Integrarea sistemelor informatice

Suport curs nr. 11

Programator >> Arhitect

Product Management & Marketing

2025-2026

Obiective

- Înțelegerea conceptului de product management în practică
  - Product Manager – Roluri și responsabilități
- Înțelegerea aspectelor de product marketing
  - Ciclul de adoptare a noilor tehnologii pe piață
  - "Crossing the Chasm"
  - Poziționare pe piață

Product Management and Marketing Today

Note
Această secțiune de curs a fost dezvoltată în cadrul unui proiect susținut de 2 organizații

USAID
CHF International

Actualizat 2025

Course Motivation

As a consultant or an advisor:

- What should you know about product management?
- What should every product manager know?
  - Key concepts in use
  - Develop a common lexicon

The Product Management Role

- Evolution of Technology Products and Services
  - Changes in Engineering views on PM

- Bridge: Customer to Engineering
  - Many Inputs to be considered

- Supporting many types of Sales

"The business plan for the product"

Product Management Evolution

- 70s to 80s
  - Engineering dominated – HP
  - PM is an assistant

- 90s and the Tech Bubble
  - Many people drawn to the role $$
  - Outlandish, improbable ideas are rewarded

- Since 2000
  - Exodus of the fair weather players
  - Back to being and expert and a resource

Product Manager – Job Description

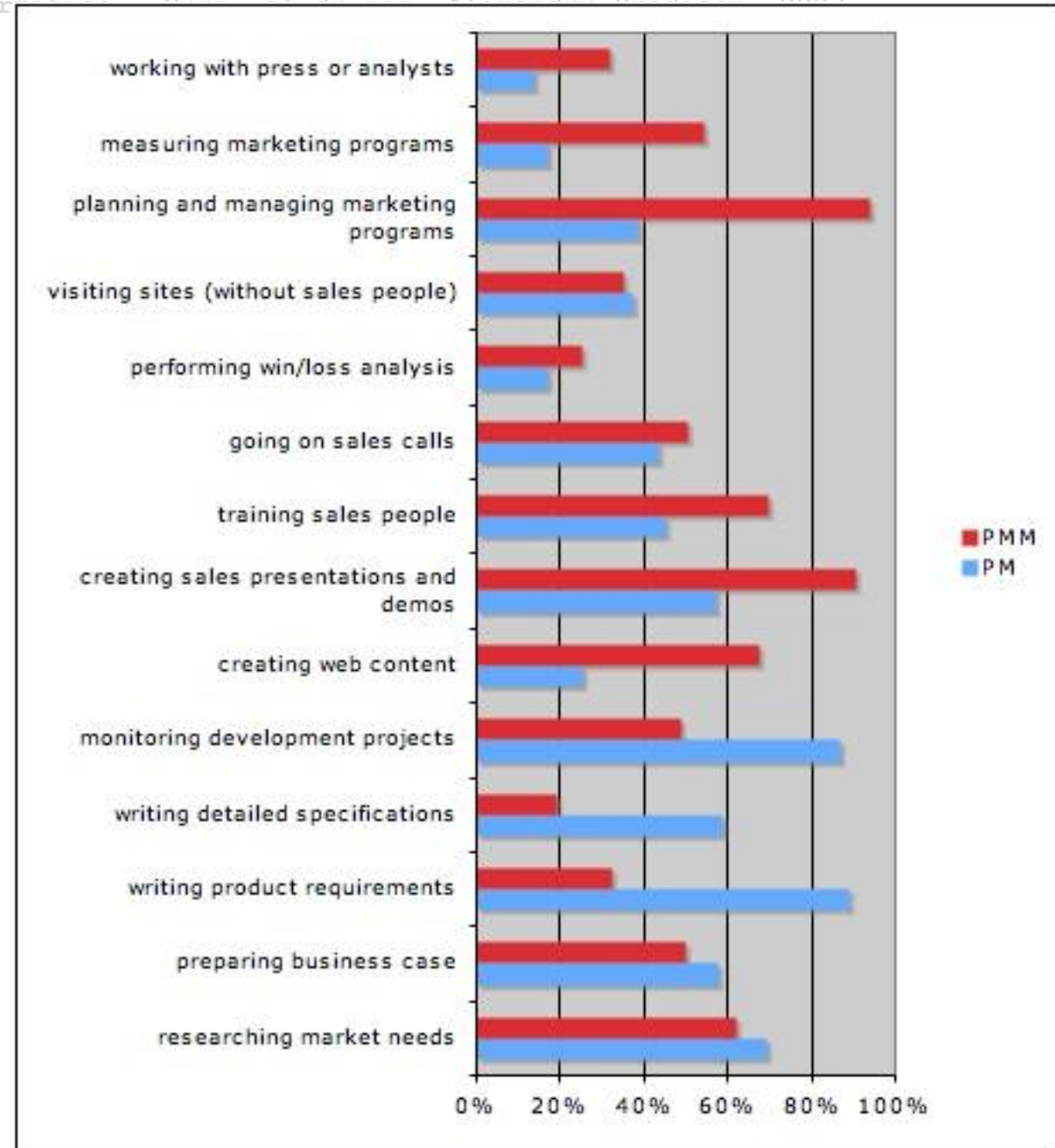Do you have a passion for creating great products? ...

Responsibilities:

- Define new products as well as enhancements to existing products.
- Responsible for the product throughout the execution cycle, including:
  - Gathering **product requirements**.
  - Defining **product vision**.
  - Creating preliminary **design concepts**.
  - Working with **engineering** to implement and iterate.
- Develop the product **strategy**, **positioning**, **pricing**, and all elements related to the **business case**.

