### Integrarea sistemelor informatice



Suport curs nr. 10
Programator >> Arhitect
Product Management & Marketing

2024-2025

### Objective

- Înțelegerea conceptului de product management în practică
  - Product Manager Roluri şi 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







This report has been produced under the USAID Enterprise Development & Strengthening project implemented by CHF International

### **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



"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:

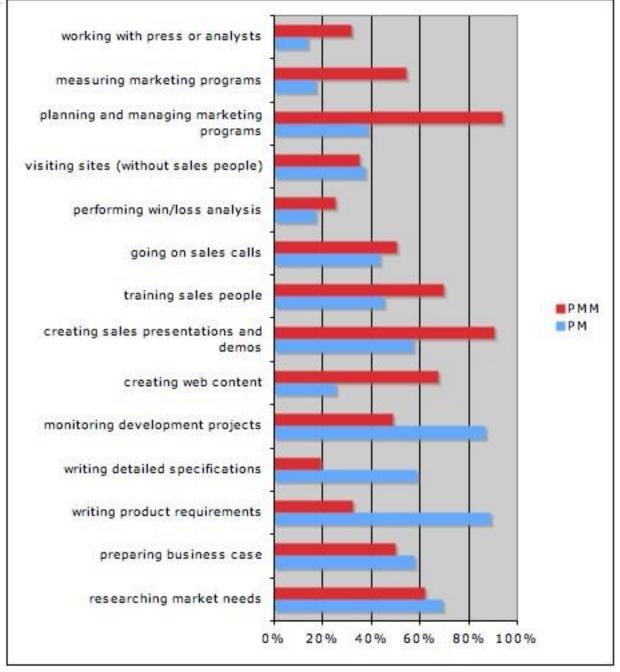
- Define new products as well as enhancements to existing products.
- Responsible for the product throughout the execution cycle, including:
  - Gathering product requirements.
  - Defining **product vision**.
  - Creating preliminary design concepts.
  - Working with engineering to implement and iterate.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

Integrarea Sistemelor Infor

Product Management vs Product Marketing

A **Product Manager listens** to the market

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



### 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

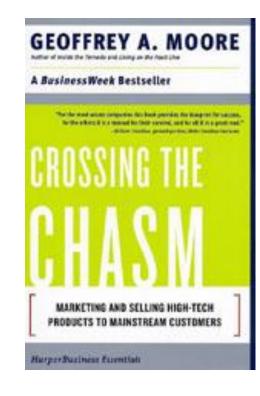
- 1. Problem Identification and Verification
- 2. Product Definition and Development Support
- 3. Sales and Channel Support
- 4. Product Support and Community Nurture



# How to launch successful products

#### Key book:

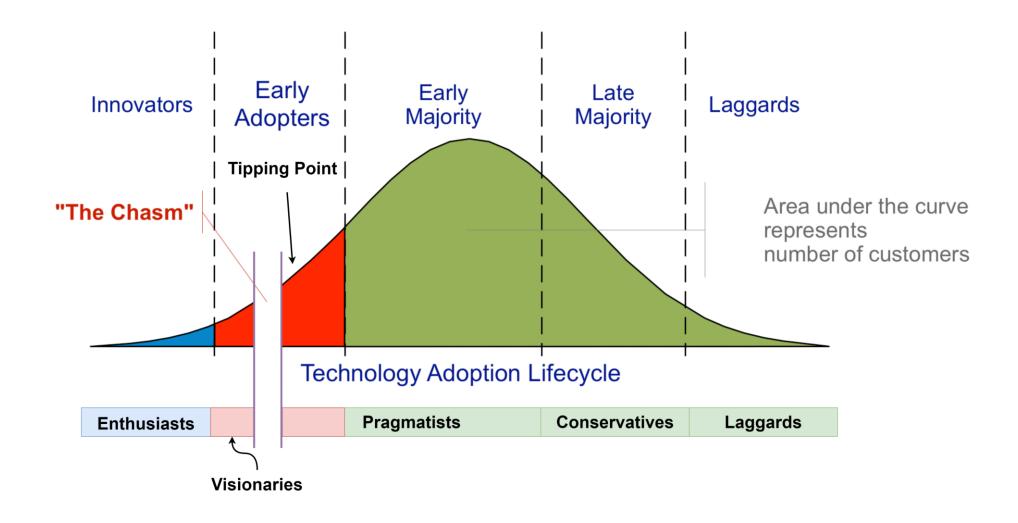
- "Crossing the Chasm"
  - Geoffrey A. Moore
  - first published in 1991





