

Chapter 12

Developing New Products & Services

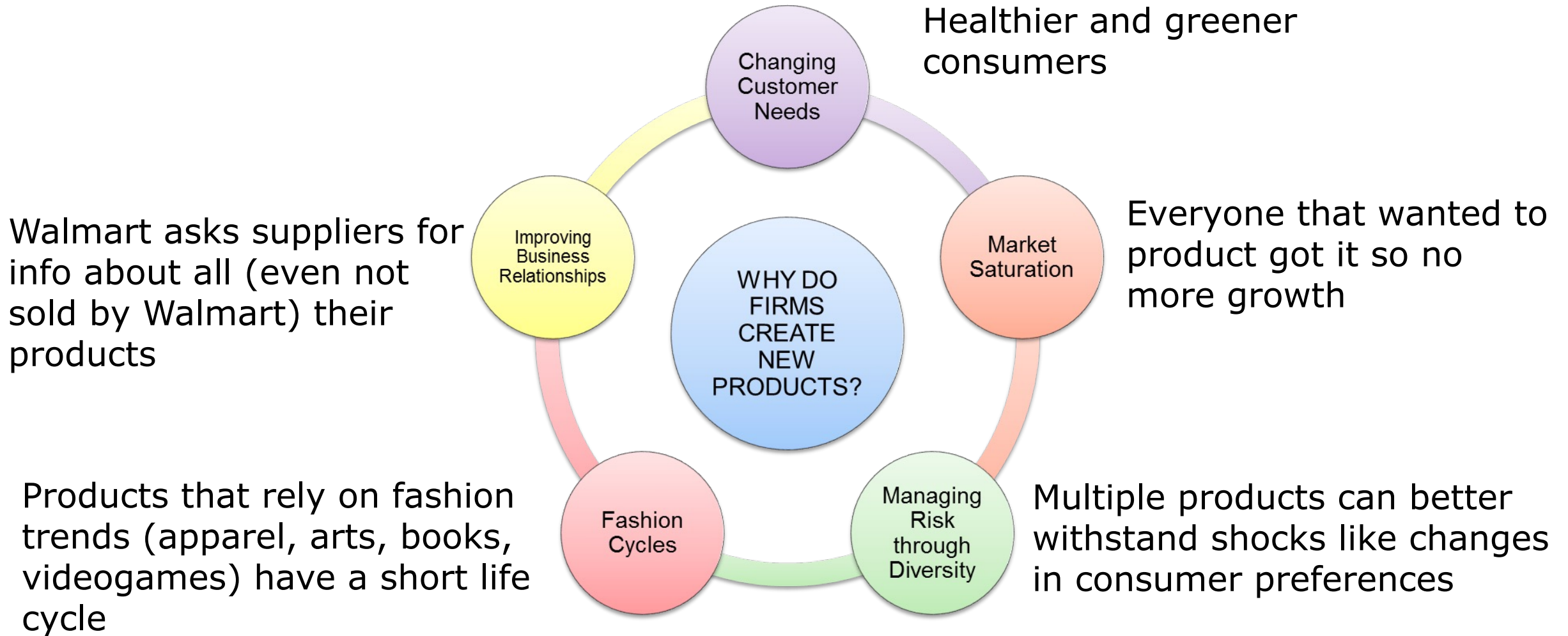
- Identify the reasons firms create new products.
- Describe the different groups of adopters.
- Describe the various stages involved in developing a new product or service.
- Explain the product life cycle.