Product Management vs Product Marketing

A **Product Manager** *listens* to the market

A Product **Marketing Manager** *talks* to the market.

(Source: Pragmatic Marketing Salary Benchmark, 2005)

Who is the Product Manager?

- Average Product Manager is 36 years old;
  - 87% claim to be "somewhat" or "very" technical
  - 33% are female, 67% are male
  - 90% have completed college and 46% have completed a masters program
- Typical product manager has responsibility for three products.
- Impacts on Productivity
  - Product managers receive 50 emails a day and send about 25.
  - Product managers spend roughly two days a week in internal meetings (15 meetings/week).
    - But 50% are going to 15 meetings or more each week, and 27% attend 20 or more meetings!

Organization

- Typical product manager reports to a director in the product management department.
  - 46% report to a director
  - 28% to VP
  - 5% report directly to the CEO
  - 21% are in the Product Management department
  - 15% are in the Marketing department
  - 12% are in Development or Engineering
  - 5% are in a sales department

Product Management Ratios

- How are product managers allocated relative to other departments?
- For each Product Manager (PM), we find:
  - 3.0 Products
  - 6.0 Developers
  - 0.8 Development leads
  - 0.6 Product architects and designers
  - 0.4 Product marketing managers
  - 0.6 Marketing communications
  - 3.2 Sales people
  - 1.0 Sales engineers (pre-sales support)
- Other ratios
  - 0.2 QA people per developer
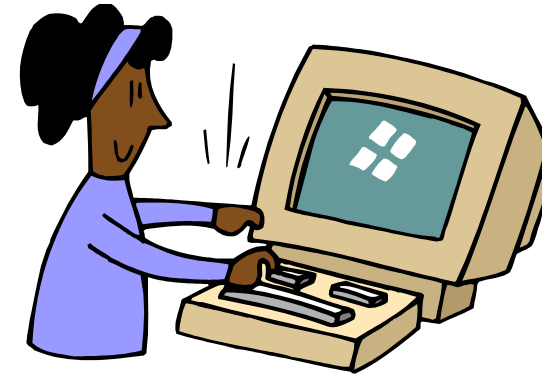 - 3.2 sales people per sales engineer

Compensation

- **Average** US product management compensation:
  - $157,000 salary
    - updated 2023
    - plus $31,124 annual bonus

    (79% of product managers get a bonus)

- Bonuses are based on:
  - 60% company profit
  - 32% product revenue
  - 41% quarterly objectives (MBOs)

Working with Development

- 66% researching market needs
- 54% preparing business case
- 19% performing win/loss analysis

- 79% monitoring development projects
- 77% writing requirements (the "what" document)
- 52% writing specifications (the "how" document)

Working with Marketing and Sales

- 49% writing promotional copy

- 23% creating web content

- 47% approving promotional materials

- 16% working with press and analysts

- 51% training sales people

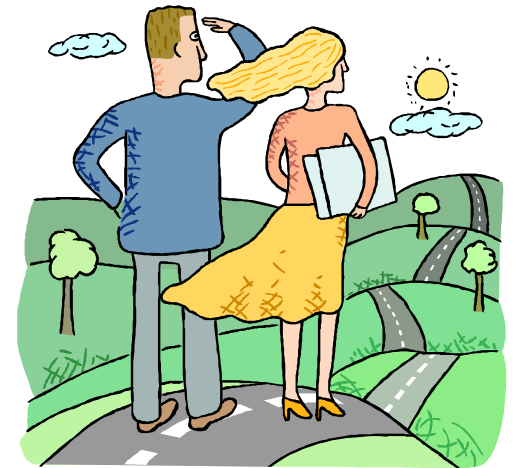- 44% going on sales calls

Superman/Superwoman needed?

- Expectations continue to expand
  - Need a **Persuasive** Leader
  - Need **Technical** Depth
  - Need **Sales** Skills
  - Need **Writing** Skills
  - Accurate Customer **Proxy**
  - Good **Researcher**
  - Good **Analyst**
  - Internal **Communication**

- Responsibility without Authority?
  - Living in the Matrix
  - Responsible for the product
  - Rarely directs resources

The Future of Product Management

- Core function
  - A key "face" of the organization
- Moving away from marketing and towards development or to a separate silo
- Training ground for CEOs, other Execs
  - Gives technical people a **grounding in business**
  - Gives business people an **appreciation for development**
- Market-focused products
  - Key for major success

Key Concepts for Product Management

- Getting on the same page – references
  - Classic
    - **Positioning** – Reis and Trout
    - **Crossing the Chasm** – Moore
    - **Innovator's Dilemma** – Christenson
  - New Thinking
    - **Cluetrain Manifesto** – Locke, Searls, et al.
    - **Global Opportunities** – Prahalad, Ravel, et al.

Product Manager Priorities

- Know your prospects/users (and their problems) better than they know themselves
  - Market-driven data drives credibility
  - Product Managers should position themselves as messengers for the market
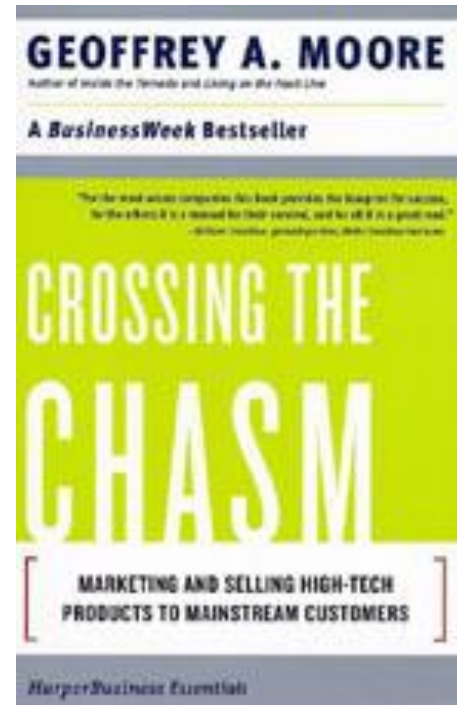
Today's Product Management Process

