INFO5992 Week 8 Cheatsheet

Commercialisation II: Customer Development, Agile, Lean Startup & Value Proposition

1. CUSTOMER DEVELOPMENT PROCESS (Steve Blank)

The Problem with Traditional New Product Introduction

The 9 Deadly Sins:

1. Assuming "I know what the customer wants"
2. The "I know what features to build" flaw
3. Focus on Launch date
4. Emphasis on execution instead of hypotheses, testing, learning and iteration
5. Traditional business plans assume no trial and no errors
6. Confusing traditional job titles with what a startup needs
7. Sales and marketing execute to a plan
8. Presumption of success leads to premature scaling
9. Management by crisis leads to a death spiral

Customer Development Process - 4 Phases

SEARCH PHASE

1. Customer Discovery

- **Phase 1:** State problem and solution hypothesis
- **Phase 2:** Test the problem - Get out of the building, build wireframe/prototype
- **Phase 3:** Test the solution - Build low-fidelity MVP, test with customers
- **Phase 4:** Verify or Pivot - Check if problem is high-value, business model is ready, market is big enough

2. Customer Validation

- **Phase 1:** Get ready and sell - Acquire/activate customers, build high-fidelity MVP
- **Phase 2:** Test sell - Sell to evangelists and early adopters
- **Phase 3:** Develop positioning - Based on customer feedback
- **Phase 4:** Verify repeatability - Ready to scale marketing and sales?

Product/Market Fit = Match between Value Proposition and Customer Segment

EXECUTE PHASE

3. Customer Creation

- Build end-user demand
- Build sales channel
- Scale business

4. Company Building

- Transition from startup to typical company

The 14 Rules of Customer Development Manifesto

1. **No facts inside the building** - Get outside
2. **Pair Customer Development with Agile Development**
3. **Failure is integral** - Part of the search
4. **Make continuous iterations and pivots**
5. **No business plan survives first contact** - Use Business Model Canvas
6. **Design experiments to validate hypotheses**
7. **Agree on market type** - It changes everything:

- New product in existing market
- New product in new market
- Re-segment existing market (low-cost or niche)
- Clone successful business model from another country

8. **Startup metrics differ** from established companies
9. **Fast decision-making, speed and tempo**
10. **It's all about passion**
11. **Startup job titles differ** from large companies
12. **Preserve cash until needed, then spend**
13. **Communicate and share learning**
14. **Customer development success begins with buy-in**

2. PRODUCT-MARKET FIT

Definition

- **Steve Blank:** Degree to which a product satisfies a strong market demand
- **Marc Andreessen:** "Being in a good market with a product that can satisfy that market"

Signs of NO Product-Market Fit

- Customers aren't getting value
- Word of mouth isn't spreading
- Usage isn't growing fast
- Press reviews are "blah"
- Sales cycle takes too long
- Deals never close

Product-Market Fit Pyramid (Lean Product Process)

1. Determine target customer
2. Identify underserved customer needs
3. Define value proposition
4. Specify MVP feature set
5. Create MVP prototype
6. Test MVP with customers

3. AGILE DEVELOPMENT

The Agile Manifesto (2001)

Core Values:

- Individuals and interactions > Processes and tools
- Working software > Comprehensive documentation
- Customer collaboration > Contract negotiation
- Responding to change > Following a plan

12 Principles Behind Agile Manifesto

1. Satisfy customer through **early and continuous delivery**
2. **Welcome changing requirements**, even late in development
3. **Deliver working software frequently** (weeks to months)
4. **Business people and developers work together daily**
5. Build projects around **motivated individuals**
6. **Face-to-face conversation** is most effective
7. **Working software is primary measure of progress**
8. **Sustainable development** - constant pace indefinitely
9. **Technical excellence and good design** enhance agility
10. **Simplicity** - maximizing work not done - is essential
11. **Self-organizing teams** produce best architectures
12. **Regular reflection and adjustment** of behavior

Key Agile Concepts

Management:

- **User Stories:** Functional increments (e.g., "As a shopper, I want to search products...")
- **Daily Meeting:** Brief coordination updates
- **Incremental Development:** Each version is usable and adds functionality
- **Iterative Development:** Intentionally revisit work products
- **Team:** Small, full-time group
- **Milestone Retrospective:** Detailed project analysis
- **Personas:** Synthetic biographies of future users

Success Rates (Standish CHAOS Report)

- **Agile:** 39% successful, 52% challenged, 9% failed
- **Waterfall:** 11% successful, 60% challenged, 29% failed