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

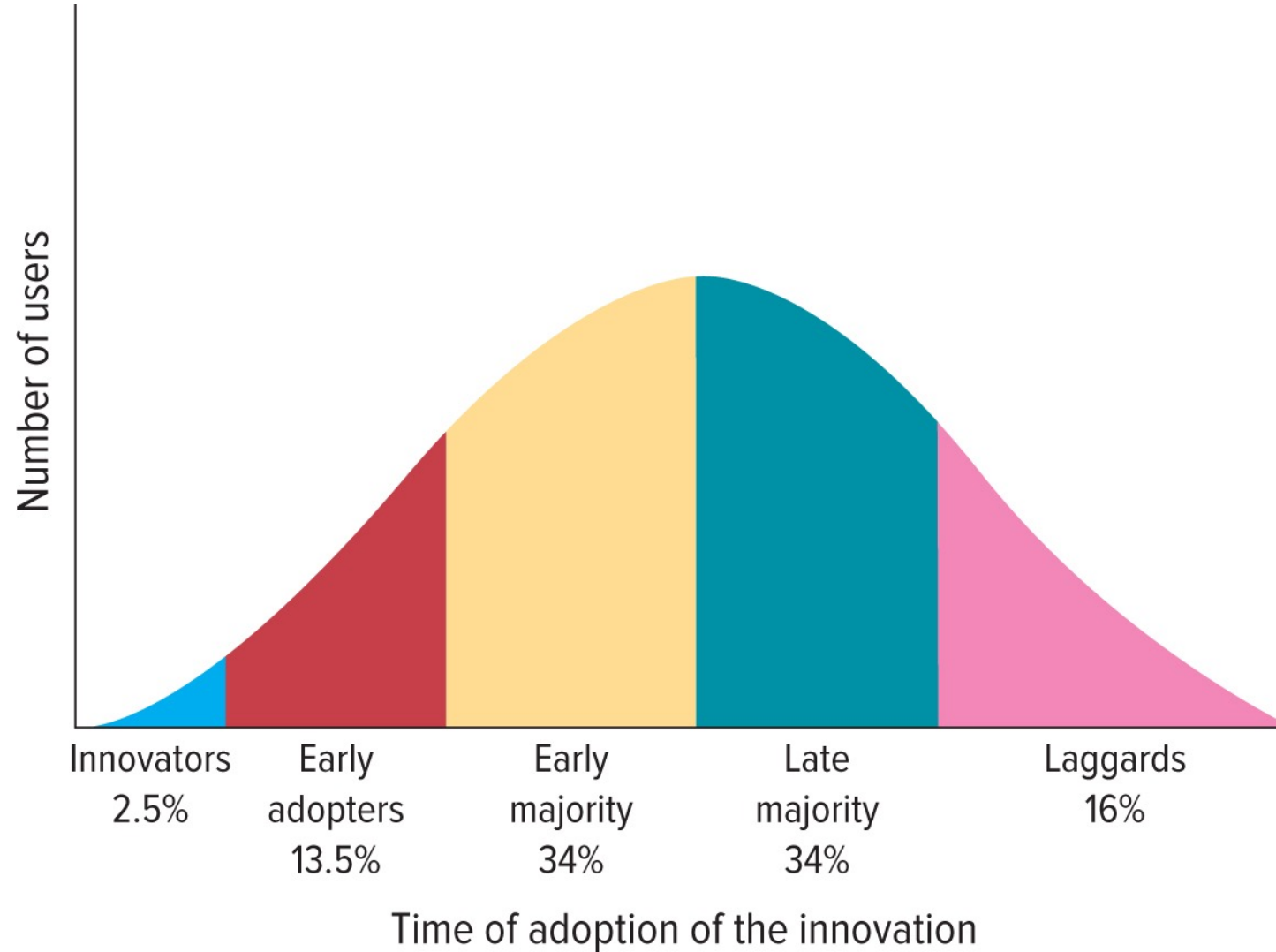
Pioneers radically change competition and consumer preferences by introducing new-to-the-world products