1. Problem Identification and Verification

2. Product Definition and Development Support

3. Sales and Channel Support

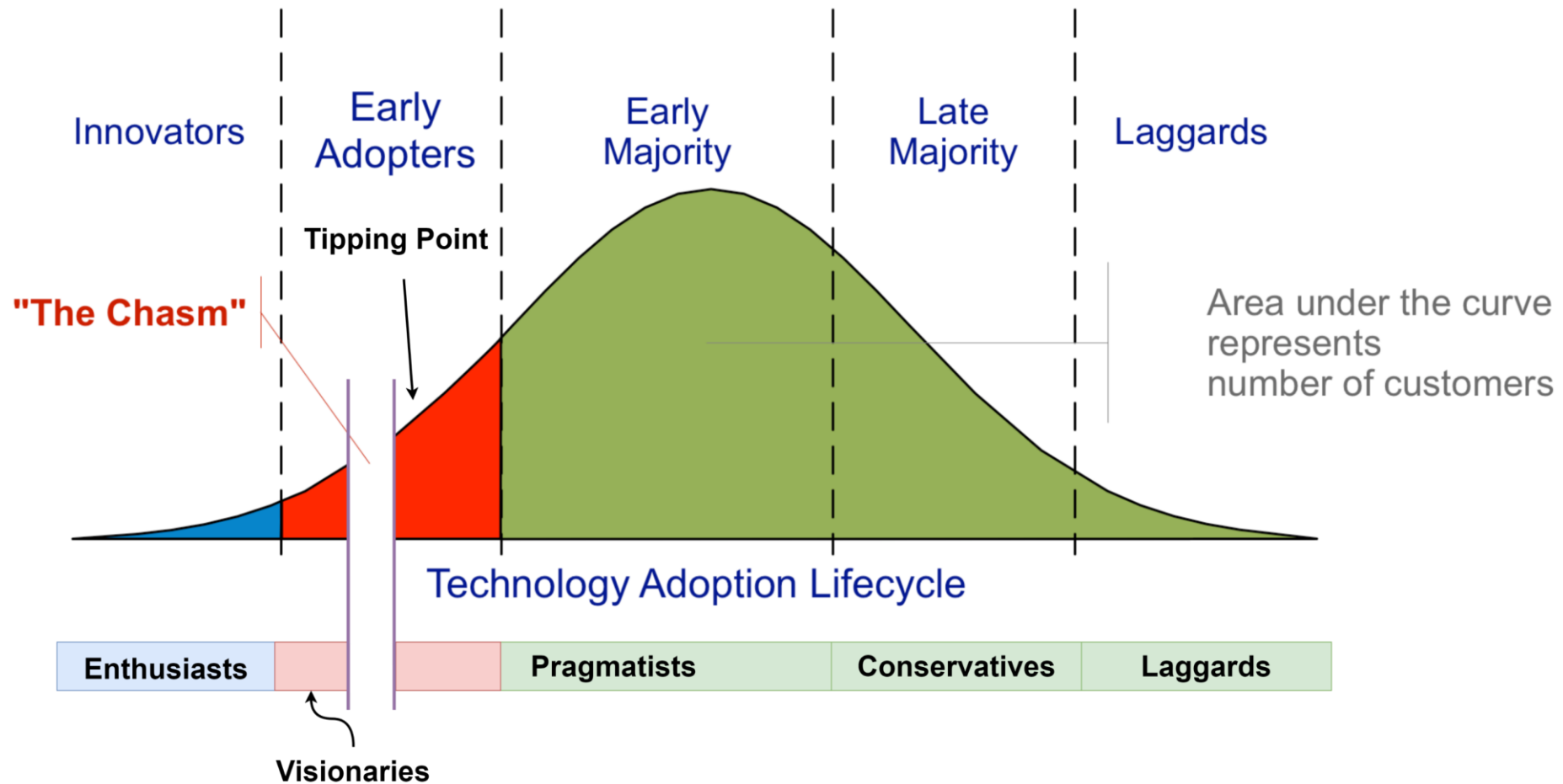4. Product Support and Community Nurture

How to launch successful products

Key book:

