

# Chapter 12

## **Developing New Products & Services**

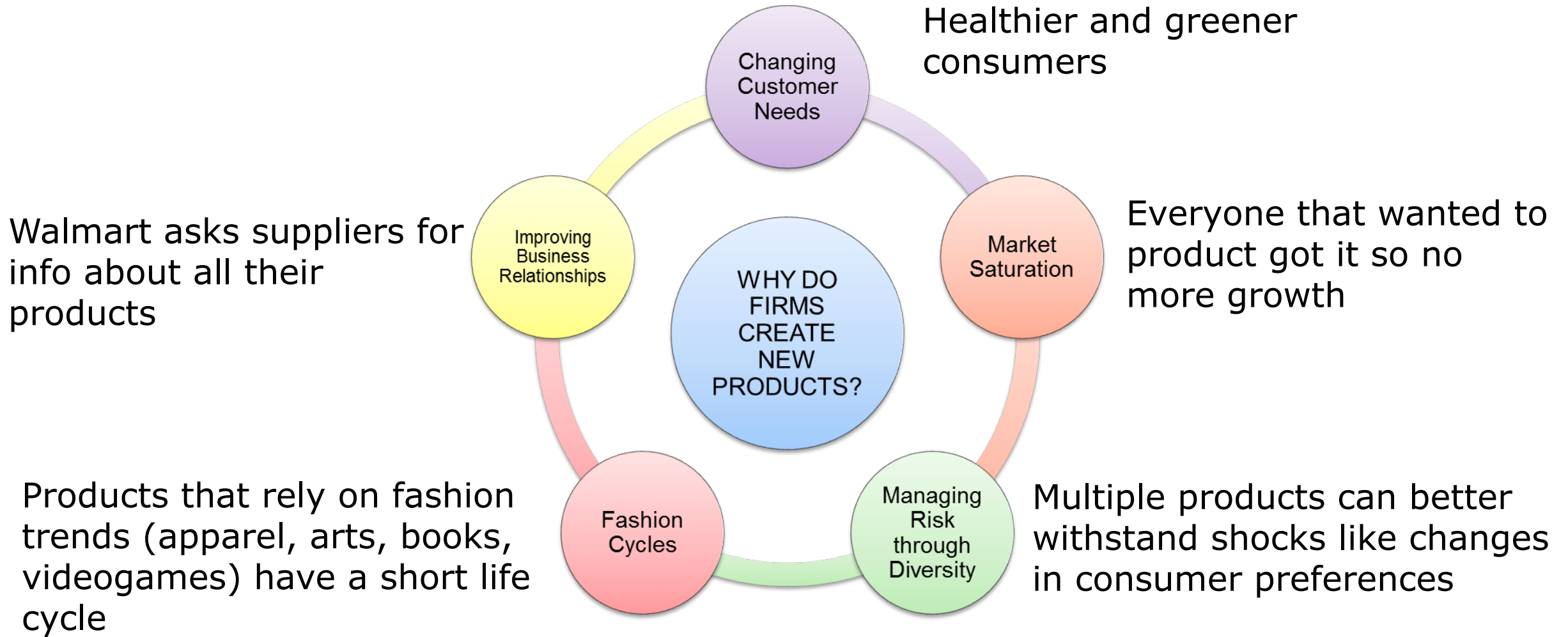
- Identify the reasons firms create new products.
- Describe the different groups of adopters.
- Describe the various stages involved in developing a new product or service.
- Explain the product life cycle.