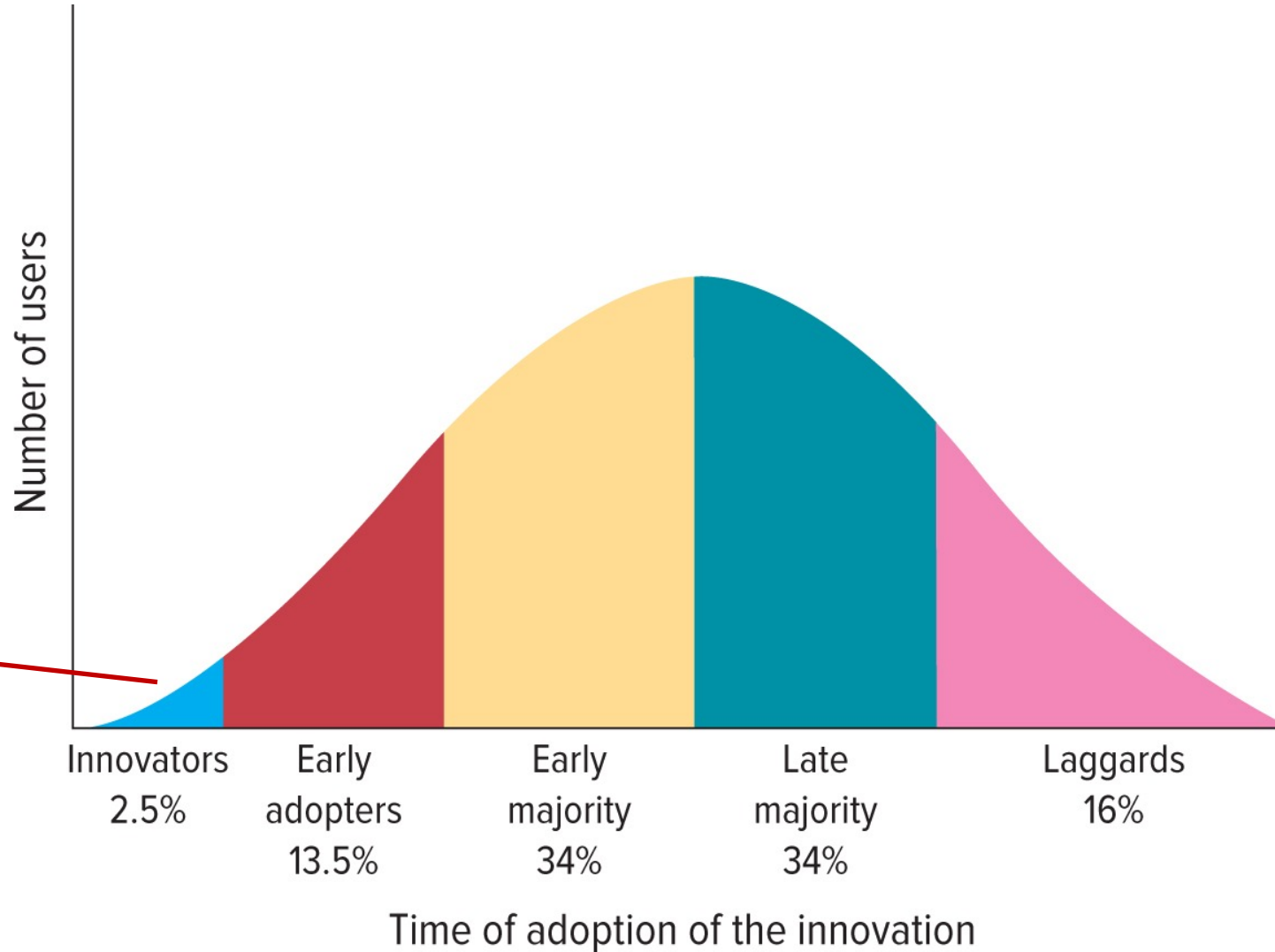
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- Have **first mover** advantage → readily recognizable by consumers
- But many fail!
 - Google Glass
 - Apple Newton
 - ...