- "Crossing the Chasm"
  - Geoffrey A. Moore
  - first published in 1991
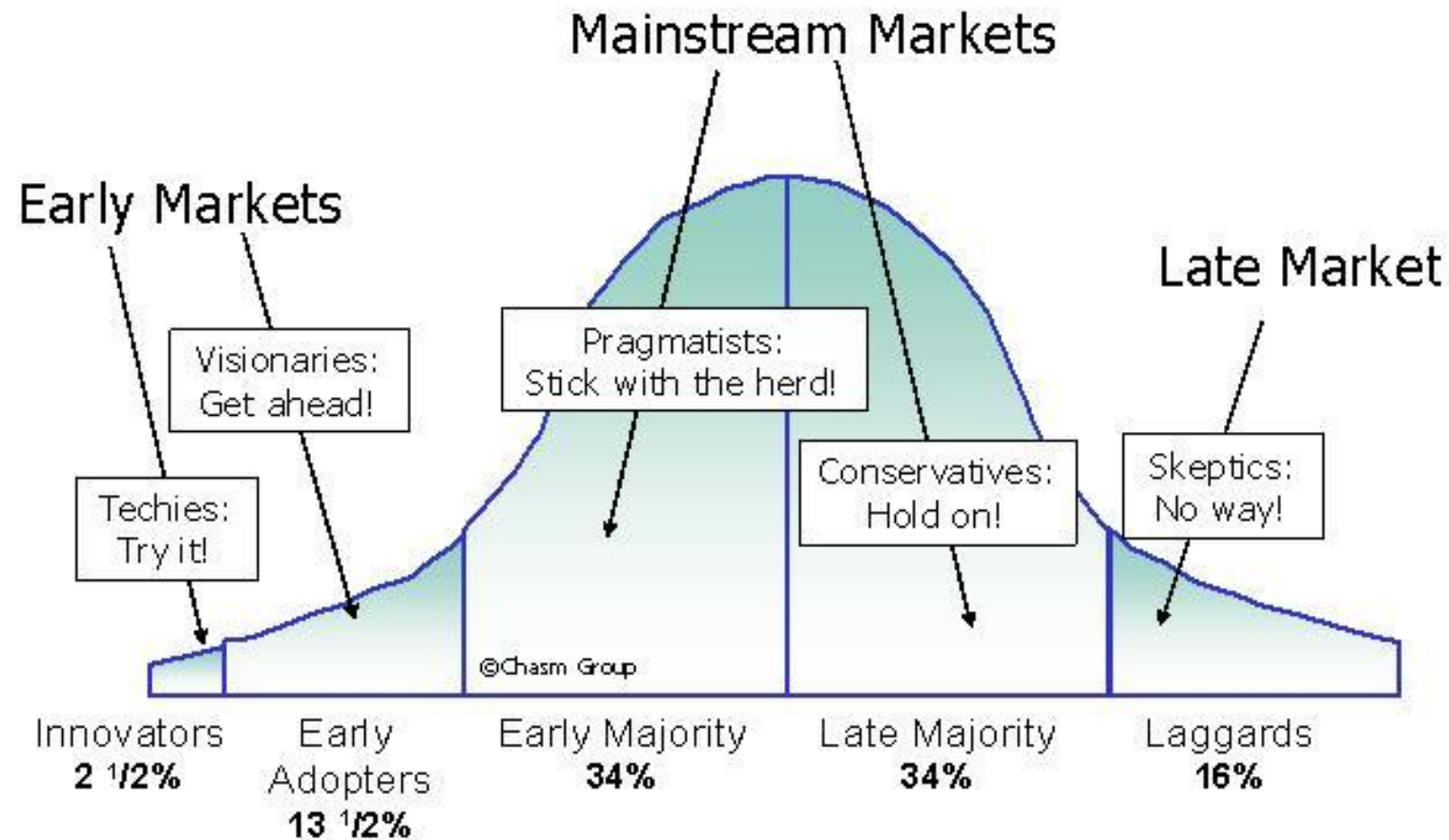
Part of every technology marketing person's lexicon
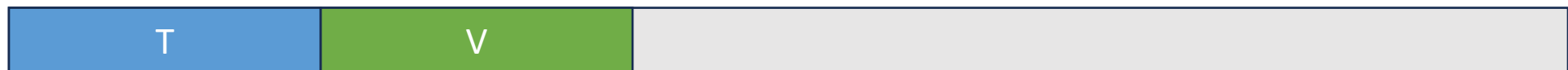
Moore's Market Dynamics

Techies

- Are inventors
  - Steve Wozniak, Linus Torvalds
- Spend hours **making the product work**
- Forgive bugs, glitches, poor documentation
- Make great critics - they care
- Want **truth, no sales pitch**.
- Need access to most tech person in the company
- Want to get products first and cheaper
- Use them to kindle the fire

T

Visionaries

- Have a knack for matching technology to **strategic opportunities**
  - Steve Jobs, Max Hopper (AA + Sabre)
- Seek **major breakthroughs**, develop a highly visibility, high risk project plan
- Have charisma to get organization to buy-in
- Highly motivated, driven by a **dream**
- Not price sensitive, will provide visibility to small company's technology
- Keep in touch with techies looking for opportunities

T	V	

Pragmatists

- Represent the bulk market, **play safe**, do not want to be pioneers, never volunteer to be an early test site, rely on advice from industry

- Seek incremental, steady, & measurable progress – **no disruption**

- Will prefer **established products**, or those that they believe will be the standard – seek developers of related products

- Like to see competition – reduces their risk

- Seek best deals at high quality levels

- Once satisfied, they are **loyal**

T	V	P	

To sell to pragmatists…

- Make systems compatible:
  - Oracle ported SQL to every hardware – which IBM was not willing to do.
- Show that you are matching competitors advances
- Do not stop investing in market
- Do not shoot yourself in the flagship
  - Ashton-Tate DBASE IV failed

T	V	P	

Conservatives

- Look to pragmatists as leaders
- Buy technology just to **stay on par** with competition
- Invest in **mature products** that are like commodities – will not support high margins
- Want pre-assembled packages at discounted prices. Like single function gadgets
- Far east has taken over these markets due to lower costs
- Zilog still makes 4-bit, 8-bit microprocessors that are used in auto seat belts.

