

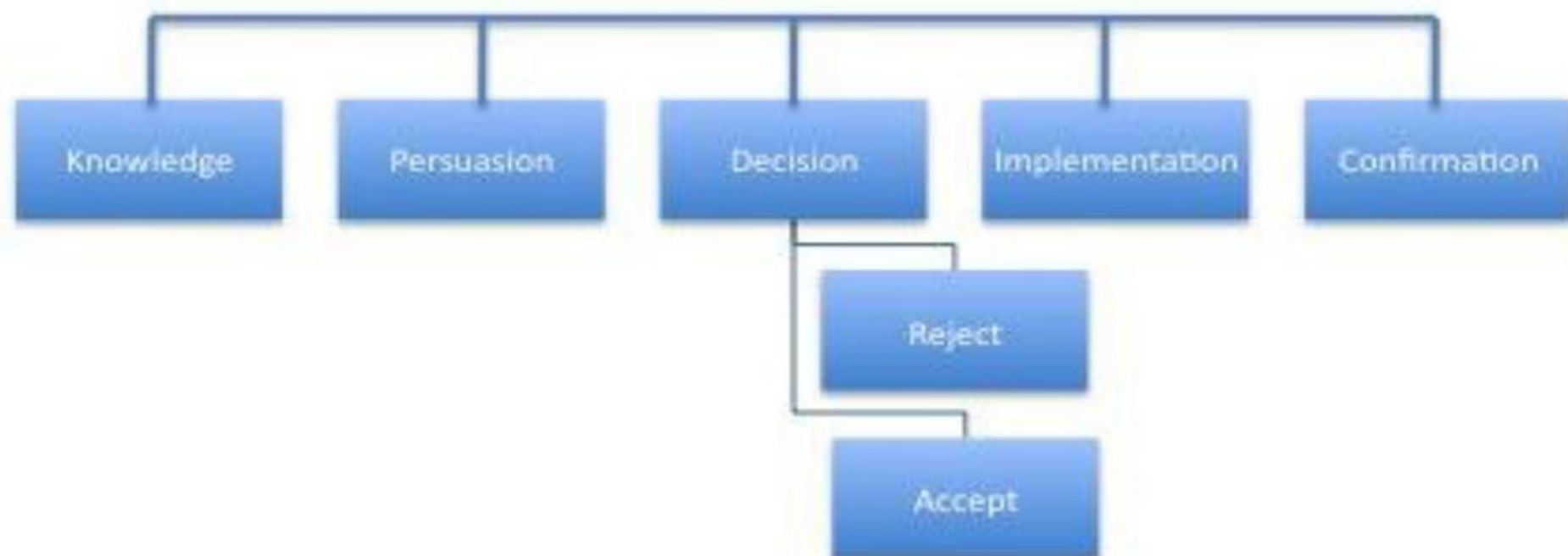
Theory of Diffusion of Innovation

- Innovation?
- How is it different from invention?
- How, why and at what rate new **ideas** and **technology** spread
- DOI is “the process in which an **innovation** is communicated through certain **communication channels** over **time** among the members of a **social system**” (Rogers, 2003)
- It is the spread of a new idea from its source of invention or creation to its ultimate use of adopters

Scope and Application

- Five key areas of DOI are:
 1. Characteristics on an innovation which may influence its adoption
 2. Decision-making process of an individual
 3. Characteristics of individuals adopting an innovation
 4. Consequence for individual and society
 5. Communication channels

