

# **WELCOME**

# **Software Product Management**

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# Product Management

- **"Software Product Management is the discipline and practice of strategically overseeing software product development, delivery, and ongoing enhancement to meet customer needs and business objectives. It involves identifying market opportunities, defining product strategies, collaborating with cross-functional teams, prioritizing features, and ensuring the successful execution of product plans throughout the product lifecycle."**
- **In essence, Software Product Management encompasses the end-to-end process of guiding software products from conception to market launch and beyond, while considering customer requirements, market dynamics, and organizational goals. It involves making decisions, setting priorities, and managing resources to create valuable and successful software products.**

## What will happen if you do not manage product?

- **Lack of market alignment:**  
a product can fail to meet evolving market needs, leading to customer dissatisfaction and loss of market share.
- **Feature bloat or irrelevance:**  
can suffer from unnecessary features, causing confusion and hindering user value, or become outdated and fail to stay competitive.
- **Missed opportunities and innovation:**  
can result in missed chances for innovation, expansion, and partnerships, limiting growth potential.
- **Inefficient resource allocation:**  
resources may be misallocated, causing delays, overspending, and strained stakeholder relationships.
- **Poor customer satisfaction:**  
can lead to dissatisfied customers due to disregarded feedback and unmet expectations.
- **Lack of strategic direction:**  
can result in unclear goals, priorities, and strategic vision, impacting growth and focus.

## Overview of Product Management

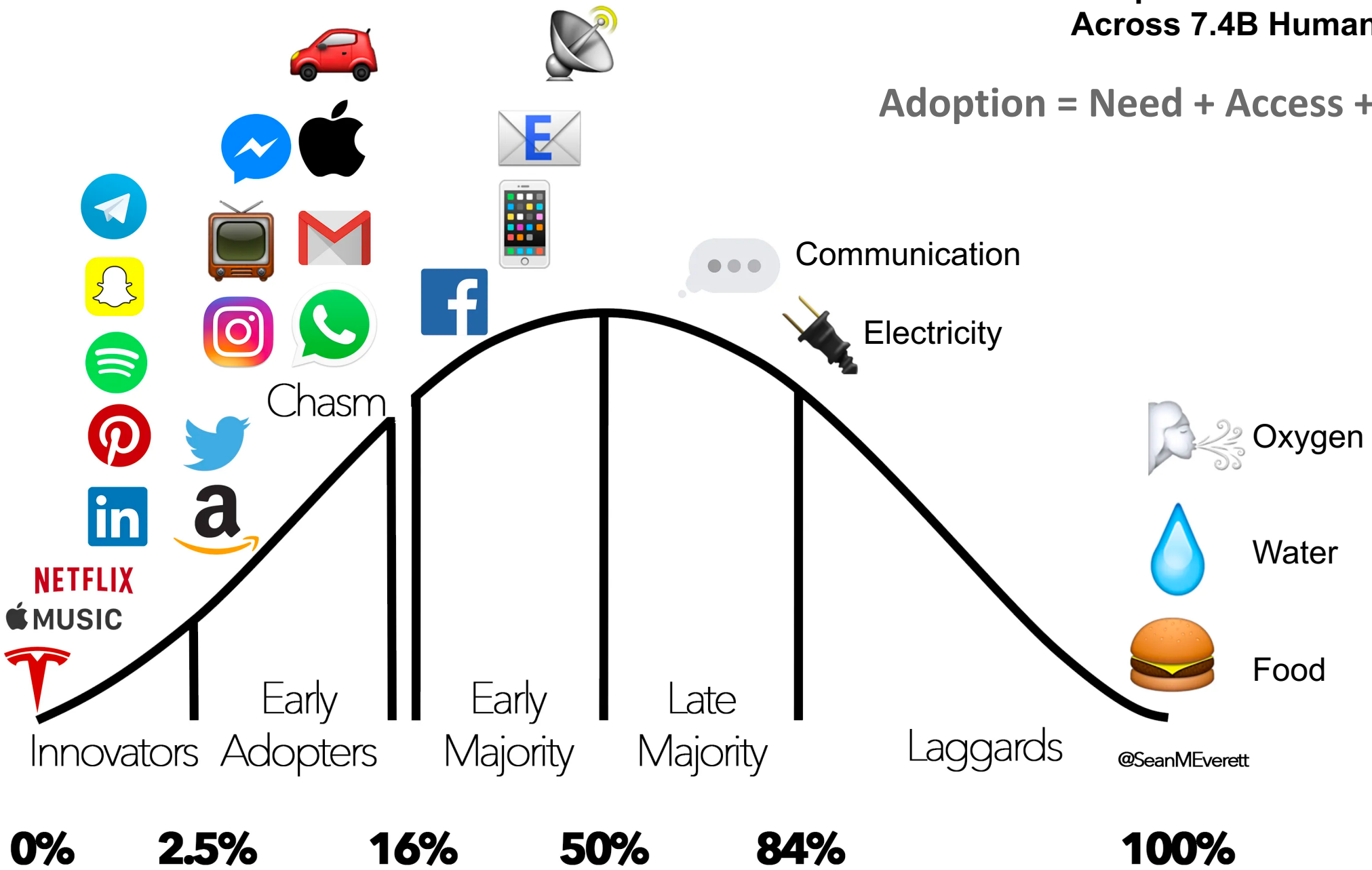
- **Evolution of product/ product companies - Startup, Scale up, Enterprise**
  - Start-up (Problem, Solution, Build product, Deploy in market)
  - Scale-up (acquire more customers, continuous improvement)
  - Enterprise (established – continuous innovation, adopt new technology etc)
- **Amazon - Offering customers, a convenient, diverse, and easy shopping experience with quick delivery.**
- **Amazon - AWS**
- **SAP - Offering businesses, a comprehensive suite of software for managing various business processes**
- **HANA - Database Size, Performance & Realtime Analytics**
- **other products**