T	V	P	C	

Skeptics

- "Luddites"

- Do not participate in high tech

- Block purchases
  - e.g. Believe that all this office automation has not improved office productivity
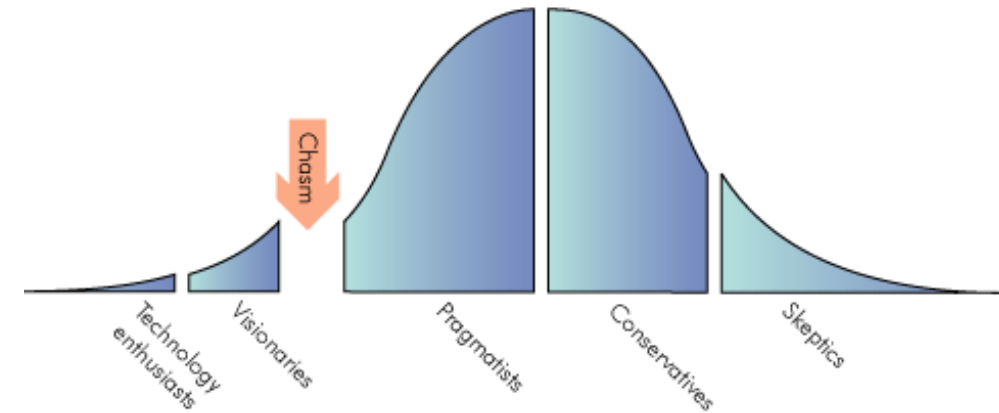
- Must **sell around them**

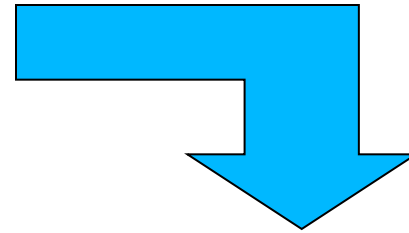| T	V	P	C	S

The Adoption "Stairway"

Generate volumes and experience so products become reliable and cheap to meet demands of conservatives

Gain bulk of revenue by serving pragmatists ideally by becoming the market leader

Capture interest of visionaries
Make them satisfied customers

Seed enthusiasts with new products
Help them educate visionaries

Leave skeptics to their own devices

Why the chasm?

- Visionary: sees **partial solution** to the problem
  - says: "Great, lets build the rest together."
- Pragmatist: requires the **whole product**
- Company
  - To satisfy pragmatists must develop the "whole product"
  - Fears placing all eggs in one basket
  - So creates partial solution to various applications
  - does not satisfy any group of pragmatists
- Hence, the chasm.
- The only safe way to cross the chasm is by putting all eggs into one basket – develop the whole product

Why the chasm?

Visionaries

✓ Do not need reference base

✓ Take greater interest in technology

✓ Underemphasize infrastructure
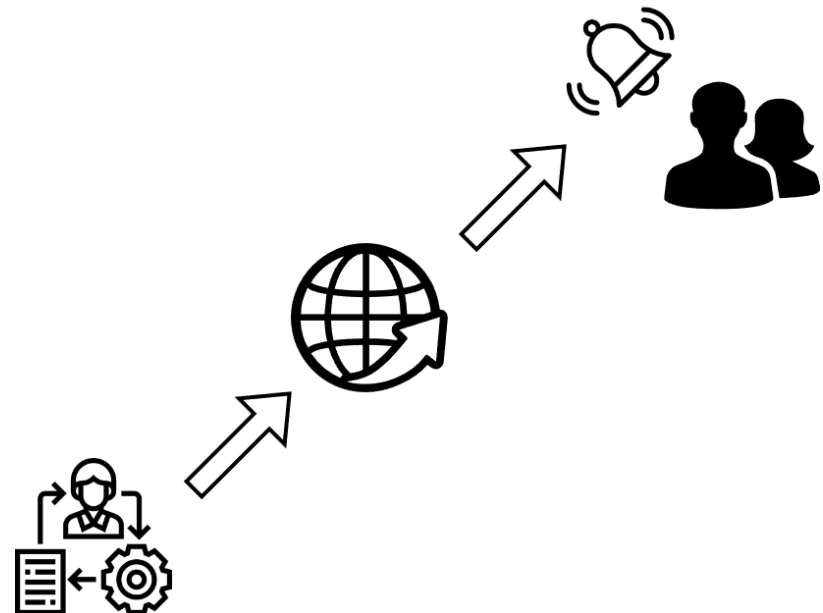
✓ Plan for disruption

✓ Do not plan to stay for long

Pragmatists

✓ Reference base very important

✓ Visionaries not proper references

✓ Less interested in technology

✓ Value infrastructure and support
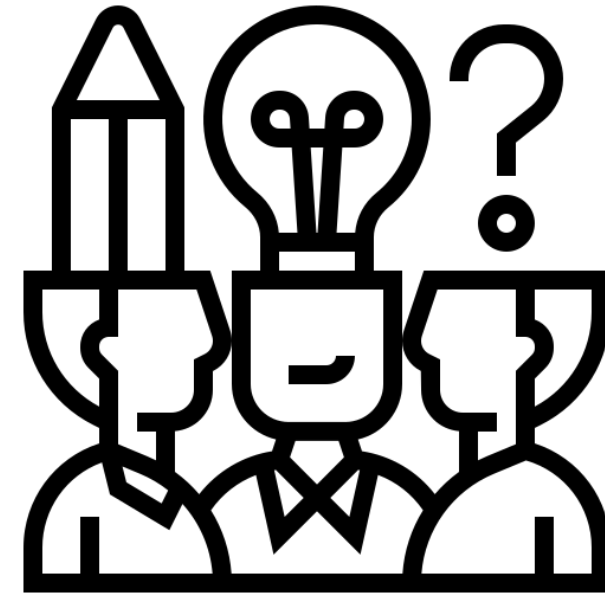
✓ Dislike disruption

✓ Plan for long term

Wisdom

- Don't focus **only** on your own internal wisdom
- You still need to reach the market to find out their actual needs