**Innovation** → process by which ideas are transformed into new offerings

Without innovation firms have two options

1. Continue to market current products to current customers
2. Take the same product to a new market

# Why Firms Need to Innovate?



**Creating or maintaining a sustainable competitive advantage!!!**



# New Product Introductions

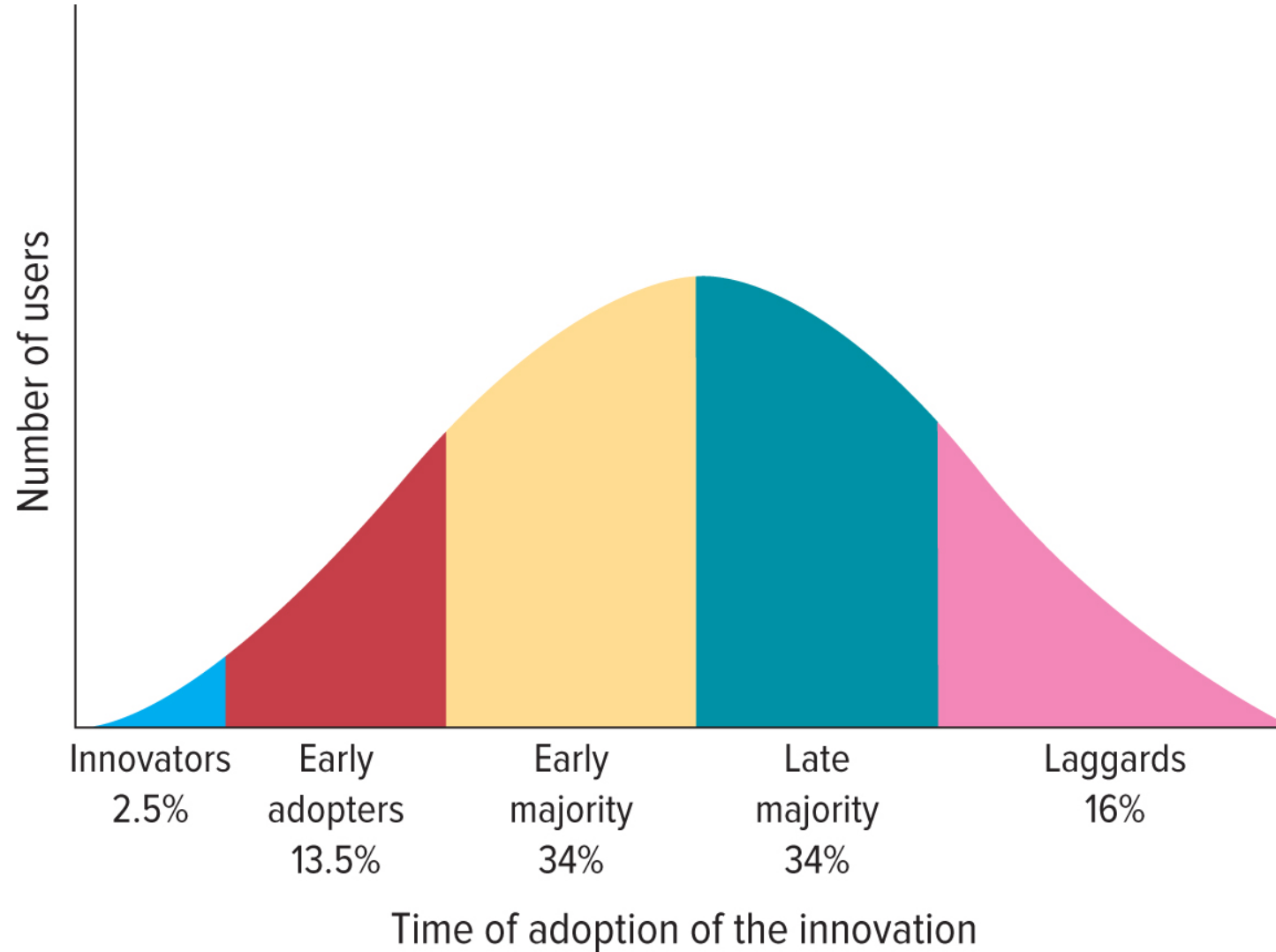
**Pioneers** radically change competition and consumer preferences by introducing new-to-the-world products



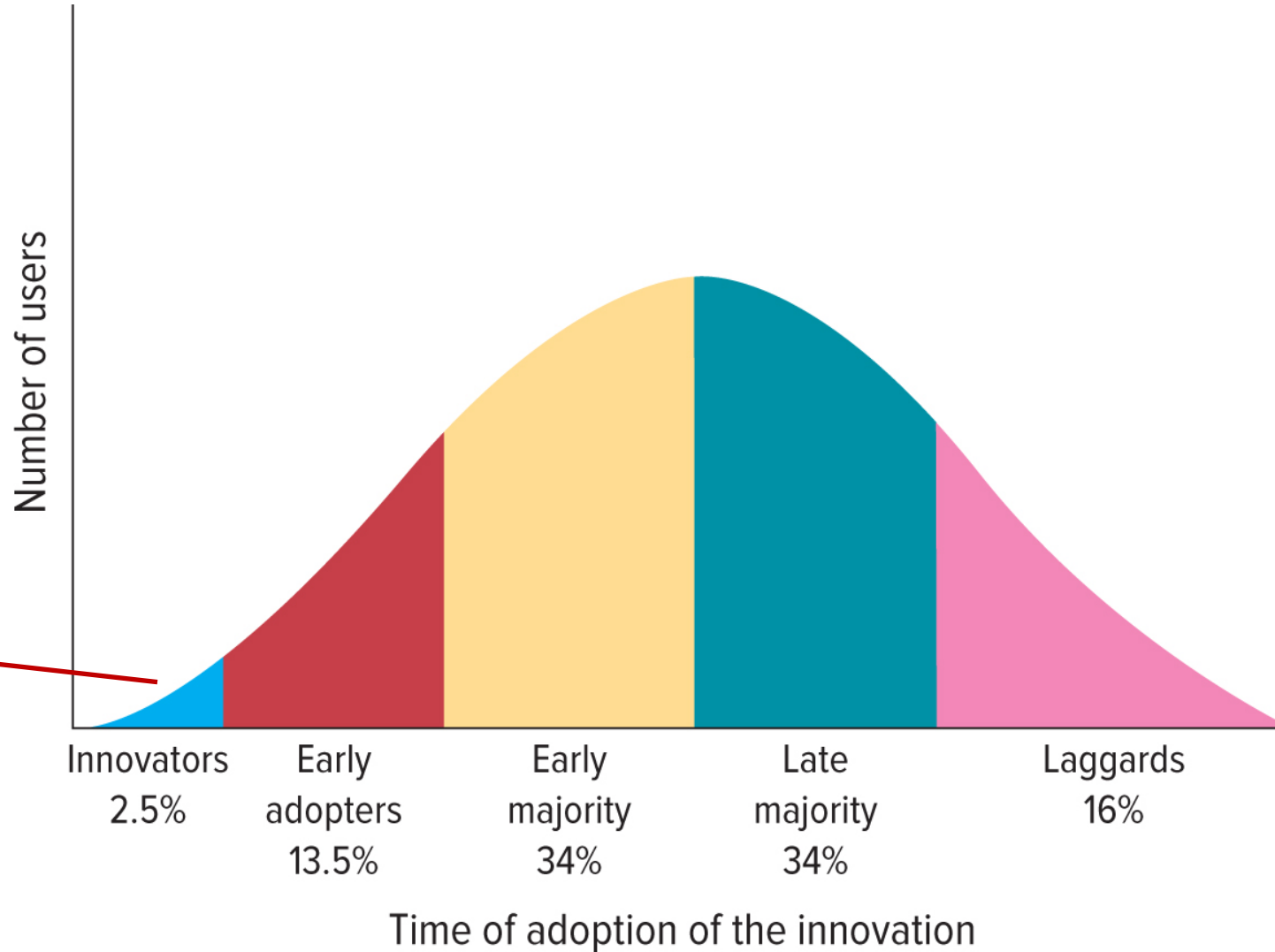
**Pioneers** radically change competition and consumer preferences by introducing new-to-the-world products