# Product Life Cycle

- **Determine your target customers**
- **Identify underserved customer needs**
- **Define your Value Proposition**
- **Assess value through customer interaction**
- **Specify your Minimum Viable Product (MVP) - Viability & Feedback**
- **Create your MVP prototype**
- **Test your MVP with customers**
- **Iterate**
- **Launch product & support,**
- **Grow & build adjacent products - Make My Trip - other examples**
- **End of life**

# Adoption Curve for 26 Technologies Across 7.4B Human Population

Adoption = Need + Access + Affordability



@SeanMEverett

# Technology Adoption Cycle

- Innovators are technology enthusiasts, pride with the latest innovation. Enjoy exploring. willing to use an unpolished product, fine with the fact that many of these products will ultimately fail.
- Early Adopters are visionaries who want to exploit new innovations to gain an advantage over the status quo. Unlike innovators, their interest is in value addition.
- The Early Majority – risk averse, proven track record, strong reference
- The Late Majority are risk-averse conservatives, doubtful that innovations will deliver value and only adopt them when pressured, for financial competition reasons, fear of being reliant on an older, dying technology that will no longer be supported.
- Laggards are skeptics who are very wary of innovation. They hate change and have a bias for criticizing new technologies even after they have become mainstream.”

## Good Product team

- **Tackle risks early – Value, Usability, business Viability, Feasibility**
- **Define and design products collaboratively**
  - PM, Designer, Engineering, Marketing, Customers (Co-Create)
- **Solve problems, not just implement features**



## Types of Product Managers

- **Domain-centric**: Specific industry/domain, knowledge; challenges, trends, and customer needs. Example - Medical, Aerospace
- **Technology**: Products driven by technological innovation. Expertise in AI, blockchain, or IoT Example: Apple
- **Customer-Centric**: Understand & meet the needs of specific customer segments. B2B and B2C; customer pain points, preferences, and behaviors, shaping the product. Examples: SAP in B2B; B2C - Amazon
- **Full Stack** is often found in startups or smaller companies with limited resources. Responsible for the entire lifecycle - ideation to execution.