Five Stages in the Decision Innovation Process

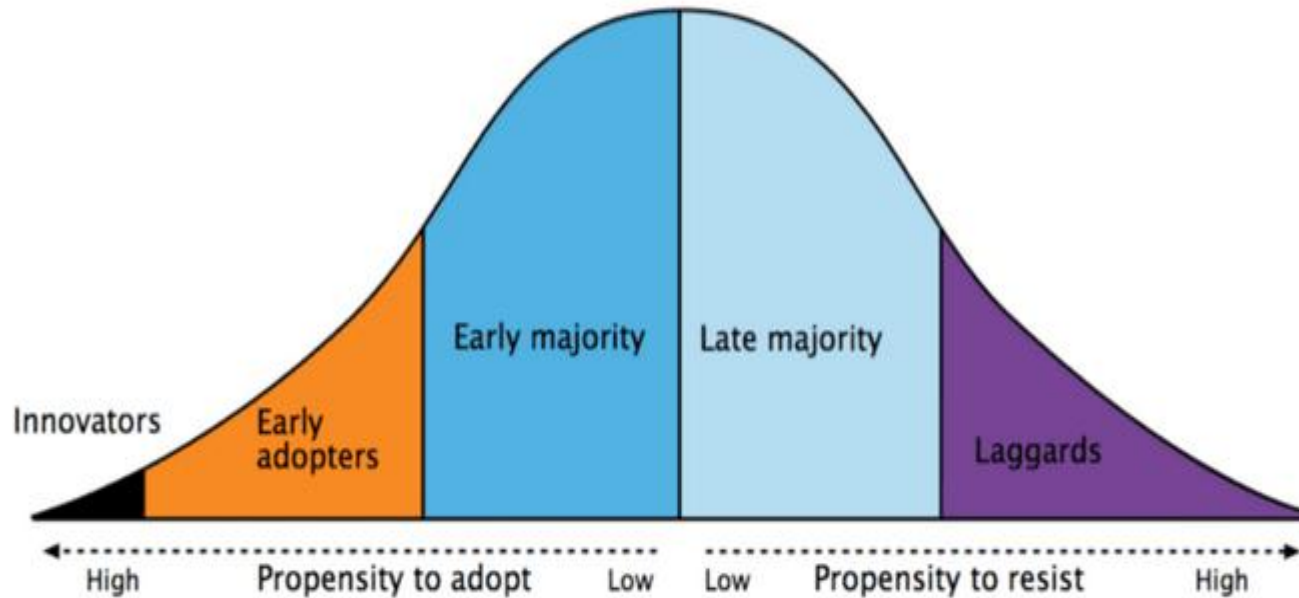


- **Knowledge:** An individual is first exposed to an innovation, but lacks information about it
- **Persuasion:** The individual is interested in the innovation and actively seeks related details/info
- **Decision:** The individual considers the change and weights the advantages/disadvantages of using the innovation and decides whether to adopt or reject the innovation
- **Implementation:** The individual employs the innovation to a varying degree depending on the situation. Also, determines the usefulness and seek further information about it
- **Confirmation:** Finalizes the decision to continue with the innovation. This stage is both intra-personnel (cognitive dissonance) and interpersonal

An individual might reject an innovation anytime during or after the adoption process

Rate of Adoption

- The relative speed or the length of time required for a certain percentage of the members of a social system to adopt an innovation



Adopter Categories

- **Innovators:** Innovators are willing to take risks, have the highest social status, have financial liquidity, are social and have closest contact to scientific sources and interaction with other innovators
- **Early adopters:** They have the highest degree of opinion leadership. Early adopters have a higher social status, financial liquidity, advanced education and are more socially forward than late adopters.
- **Early Majority:** They adopt an innovation after a varying degree of time that is significantly longer than the innovators and early adopters. Early Majority have above average social status, contact with early adopters and seldom hold positions of opinion leadership in a system (Rogers 1962, p. 283)
- **Late Majority:** they are typically skeptical about an innovation, have below average social status, little financial liquidity.
- **Laggards:** They are the last to adopt an innovation. Unlike some of the previous categories, individuals in this category show little to no opinion leadership. These individuals typically have an aversion to change-agents.

Why do some products diffuse easily, while others diffuse slowly or not at all?