- Have **first mover** advantage → readily recognizable by consumers
- But many fail!
  - Google Glass
  - Apple Newton
  - New Coke
  - ...

# Diffusion of innovation



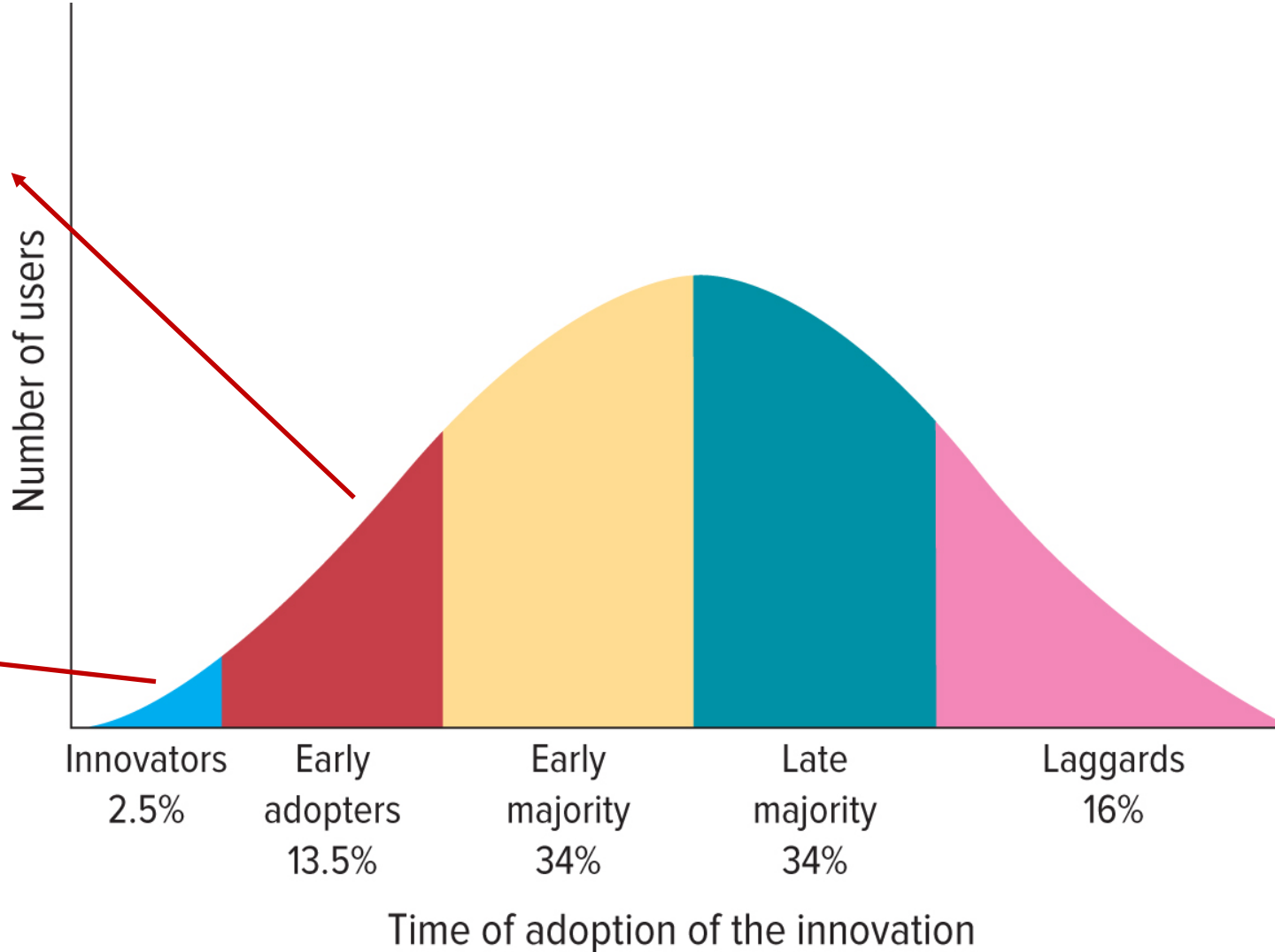
# Diffusion of innovation



Those that stand in line for a new product. Spread positive word of mouth.

# Diffusion of innovation

Wait for a review, less risk. Spread positive word of mouth.



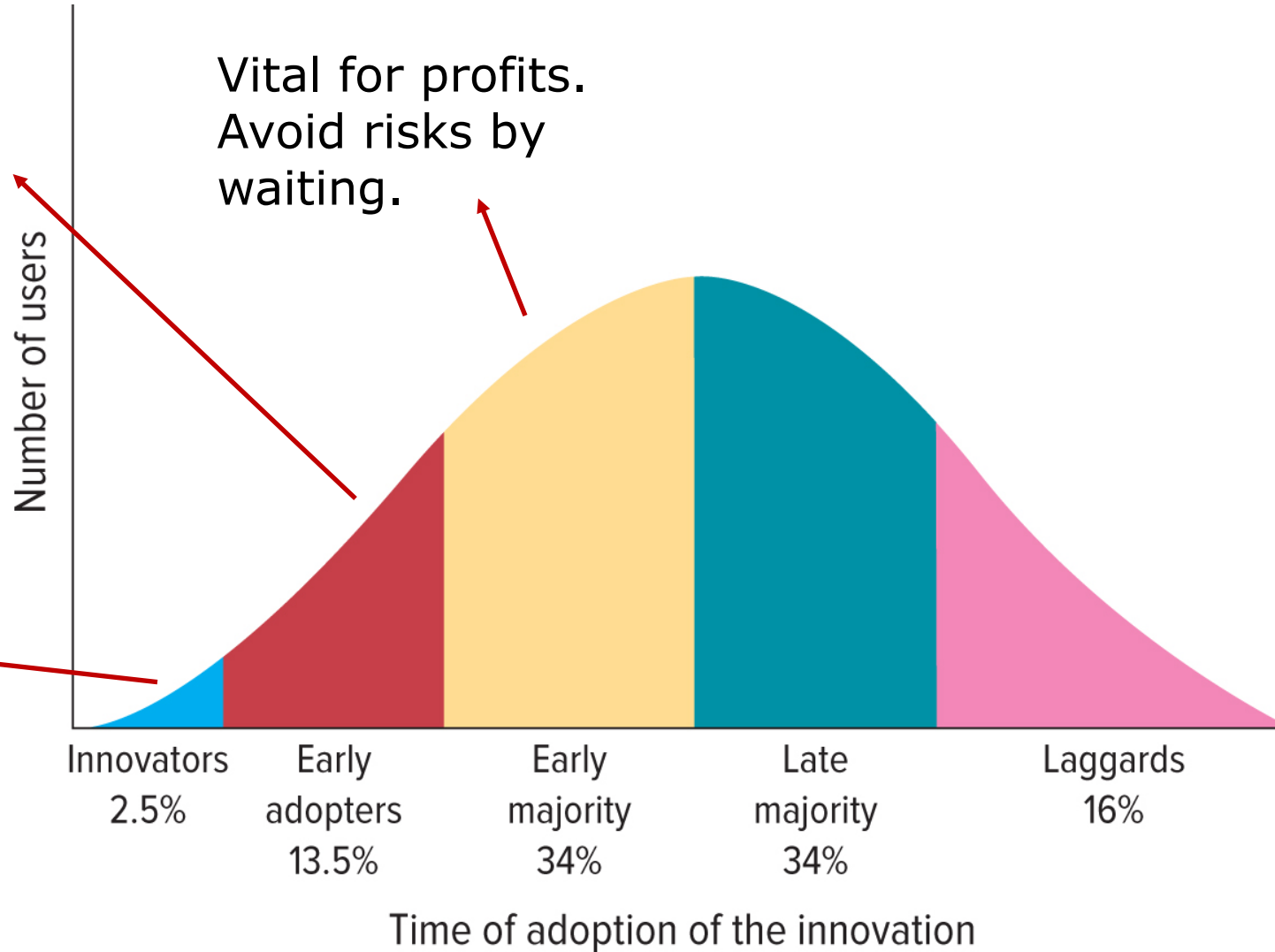
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Vital for profits. Avoid risks by waiting.