## SAP Labs - Product Managers? Example

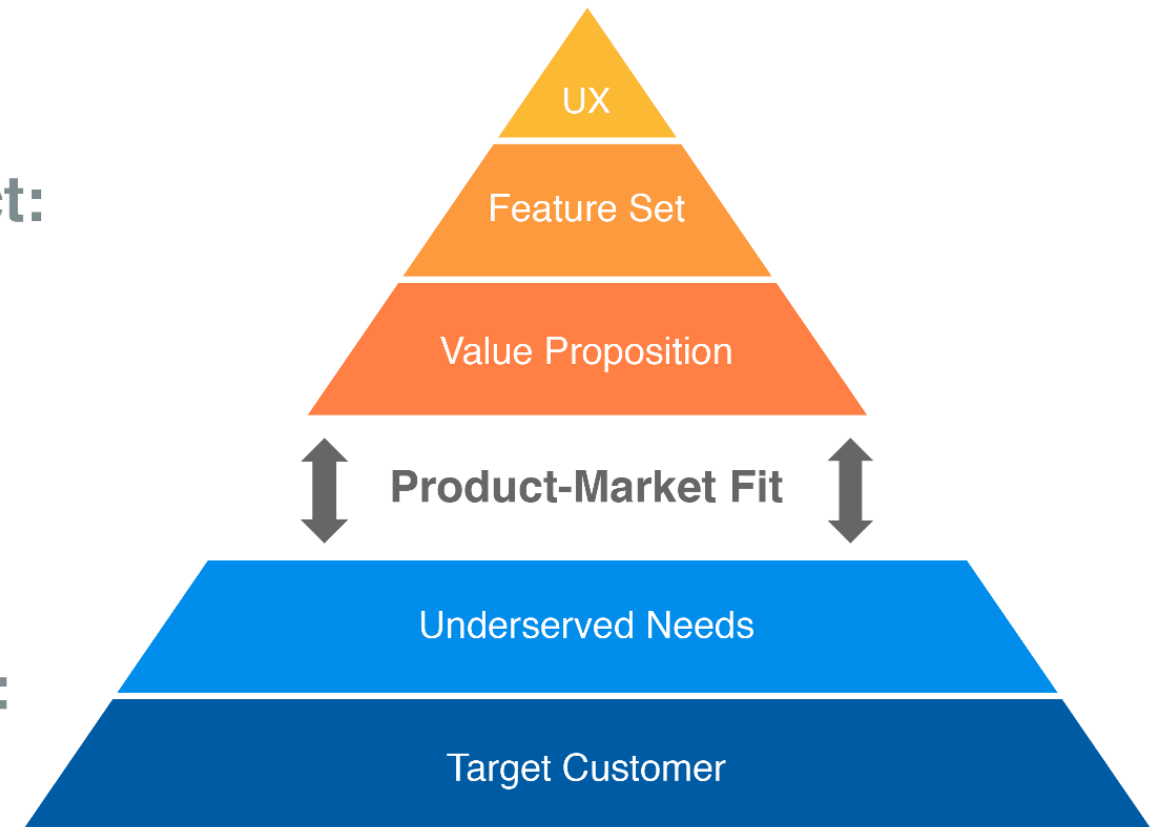
- ✓ **Characteristics of a holistic product**
  - ✓ Value, Features, Tech, UX (offline), Monetize
- ✓ **Product-Market fit**

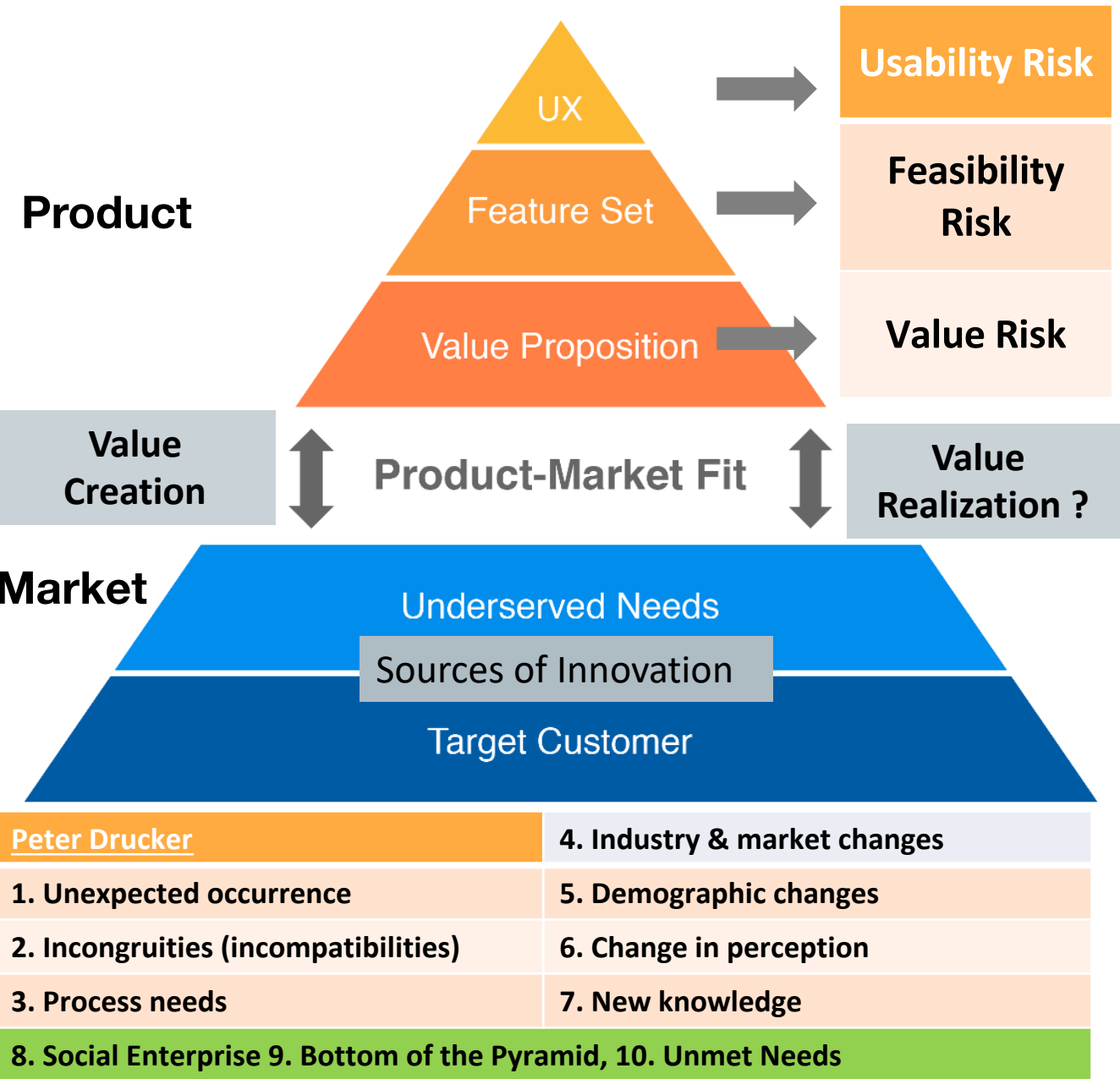
Build the Right Product  
&  
Build the Product Right