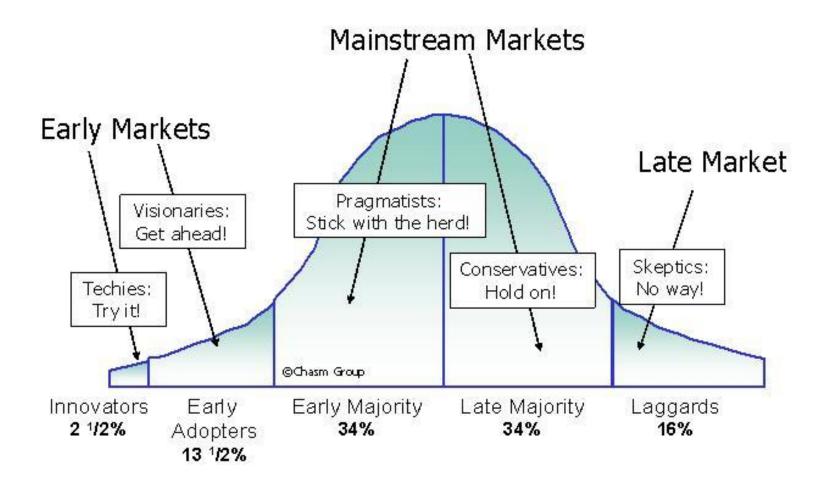
Part of every technology marketing person's lexicon

### Moore's Market Dynamics



#### Technology Adoption Life Cycle

Groups are distinguished form each other based on their characteristic response to discontinuous innovations created by new technology



#### **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

#### 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

### 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
- Once satisfied, they are loyal
- Like to see competition reduces their risk
- Seek best deals at high quality levels

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### 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

#### 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.

### 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 P C S

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

The Adoption "Stairway"



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



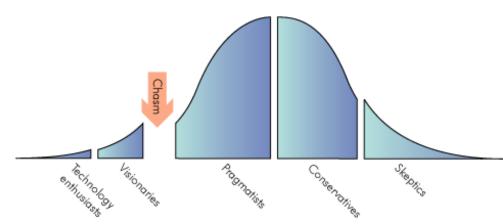
**Capture interest of visionaries Make them satisfied customers** 

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

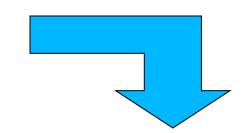


### Why the chasm?

#### **Visionaries**

- ✓ Do not need reference base
- √ Take greater interest in technology
- ✓ Underemphasize infrastructure
- ✓ Plan for disruption
- ✓ Do not plan to stay for long





#### **Pragmatists**

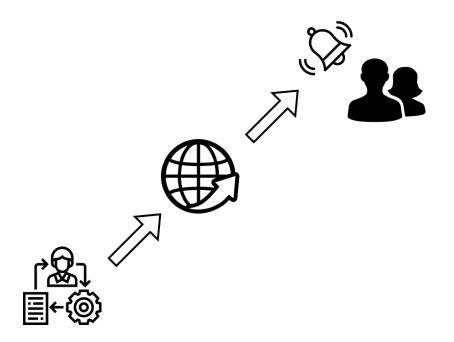
- ✓ Reference base very important
- √ Visionaries not proper references
- ✓ Less interested in technology
- √ Value infrastructure and support
- ✓ Dislike disruption
- ✓ Plan for long term

#### Wisdom

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

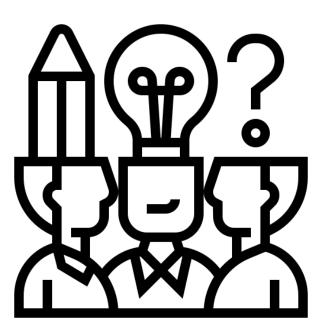
**Pragmatic Marketing Training Course** 





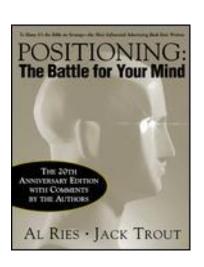
### Creativity Counts...

- 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



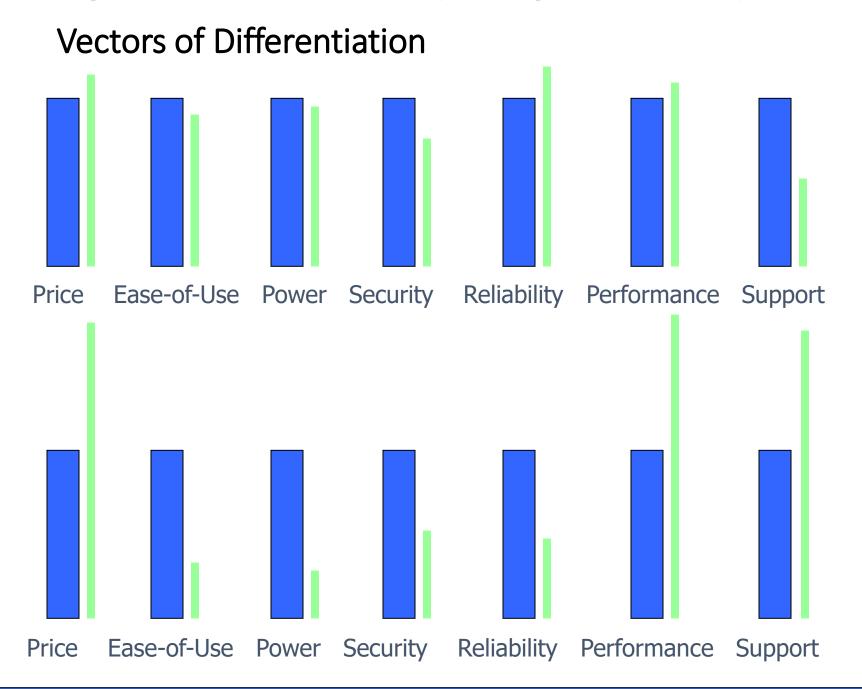
### Feature Analysis – new product dev.