1876: Invention of Telephone

1900 (25yrs): It was found in only 10% of households of USA

1935 (60yrs): 30% of the households

Only till 1980s: it reached 90% of households

Rogers “Five factors”

- Also, termed as “product-based factors” governing the rate of innovation diffusion
 - **Relative advantage:** the degree to which a product is better than the product it replaces
 - **Compatibility:** the degree to which a product is consistent with existing values and experiences of adopters
 - **Complexity:** the degree to which a product is difficult to understand and use
 - **Trialability:** the degree to which a product may be experimented with on a limited basis
 - **Observability:** the degree to which product usage and impact are visible to others

Note: These five factors have been shown to explain 49% to 87% of the variance in the rate of diffusion across innovations in various product categories

Summary:

The Diffusion of Innovations

1/1

Background



Everett Rogers
1962

Innovation:

idea, practice, or object perceived as new by an individual

Diffusion:

The process by which an innovation is communicated through certain channels overtime among the members of social system

Adopter categories

- Innovators
- Early adopters
- Early majority
- Late majority
- Laggards

Note: Adapted from *Diffusion of Innovations*, fifth edition by
Everett M. Rogers, 2003, New York: Free Press Copyright 2003



The rate of adoption

- Relative advantage
- Compatibility
- Complexity
- Trialability
- Observability

UPI adoption in India

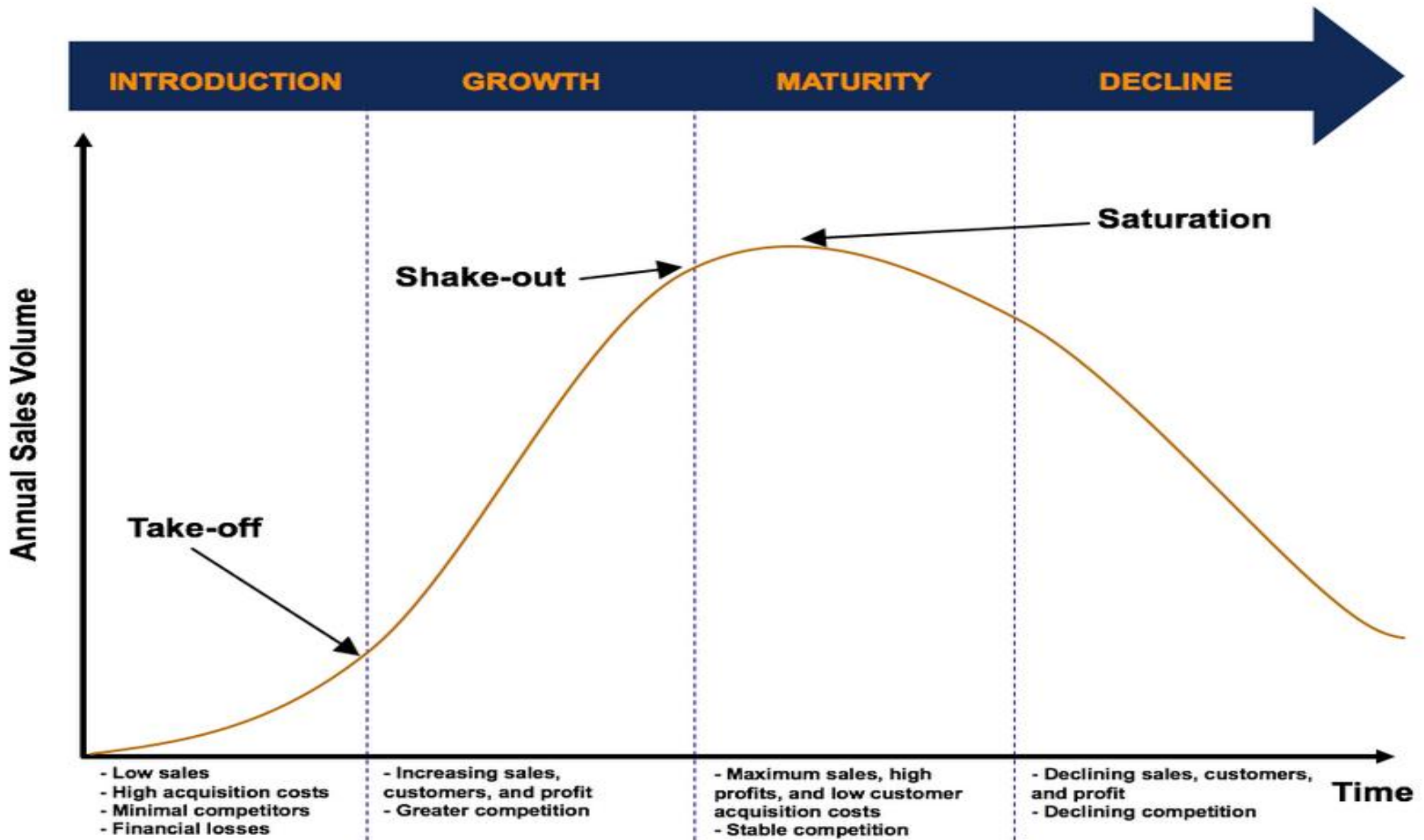
- Launched in 2016 for enabling bank to bank transfers via smartphones
- Catalysts: Demonetization, COVID 19
- Keys to adoption:
 - **Relative advantage:** speed, security and ease over transactions
 - **Compatibility:** As Indians were already sending money via net banking, UPI made the existing behavior easy and fast
 - **Trialability:** Easy onboarding with no cost
 - **Observability:** UPI QR codes
 - **Proactive Govt.** backing and ecosystem development (merchants, apps) for mass adoption