Diffusion of innovation



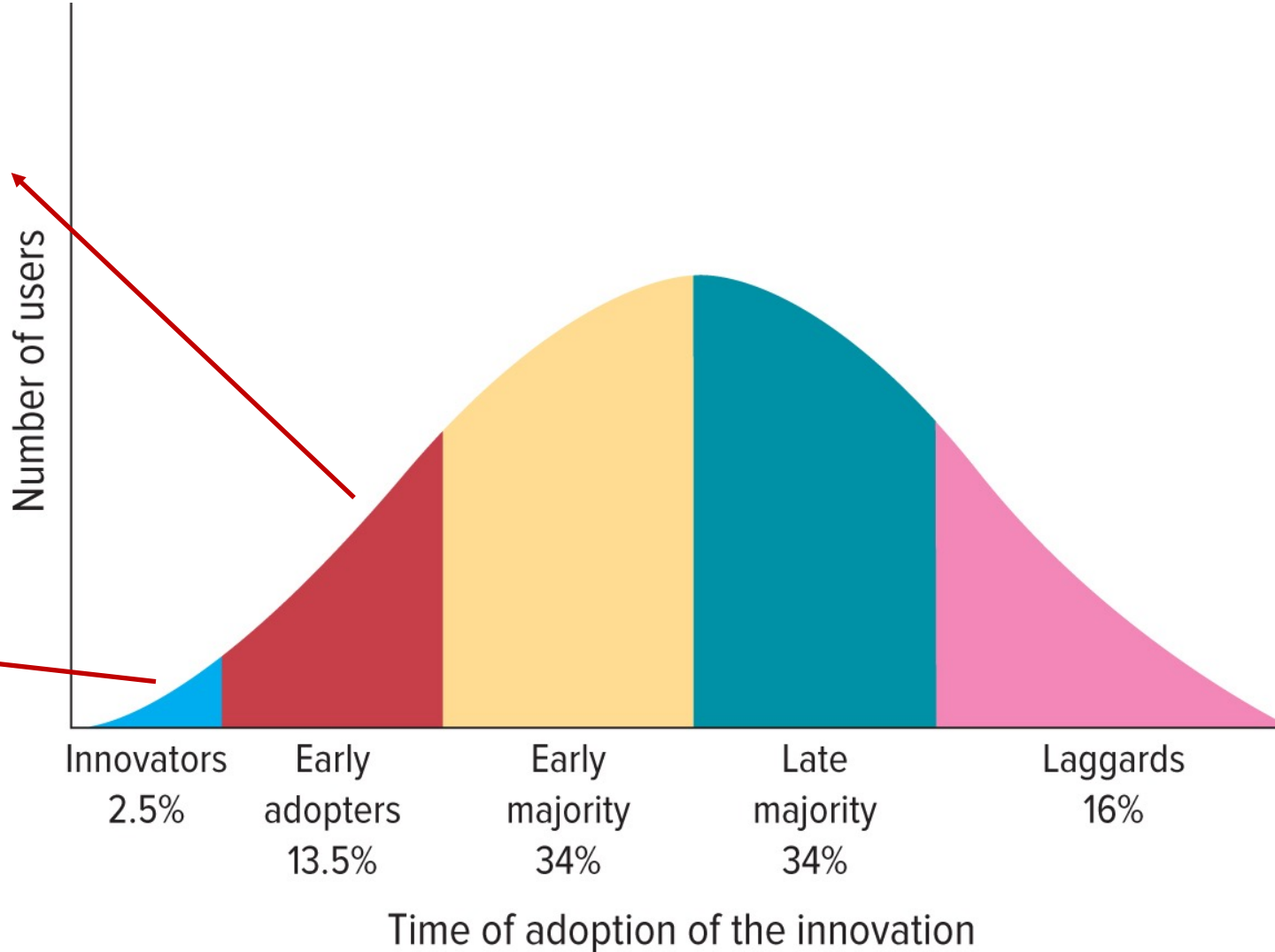
Diffusion of innovation



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.