**Product:**

**Market:**

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Tools for the Product Managers

Sample Users, Observe, Analytics Competition	
POC, Alpha, Beta Prototype Early adopter	
Value - Qualitative Landing page, Crowdfunding, A/B, Partners Competitor analysis, Growth	
Marketing (brand); cost of sales, channel ability, Service (touch?); Profitability, Legal (IP, Privacy), Growth	
MVP Marketing Material Landing page Video Ad Marketing A/B Crowd finding	Wireframe Mockup Interactive Proto Wizard Oz concierge Live product Fake Door Analytics

# Sources of Innovation

Sources of Innovation

Peter Drucker ++

4. Industry & market changes  
customer preferences, tastes, and new values.  
Car, phone; dining vs ordering; movie hall vs OTT

1. Unexpected occurrence - Success or Failures  
Unexpected events - Covid

5. Demographic changes  
Young vs elderly; highly paid jobs; women in  
workforce

2. Incongruities (incompatibilities)  
What is expected vs what is happening - cargo  
ship, growing market, Value perceived, Usage

6. Change in perception  
Tata Nano

3. Process needs  
There is a better way to do

7. New knowledge  
AI/ML, Cloud, IoT

8. Social Enterprise, 9. Bottom of the Pyramid, 10. Unmet Needs

# Value Realization

- **Marketing (Brand):**
  - Build strong brand identity to drive loyalty and premium pricing.
- **Cost of Sales (CoS):**
  - Optimize costs to ensure revenue exceeds expenses.
- **Channel Ability:**
  - Establish and diversify channels for consistent customer access.
- **Service (Touch):**
  - Balance customer service quality with cost efficiency.
- **Profitability:**
  - Focus on maintaining margins through pricing and cost control.
- **Legal (IP, Privacy):**
  - Protect intellectual property and ensure compliance with regulations.
- **Growth:**
  - Plan for scalable growth aligned with operational capacity.

Exercise - Sources of Innovation

- Open Tab CS03
- Use the format below
- Complete the first two rows now.
- Rest is homework
- Note: Important for Exam

No	Innovation	Maps on to Which Source	Justification
1	ChatGPT		
2	HANA		
3			
4			
5			