Can you identify a pattern here?

- Google Glass (2013)
- Segway (2001)
- Amazon Fire phone (2014)

Product Life Cycle

- During its life span, a product passes through a certain distinct stages in terms of demand, growth rate and profitability
- A typical PLC is presented as a sales curve spanning the product 's course from introduction to exit
- Understanding and managing the PLC, can help in prolonging the profitable phases of the lifespan of a product/brand



Underlying Goals and Possible Strategies

1. INTRODUCTION:

- Gaining widespread product recognition
- stimulate trials of the product by consumers
- Marketing efforts should be focused on the customer base of innovators
 - Building awareness, educating early adopters and generating trials
 - Two Possible pricing strategies are price skimming or price penetration
 - Investing in promotion and market development

2. GROWTH

- Increasing demand, sales revenue and number of customers
- Economies of scale is realized as sales revenues increase faster than costs
 - Maximizing market share
 - Competition-oriented pricing
 - Expanding the distribution reach and distribution efficiency
 - Building brand loyalty
 - Differentiation

Underlying Goals and Possible Strategies

3. MATURITY:

- The biggest challenge is to maintain profitability by retaining the customers
- Prevent sales from declining
 - Implementing marketing innovation to ensure that the product remains successful
 - Differentiation through new features and services

4. DECLINE:

- Sales and profitability decreases due to the market entry of other innovative or substitute products that satisfy customer needs better than the current product.
- Possible strategies are:
 - Reduce marketing efforts and attempt to maximize the life of the product for as long as possible
 - Slowly reducing distribution channels and pulling the product from underperforming geographic areas and attempt to introduce a replacement product.
 - Selling the product to a niche operator or subcontractor. This allows the company to dispose of a low-profit product while retaining loyal customers.

- Not all products follow the classic S-curve and the specified sequence
- PLC as a tool facilitates pre-planning the product launch
- Facilitates enhanced profitability by-
 - Finding new users of the product
 - New uses of the product
 - Making the product more distinctive
- Understanding both the DOI and PLC link allow marketers to tailor their marketing strategies (4Ps), product development efforts and resource allocation decision

Case

Thenga Coco: the incredible voice of sustainable shells

Dilemma??

Identify 5 brands with Zero waste policy

Questions

- What were the positioning tactics opted by the Protagonist?
- Thenga's products were facing a problem during which phase? Explain.
- What should be the strategic plan of action for Thenga for survival in the long run?