What are the features that could be eliminated?

• Which features should be reduced below industry standards?

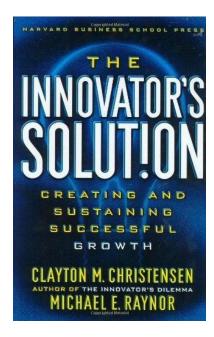
• Which features should be raised above industry standards?

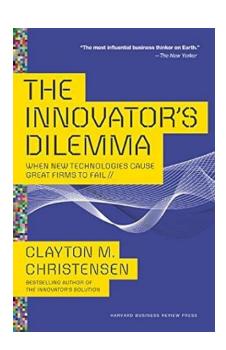
• Which features could be created that the industry has never offered?



### Ideas

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





### The Innovator's Dilemma

# Why New Technologies cause Great Firms to Fail

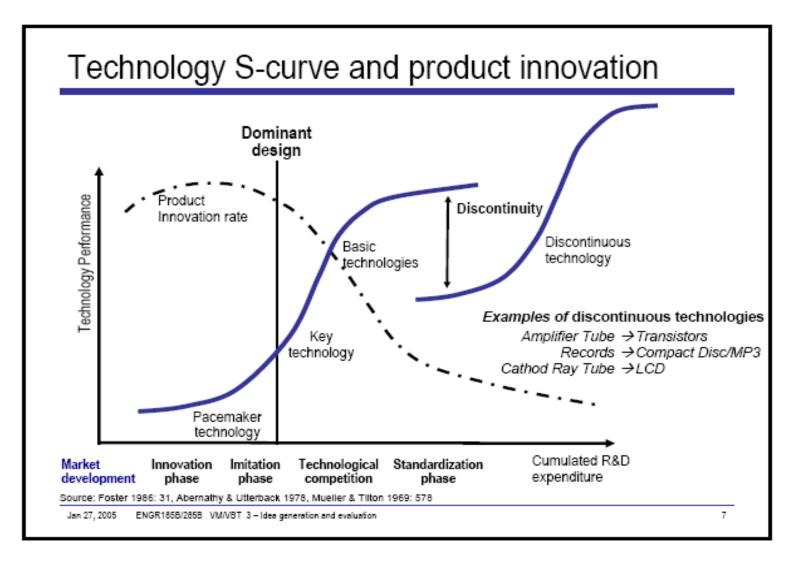
- Sustaining vs. <u>disruptive</u> technologies
- Disruptive technologies vs. rational investments
- Why Great Companies Can Fail
  - How Can Great Firms Fail?
  - Value Networks and the Impetus to Innovate
  - Disruptive Technological Change
  - What Goes Up, Can't Go Down (?)

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



#### The S-Curve

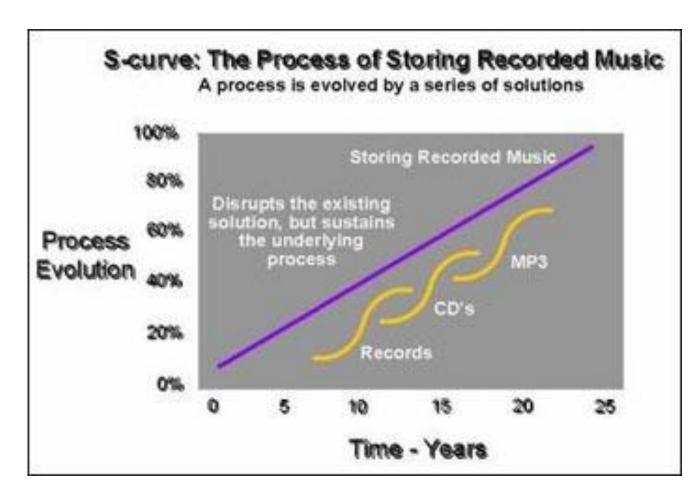
- New technologies adoption vs innovation over time
- Market development
  - Innovation phase
  - Imitation phase
  - Competition phase
  - Standardization phase



## "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



### Examples of Disruption

Analog vs. Digital audio

Skype vs. International Telecom

• Digital Cameras vs. Film

• Open Source vs. Proprietary Software