Pragmatic Marketing Training Course

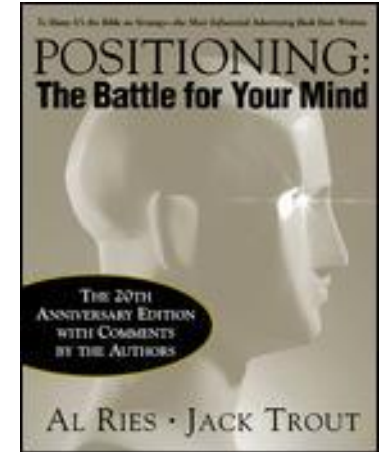# Creativity Counts…

- Don't skip the brainstorming session
- Question, Ideate, Implement, Repeat

Positioning

- What do we do for the market
  - Our terms, our worldview
  - Simple statement used to create all communications
  - *"Positioning: The Battle for Your Mind", Al Ries and Jack Trout*
- *"The would-be entrepreneur who neglects to identify, and spell out, clear benefits for clients is destined for failure."*
  - "Management Mistakes in a New Business", Howard Upton
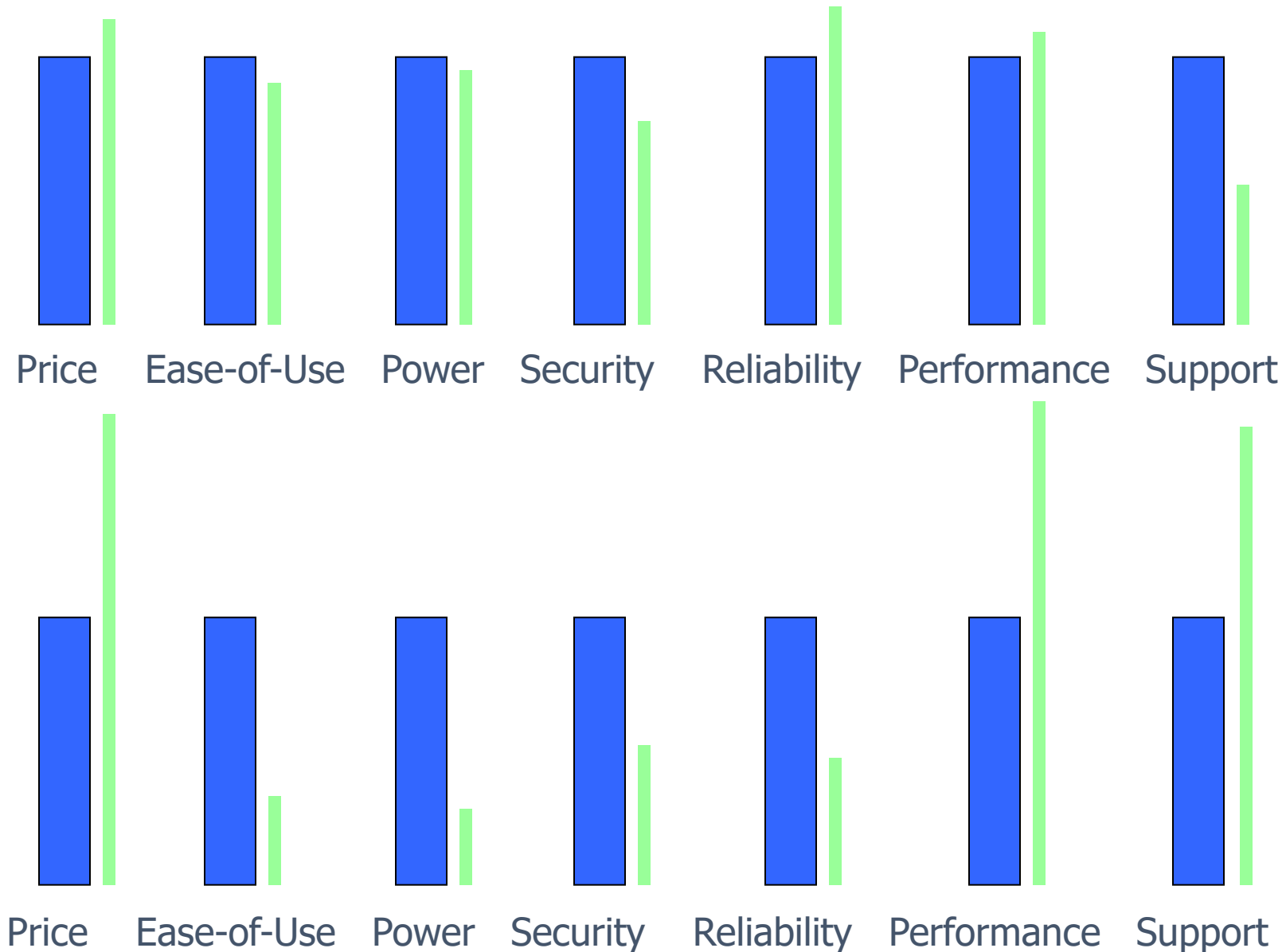
Getting Started – new product idea

- What problem does it solve?

- What value does it provide?

- What about it is unique?

- What is the single overriding benefit?

- Your <u>Worldview</u>
  - Your product should reflect what you believe
  - And you should be the <u>only</u> or certainly the <u>best</u> choice for your given worldview
  - Position yourself in terms of your worldview

Feature Analysis – new product dev.

- What are the features *that could be eliminated?*

- Which features should be *reduced below* industry standards?

- Which features should be *raised above* industry standards?