# Introduction - MVP

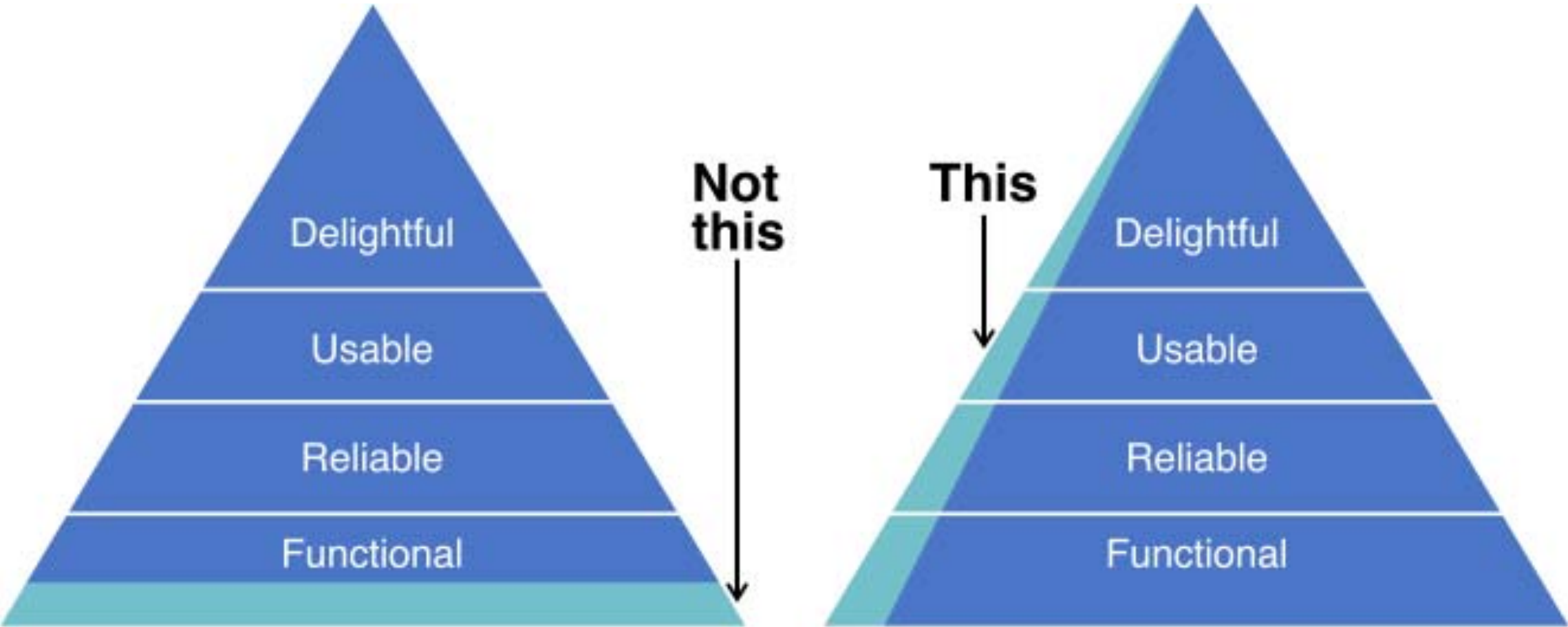
- Product is a risky business
- We should not wait to develop all the features to launch it.
- Rather we should develop a product with just enough functionality for users to **use it meaningfully and derive significant value** from it.
- Such an approach will reduce risk



## What is MVP?

- Frank Robinson - "The MVP is the right-sized product for your company and your customer. It is **big enough to cause adoption, satisfaction, and sales, but not so big as to be bloated and risky**
- Eric Reis - "The minimum viable product is that version of a new product which allows a team to **collect the maximum amount of validated learning about customers with the least effort.**"
- An MVP helps entrepreneurs start the process of learning as quickly as possible. Fastest way to learn with a minimum amount of effort.
  - Its goal is to test fundamental business hypotheses
  - Is this the need?
  - Is there enough value? (Product–Market fit)
  - Does it make business sense?

# MVP - What is and What is Not



# MVP

No	MVP	What is it?
	Marketing Material	Assess user reactions to marketing materials for qualitative insights; <i>cost-effective</i>
	Video	Gauge user interest and comprehension of the product concept. <i>For simple products, easy to explain, low investment.</i>
	Landing page	Quantify user interest and sign-ups on a landing page <i>budget constraint for development.</i>
	Ad	Measure user engagement with ad content
	Marketing A/B	Compare different approaches
	Crowd finding	Measure user interest and contributions for financial validation. <i>Expensive</i>

# MVP Continued

No	MVP	What is it?
	Wireframe / Mockup	Gather user feedback on design and user interface.
	Interactive Proto	Test user interactions and gather feedback - too many features
	Wizard Oz	Give the impression of a functioning product, but behind the scenes, manually handle the function, but appears entirely functional to the customer from the outset.
	concierge	Same as Wizard Oz - but typically disclose the work behind
	Fake Door	Measure user clicks and interest in non-existent features.
	Live product	Conduct usability tests to gather qualitative data.
	Analytics	Product Analytics: Collect data on user behavior within the live product

## Exercise / Home Work

- **You are the Product Manager for SAP HANA Database in 2010 (when it started)**
  - HANA - Large DB, Real-time performance, Analytics
- **HANA is being developed both for existing customers and for potential customers**
- **You have been asked to create an MVP roadmap - exploit all MVPs to add value to the product**