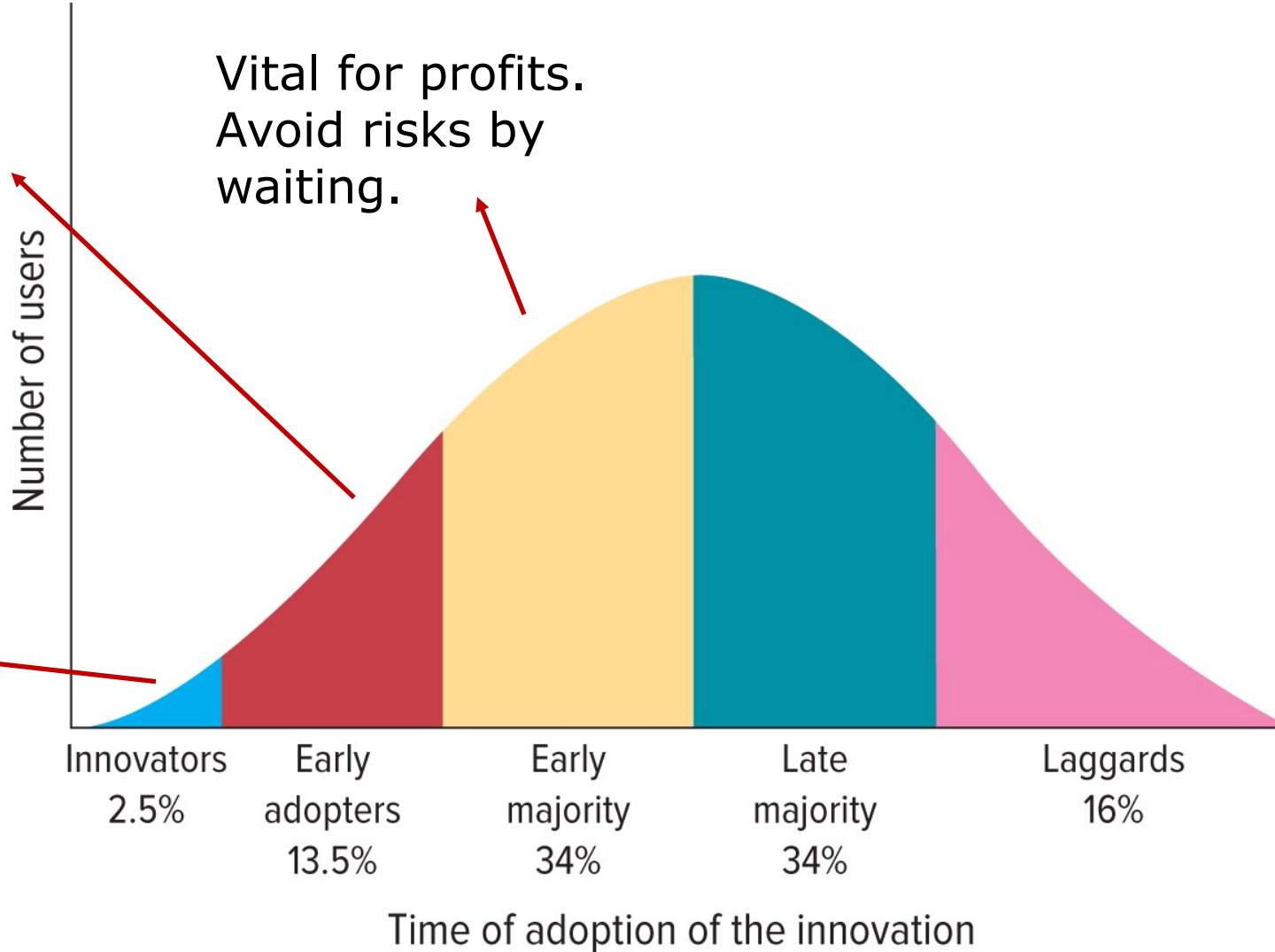


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Vital for profits. Avoid risks by waiting.