- Which features could be created that the industry *has never offered*?
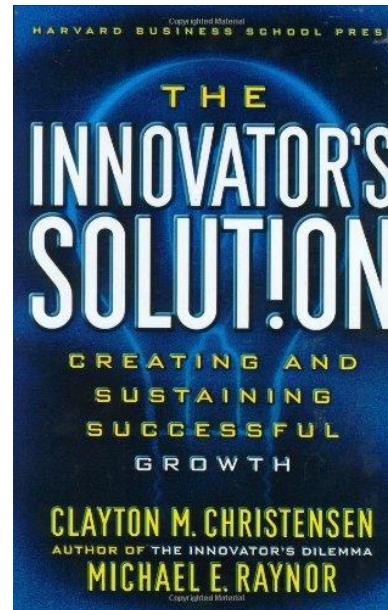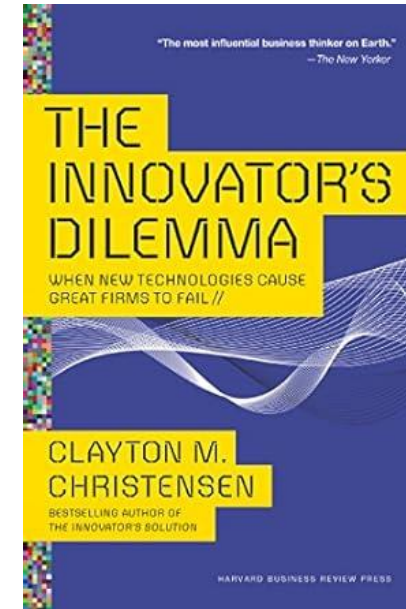
Vectors of Differentiation

Price   Ease-of-Use   Power   Security   Reliability   Performance   Support

Price   Ease-of-Use   Power   Security   Reliability   Performance   Support

Ideas

"The Innovator's Dilemma"
- Clayton M. Christensen
- First published in 1997

This book is about the failure of companies to stay atop their industries when they confront certain types of market and technological change.

The Innovator's Dilemma
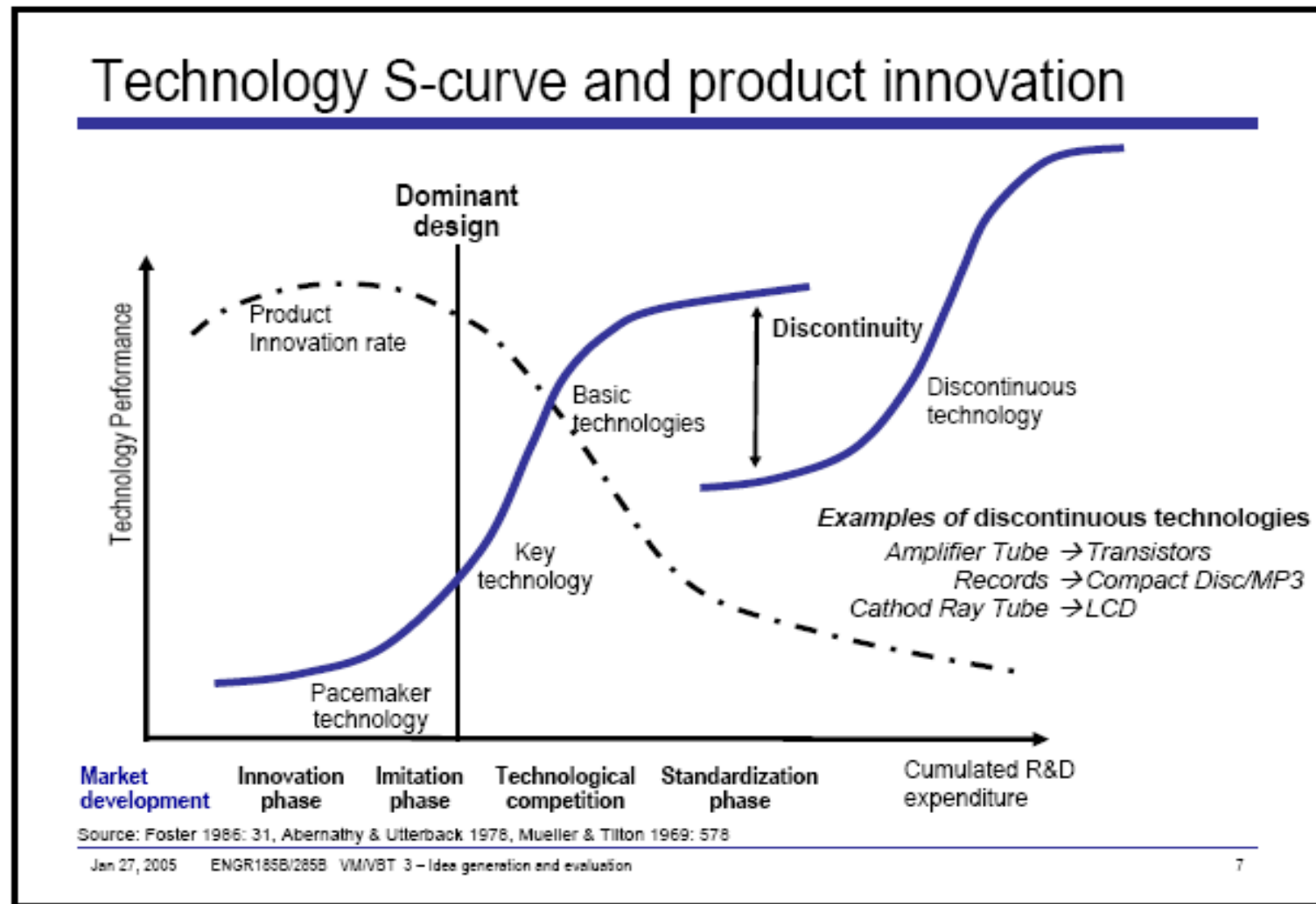
<u>Why New Technologies</u>

<u>cause Great Firms to Fail</u>

- Sustaining vs. <u>disruptive</u> technologies

- Disruptive technologies vs. rational investments

- Why Great Companies Can Fail
  - How Can Great Firms Fail?
  - Value Networks and the Impetus to Innovate
  - Disruptive Technological Change
  - What Goes Up, Can't Go Down (?)