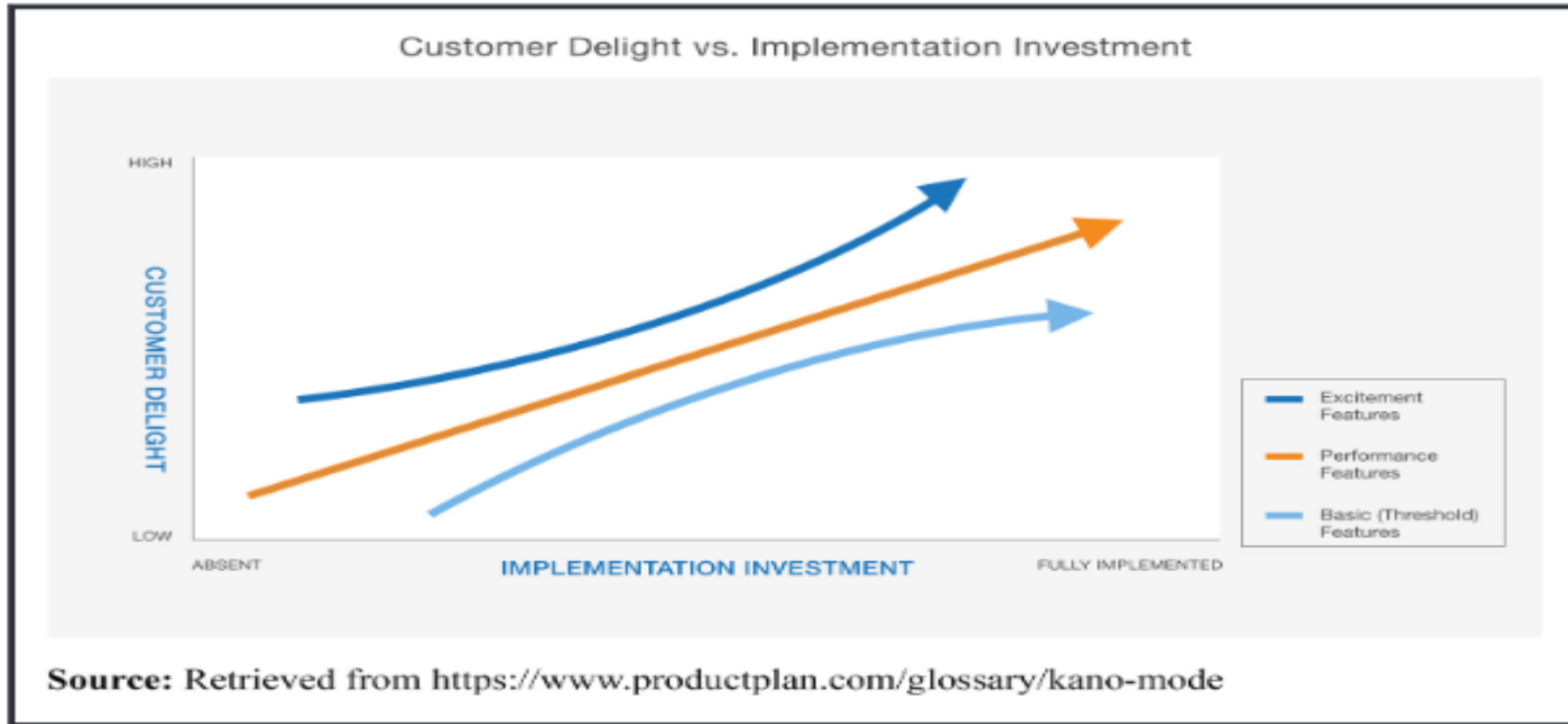
Dilemma

- **Non-uniformity** in the sizes of the product especially in bulk orders
- **Durability of the products** because the shells that exposed to sun for a long period of time were not ideal for crafting due to the cracking of the shells

Strategic Plan of action using Kano Approach

- The challenge is to retain customer satisfaction and loyalty

- Developed in 1984 by Dr. Noriaki Kano, Prof. of quality management at Tokyo school of science
- Emphasized the importance of expanding potential product features and the investment required to implement them
- The model aims at mapping three categories of features:
 - Basic (threshold) features: Specific features expected by the customers for a product to be competitive. Eg, durability
 - Excitement features: Unique innovations, customized pieces and diversifying their product portfolio
 - Performance features: they are “one-dimensional” due to the direct and linear correlation between how much you invest in it and the amount of customer satisfaction it delivers.



With this model, it can become clear that the brand is lacking in basic and performance features

“By using the Kano Model, companies can prioritize the development efforts and improve customer satisfaction, leading to increased revenue and market share.”

Reference:

<https://www.productplan.com/glossary/kano-model/>