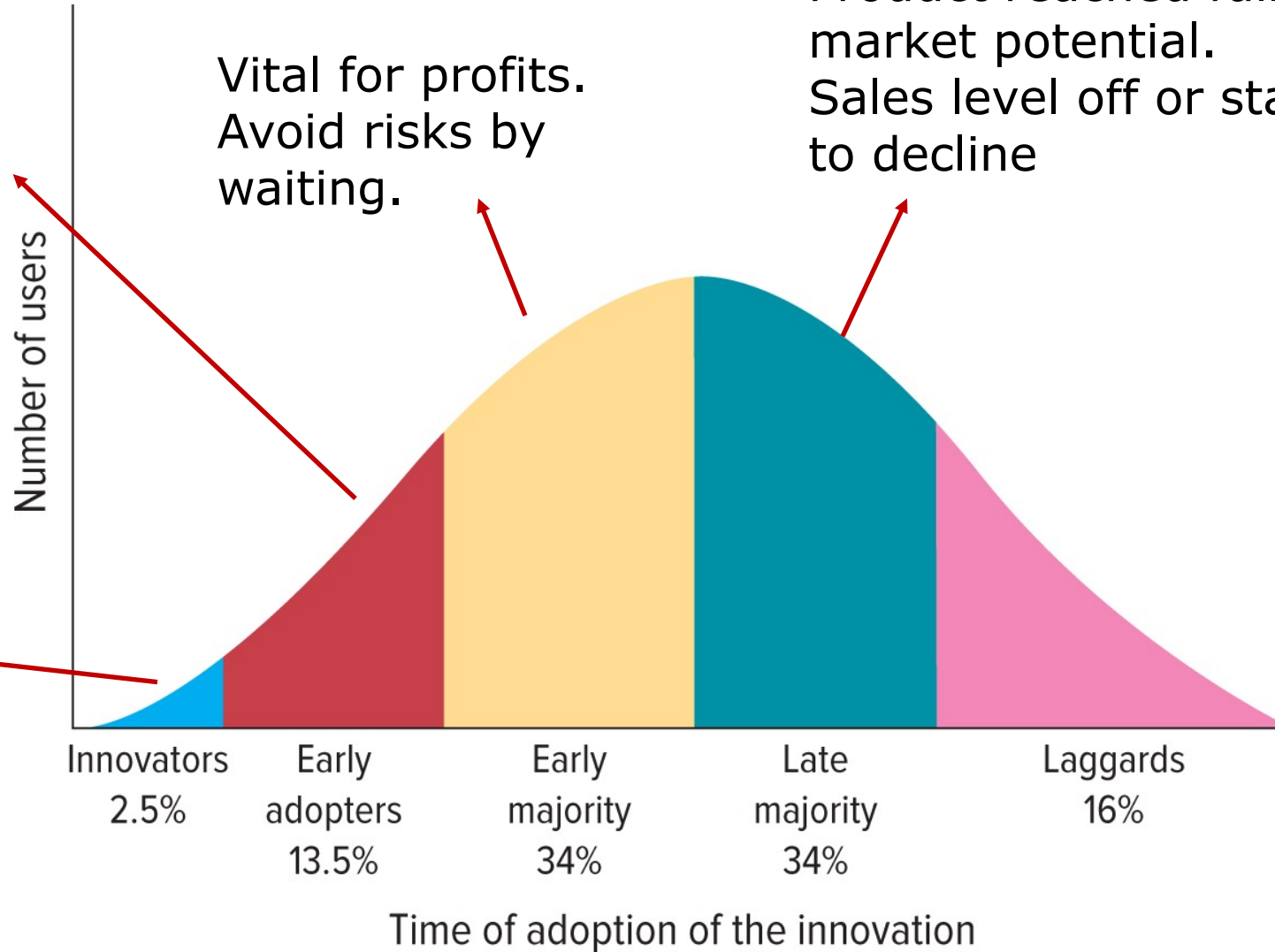
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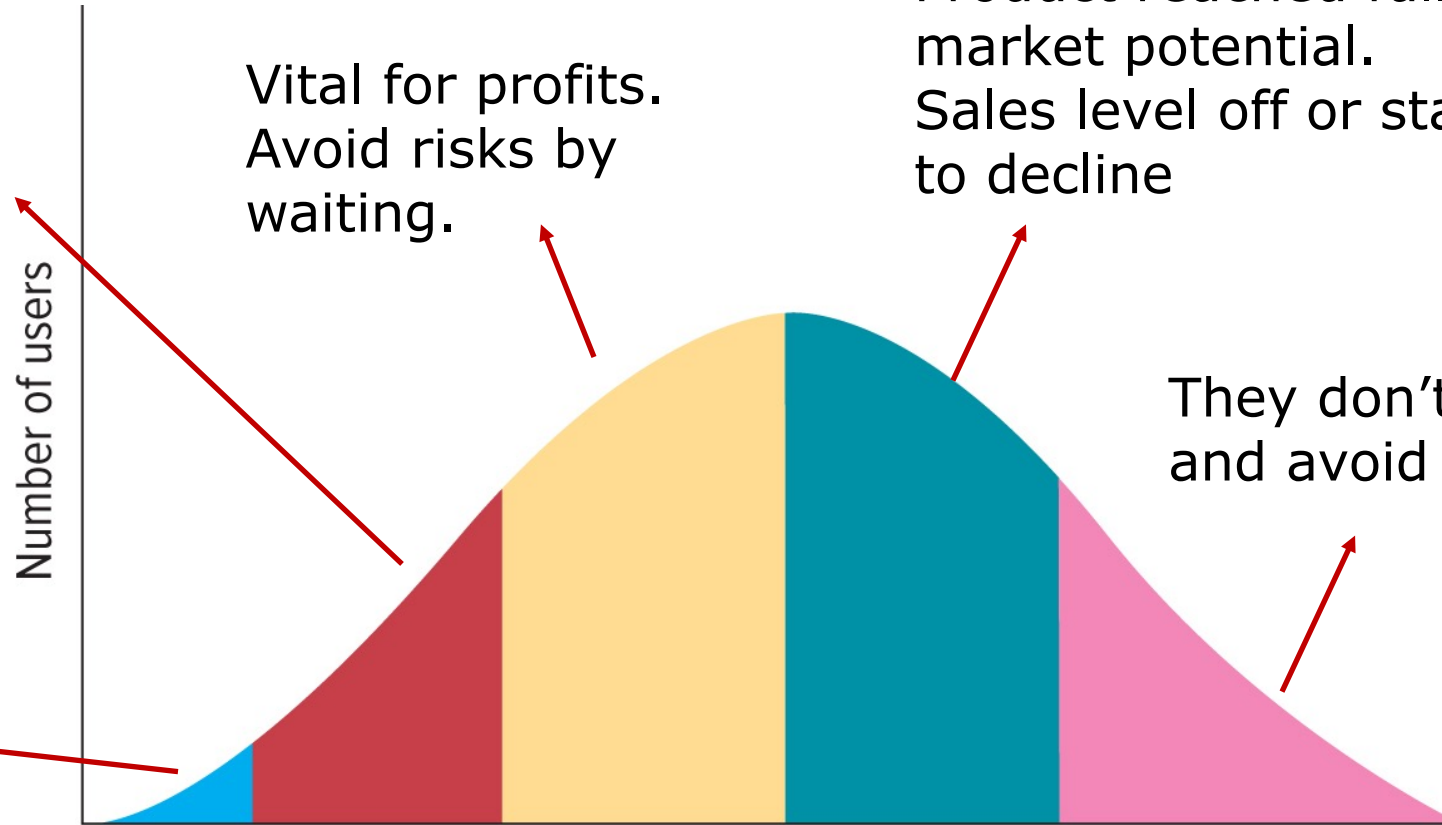
Product reached full market potential. Sales level off or start to decline