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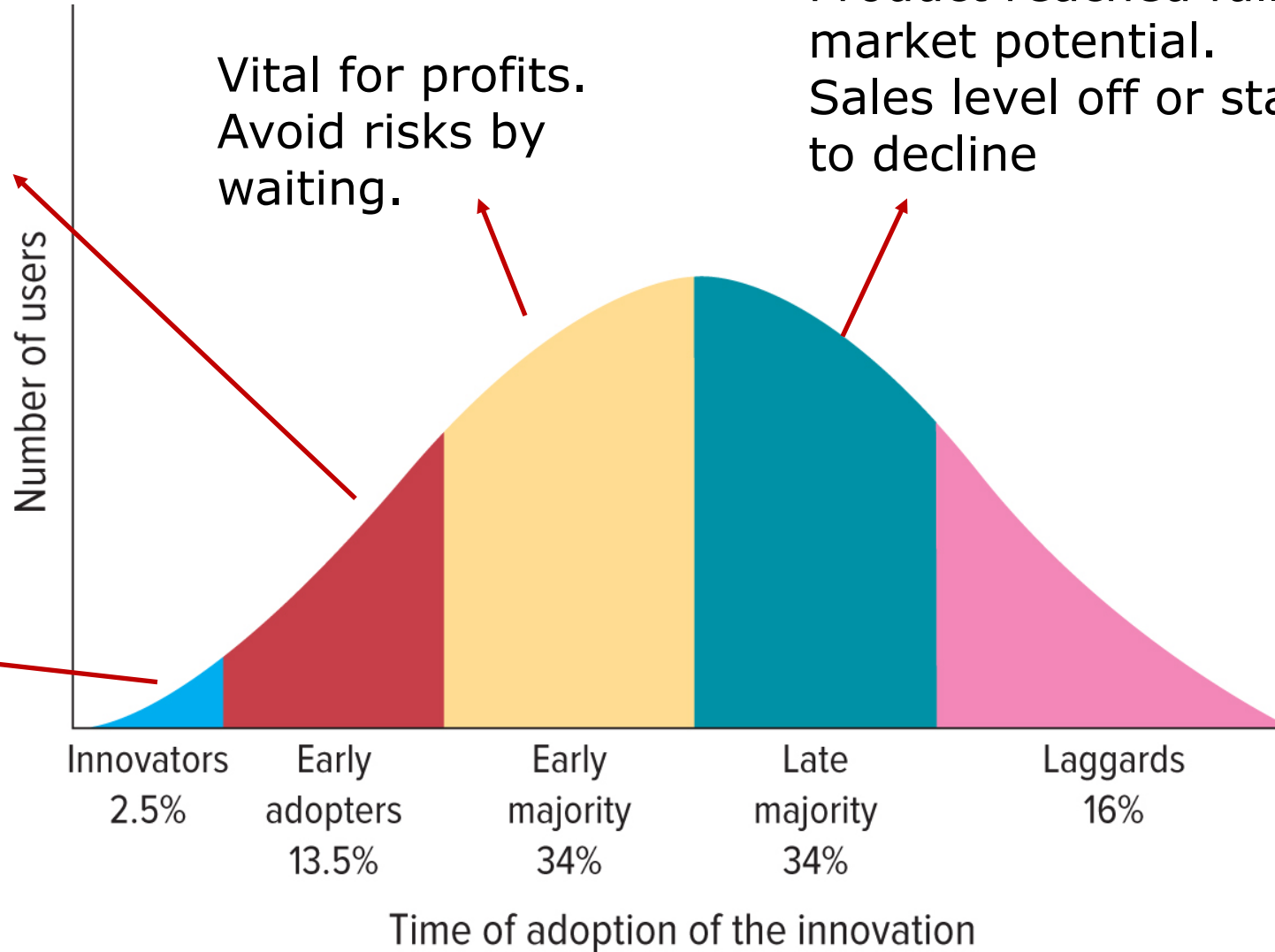


# Diffusion of innovation

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Product reached full market potential. Sales level off or start to decline