- Products tend to mirror the organizations that create them
  - Inhibits radical new architectures
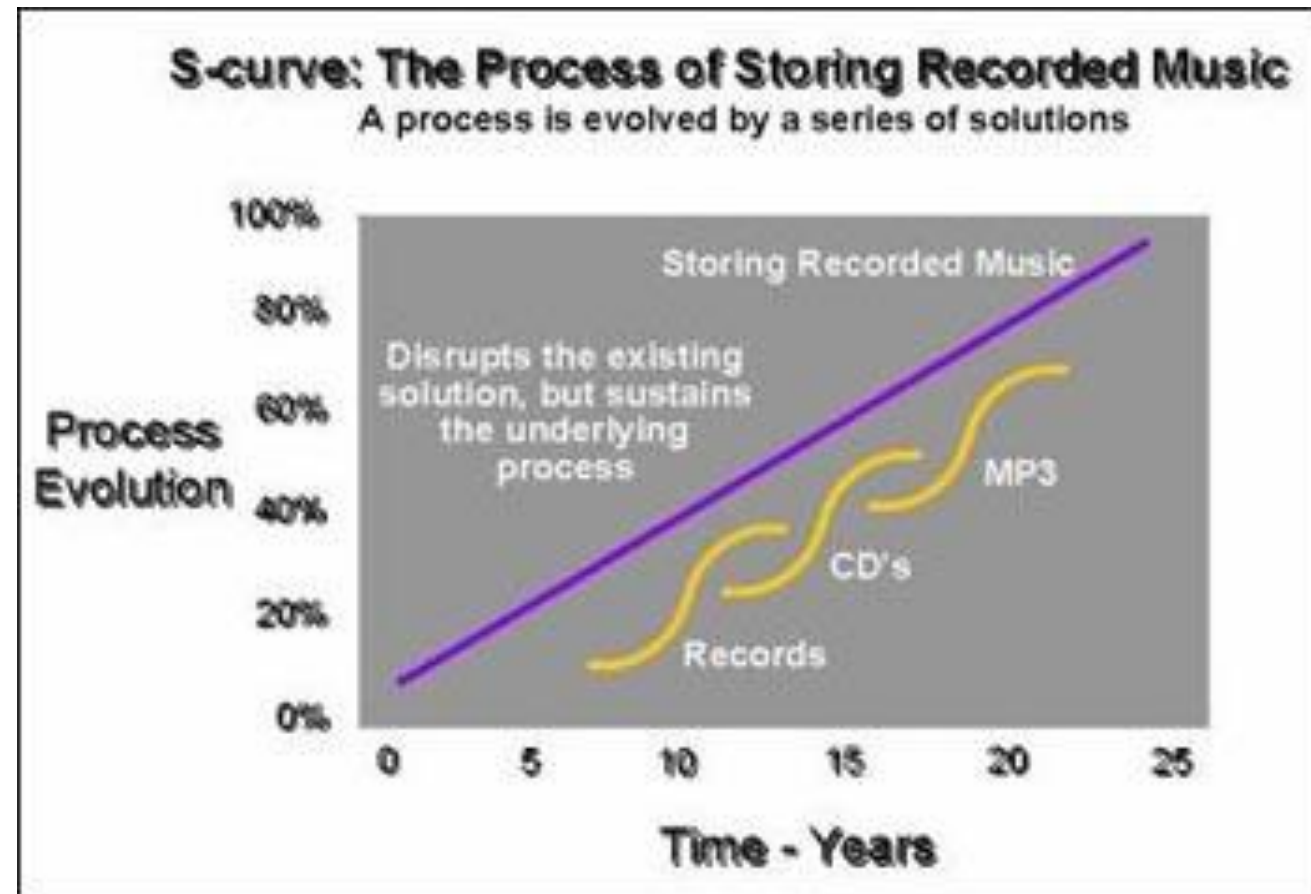
The S-Curve

- New technologies adoption vs innovation over time
- Market development
  - Innovation phase
  - Imitation phase
  - Competition phase
  - Standardization phase

"Disruptive Technology"

Sustaining vs emerging "disruptive" technologies

- Disruptive means products and technologies that **disrupt established solutions** and markets, but **sustain the underlying process**
- This can be viewed as methods that offer **easier**, **faster**, **better** and/or **cheaper** ways improving products and services

S-curve: The Process of Storing Recorded Music
A process is evolved by a series of solutions

Examples of Disruption

- Analog vs. Digital audio

- Skype vs. International Telecom

- Digital Cameras vs. Film

- Open Source vs. Proprietary Software

Product Management and Integration

Integration methods at the company/industry level

- Vertical integration
  - The same company controls the final product and components
  - Example: Apple products (ex. iPhone, iPad, Macbook) have their hardware and software components designed by Apple (as well as branding, stores, customer support, etc.)

- Horizontal integration
  - Example: Google owns Android OS and multiple layers of services, but lacks control on hardware running Android
  - Google transitions towards more vertical integration by acquiring hardware companies (ex. Motorola, HTC, FitBit), social media companies (ex. YouTube) and advertising companies (ex. DoubleClick)

That's all, folks!