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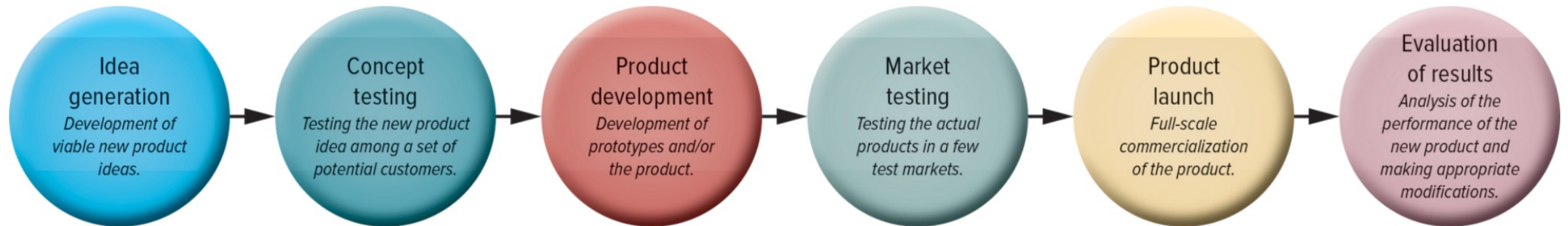
They don't like changes and avoid them.

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Time of adoption of the innovation

How Firms Develop New Products

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



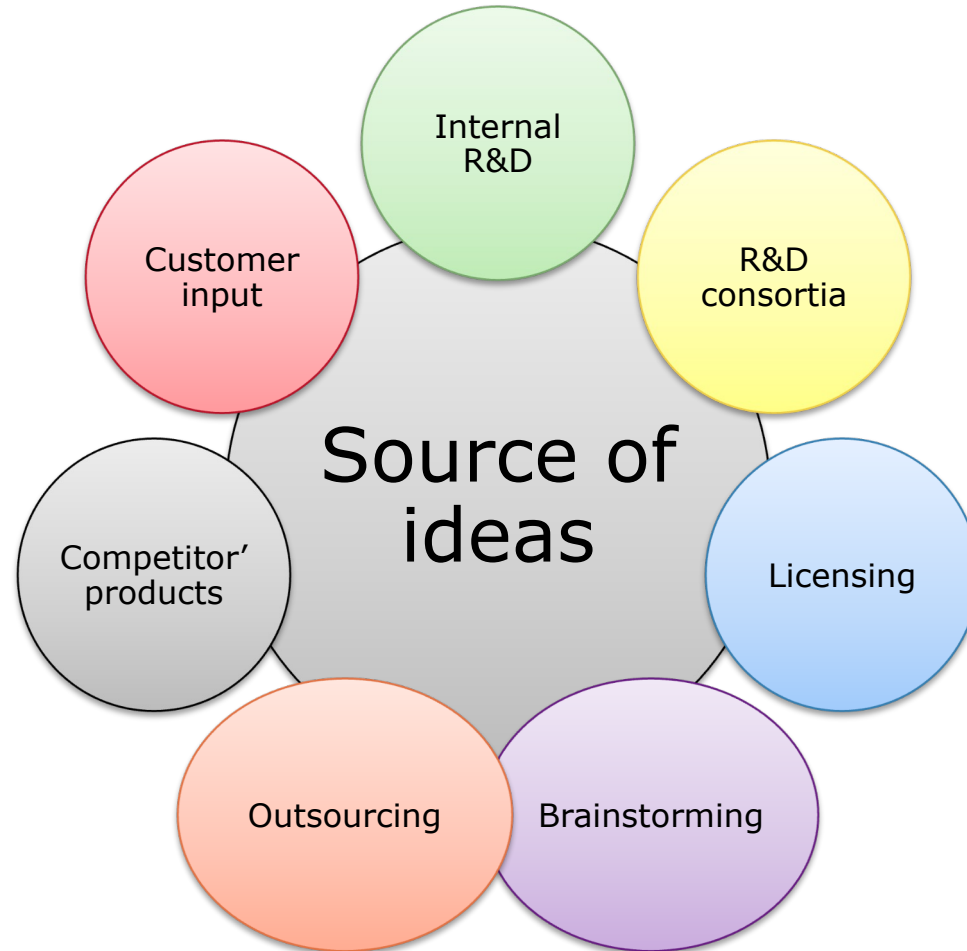
But even if you have a great idea, the new-product development process can become somewhat **messy, costly, and aimless** in the absence of a very clearly-articulated (and well-executed) new product development methodology!