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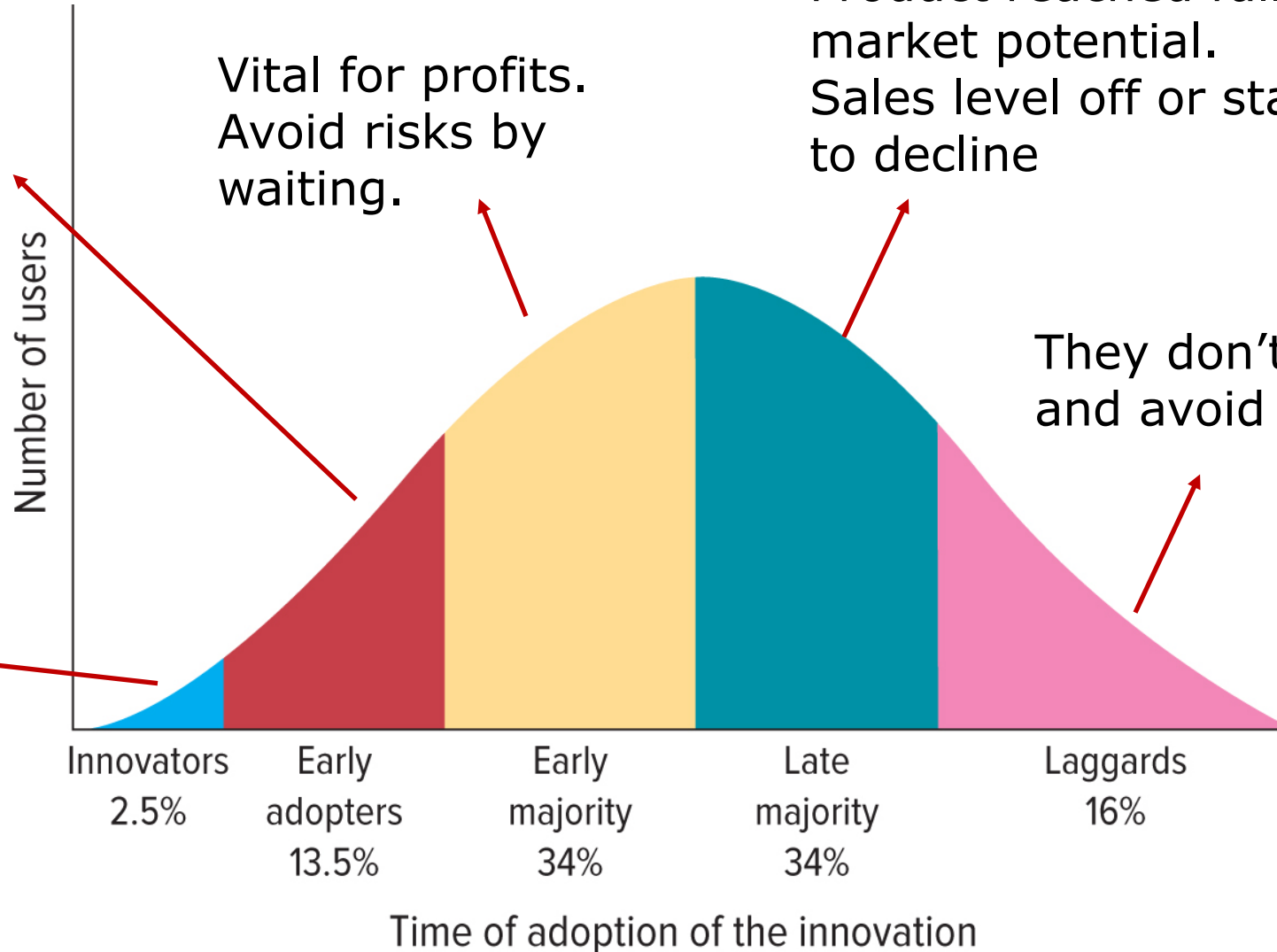
# Diffusion of innovation

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They don't like changes and avoid them.

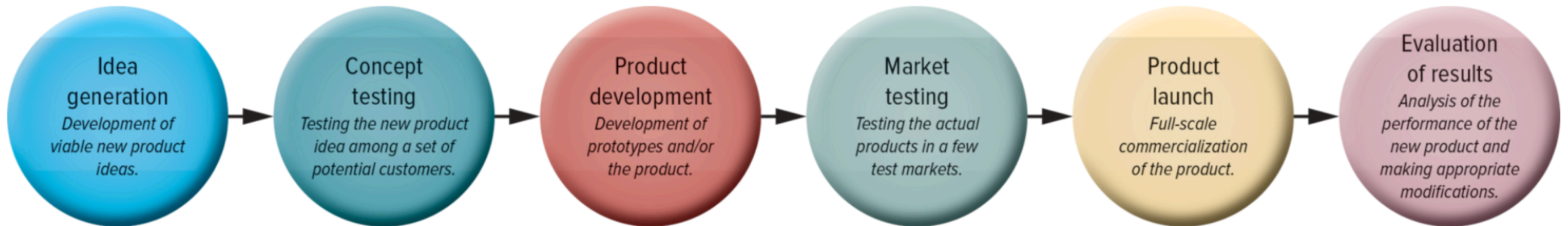


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# How Firms Develop New Products

In very general terms, these are the stages of new-product (or service) development:



