luck underpinning successful commercialization of innovations.
- Luck, unfortunately, is not easy to replicate.
- The lessons of strategic new-product planning and implementation, however, are.

end