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/

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

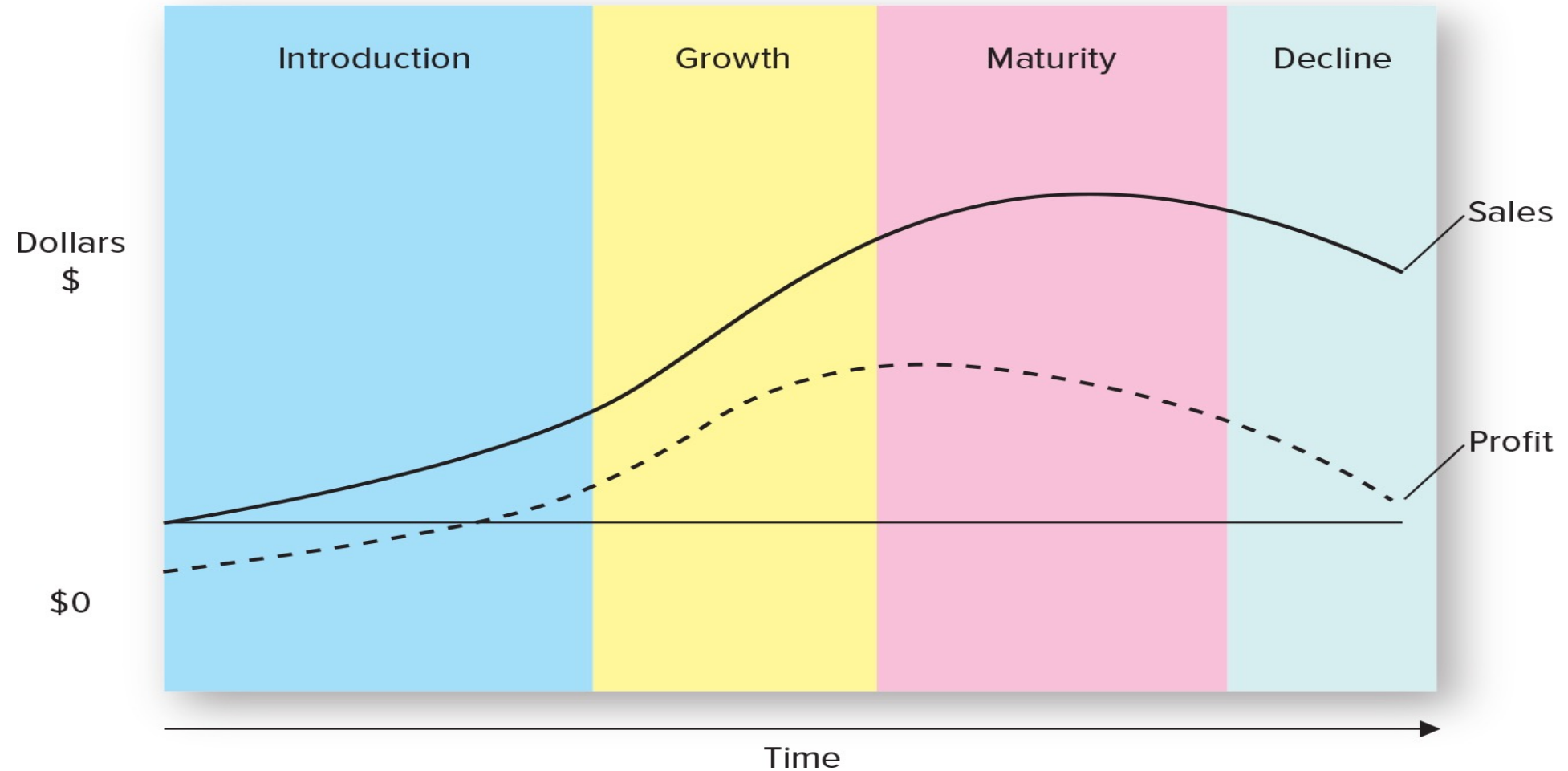
- Tech companies use events
 - Apple
 - Google
 - Airbnb
- Tesla did too!

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

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