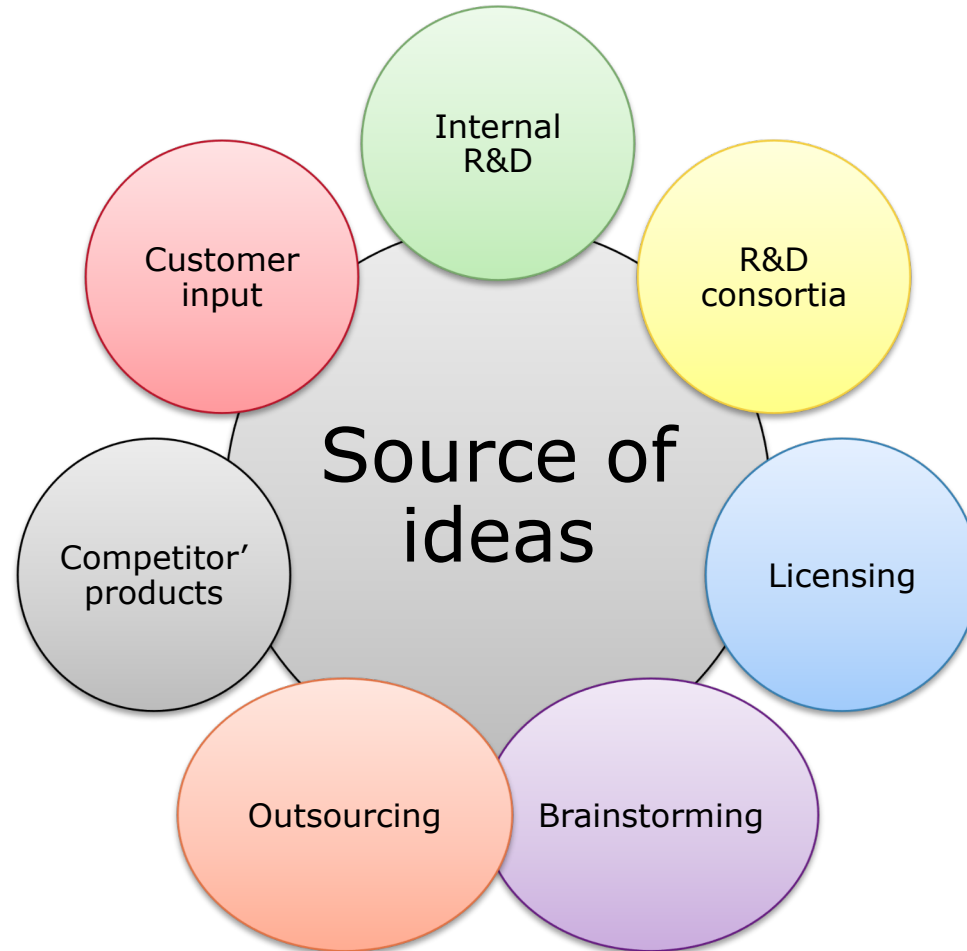
But even if you have a great idea, the new-product development process can become somewhat **messy, costly, and aimless** in the absence of a very clearly-articulated (and well-executed) new product development methodology!

# Failure is (almost) inevitable!

Microsoft didn't create **Internet Explorer** to be a way of downloading **Google Chrome** but...

[https://www.reddit.com/r/dataisbeautiful/comments/cxuah9/usage\\_share\\_of\\_internet\\_browsers\\_1996\\_2019\\_oc/](https://www.reddit.com/r/dataisbeautiful/comments/cxuah9/usage_share_of_internet_browsers_1996_2019_oc/)

# 1. Idea Generation





- High product development costs
- Often the source of technological products or breakthrough products



- Firms join together to form research consortiums
- Lower costs and risks
- Benefits spread to all firms
- Example: pharmaceutical industry research

- Firms purchase the rights to technology or ideas from other research-intensive firms
- University research centers also often provide such licenses



# Brainstorming

- Groups work together to generate ideas
- No idea can be immediately dismissed





Leverage outside firms to generate new ideas





- Reverse engineering
- Copycat products



Products with **patents** or other **proprietary protections** cannot be copied, so reverse engineered products must be substantively different from their source product.

# Customer Input



## 2. Concept testing

- Concept is a brief written description of the product
- Customers reactions determine whether or not it goes forward
- Triggers the marketing research process



## Prototype is created

- Alpha testing
  - Within the firm
- Beta testing
  - Uses potential customers



**Tesla To Skip Beta Development Phase And Start Building “Early-Release” Model 3s This Week:** <http://www.carscoops.com/2017/03/tesla-to-skip-beta-development-phase.html>

## 4. Market Testing

- **Premarket tests (product not in the market yet)**
  - Customers exposed
  - Customer surveyed
  - Sales estimated
  - Firm makes decision

- **Test marketing (only for a limited geo area)**
  - Mini product launch
  - More expensive than premarket
  - Market demand estimated

2017 CHEVROLET BOLT EV DISTRIBUTION PLAN



Dealer Ordering Month	In-Dealerships By*	States
October	December	CA, OR
December	February	CA, OR, MA, MD, VA
January	March	CA, OR, MA, MD, VA, NY, NJ
February	April	CA, OR, MA, MD, VA, NY, NJ, WA
March	May	CA, OR, MA, MD, VA, NY, NJ, WA, CT, ME, RI, VT, NH, CO
May	July	CA, OR, MA, MD, VA, NY, NJ, WA, CT, ME, RI, VT, NH, CO, IL, FL, AZ, PA
June	August	CA, OR, MA, MD, VA, NY, NJ, WA, CT, ME, RI, VT, NH, CO, IL, FL, AZ, PA, TX
July	September	ALL STATES

### Part art and part science

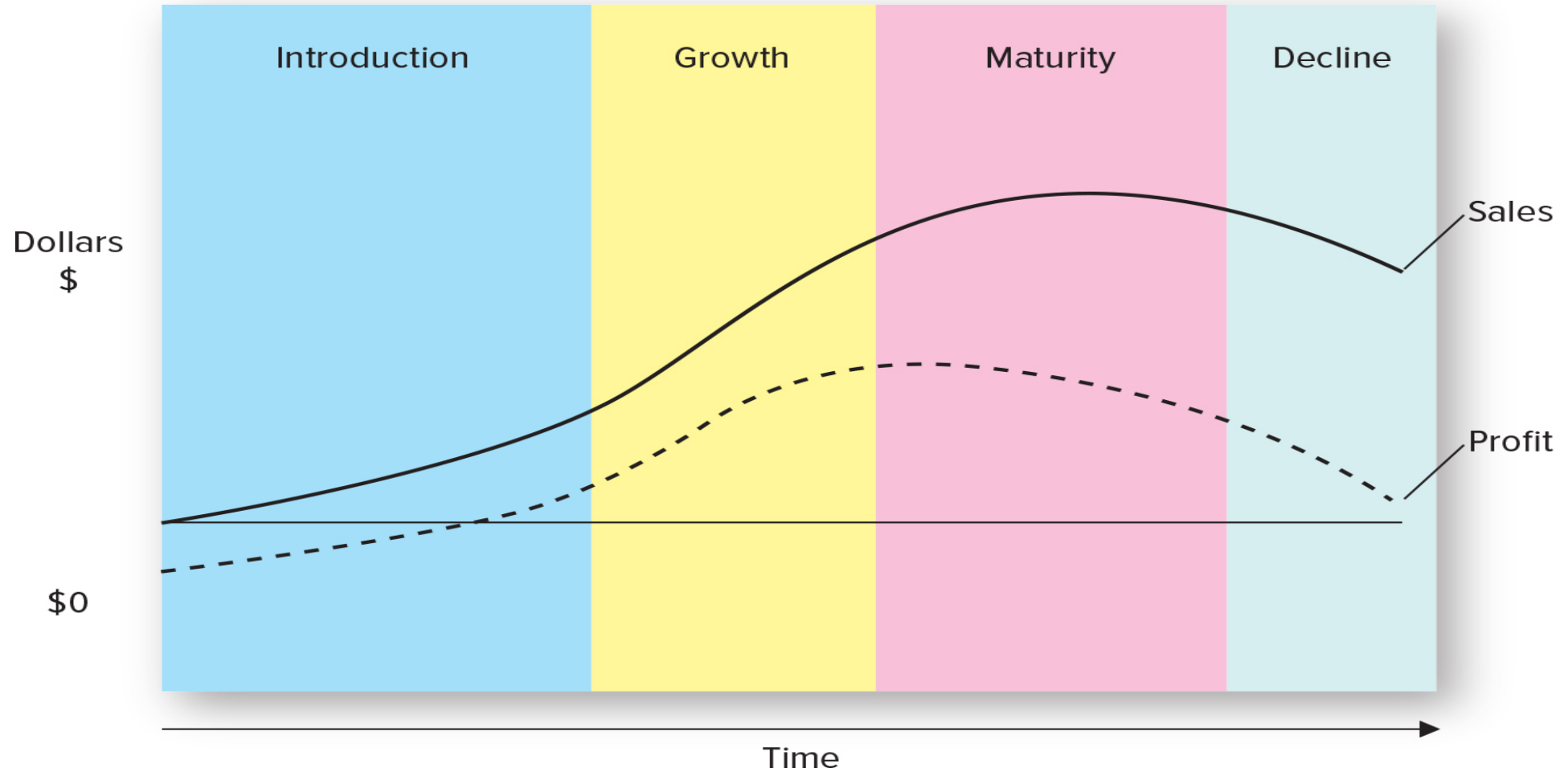
- Tech companies use events
  - Apple
  - Google
  - Airbnb
- Tesla did too!

Convey characteristics and **KEY BENEFITS** (which will convince buyers!)

## 6. Evaluation of Results

- Satisfaction of technical requirements
- Customer acceptance
- Satisfaction of the firm's **financial requirements**

# Product life cycle





# Product life cycle

	<b>Introduction</b>	<b>Growth</b>	<b>Maturity</b>	<b>Decline</b>
<b>Sales</b>	Low	Rising	Peak	Declining
<b>Profits</b>	Negative or low	Rapidly rising	Peak to declining	Declining
<b>Typical consumers</b>	Innovators	Early adopters and early majority	Late majority	Laggards
<b>Competitors (number of firms and products)</b>	One or few	Few but increasing	High number of competitors and competitive products	Low number of competitors and products