Three Common Forms

SCRUM**	**KANBAN**	**LEAN DEVELOPMENT**
mpower creative cross-functional teams	Visualize workflows, limit work in process	Eliminate waste from system
reative cultures with high trust OR Radical innovation teams	Process-oriented cultures, evolutionary improvements	Process-oriented cultures, evolutionary improve

4. THE LEAN STARTUP (Eric Ries)

Core Concept

Combines **Customer Development** (Steve Blank) + **Agile Software Development**

Build-Measure-Learn Loop

- **Learn Faster:** Split tests, customer interviews, customer development, five whys root cause analysis
- **Code Faster:** Agile development, unit tests, usability tests, continuous integration/deployment, refactoring
- **Measure Faster:** Split tests, customer lifetime value, continuous deployment, real-time monitoring, customer liaison

5 Principles of Lean Startup

1. **Entrepreneurs are everywhere** - Not just in garages
2. **Entrepreneurship is management** - Startup is an institution requiring new management
3. **Validated learning** - Learn to build sustainable business through experiments
4. **Innovation accounting** - Measure progress, set milestones, prioritize work
5. **Build-Measure-Learn** - Turn ideas into products, measure customer response, learn whether to pivot or persevere

5. MINIMUM VIABLE PRODUCT (MVP)

Definition (Eric Ries)

"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**."

Key Principle

Customer discovery in the quickest time frame with minimum effort

The Art of MVP

- **NOT** a minimal product
- **NOT** just a feature
- Focus on the **core value proposition**
- Sufficient to test key hypotheses

Purpose

Balance essential features with risk of overwhelming complexity

6. LEAN STARTUP vs. TRADITIONAL APPROACH

Aspect	**Lean Startup**	**Traditional**
Strategy	Business Model (hypothesis-driven)	Business Plan (implementation-driven)
New-Product Process	Customer Development (get out & test)	Product Management (prepare for market)
Engineering	Agile Development (iterative/incremental)	Waterfall (fully specify before building)
Organization	Customer & Agile Dev Teams (learning/speed)	Departments by Function (experience/execution)
Financial Reporting	Metrics That Matter (acquisition cost, lifetime value, churn)	Accounting (income statement, balance sheet, cash flow)
Failure	Expected (iterate/pivot from ideas that don't work)	Exception (fix by firing executives)
Speed	Rapid (operates on good-enough data)	Measured (operates on complete data)

7. VALUE PROPOSITION CANVAS

Two Sides: Customer Profile + Value Map

CUSTOMER PROFILE (Right Circle)

1. Customer Jobs

What customers are trying to accomplish in work/life

Types:

- **Functional Jobs:** Perform specific task/solve problem (e.g., write software, help clients)
- **Social Jobs:** Look good, gain power/status (e.g., be perceived as competent)
- **Personal/Emotional Jobs:** Seek emotional state (e.g., peace of mind, job security)

2. Pains

Annoyances before/during/after getting job done

Types:

- **Undesired outcomes:** Functional (doesn't work), social (look bad), emotional (feel bad)
- **Obstacles:** Things preventing start or slowing down (lack time, can't afford)
- **Risks:** Potential negative consequences (lose credibility, security breach)

3. Gains

Outcomes and benefits customers want

Types:

- **Required Gains:** Must have for solution to work (e.g., make calls on smartphone)
- **Expected Gains:** Basic expectations (e.g., phone is well-designed)
- **Desired Gains:** Beyond expectations, customers would mention if asked (e.g., seamless device integration)
- **Unexpected Gains:** Beyond desires, wouldn't think of them (e.g., touch screens, App Store before Apple)

VALUE MAP (Left Square)

1. Products & Services

Product offering and associated features

Types:

- Digital (SaaS, platforms, streaming)
- Physical/tangible goods
- Intangible (copyrights, services)
- Financial (investment funds, insurance)

2. Pain Relievers

How products alleviate customer pains

- Eliminate/reduce annoyances
- Focus on **extreme pains** that matter most
- Don't need to address every pain

3. Gain Creators

How products create customer gains

- Produce expected/desired/surprising outcomes
- Focus on gains customers **care about**
- Where product can **make a difference**

ACHIEVING FIT

Fit = When customers get excited about value proposition

- Address **important jobs**
- Alleviate **extreme pains**
- Create **essential gains**

Ranking & Prioritization

Job Importance: Rank jobs by importance to customers
Pain Severity: Rank pains by how extreme they are
Gain Relevance: Rank gains by how essential they are

8. VALUE PROPOSITION PYRAMID

FUNCTIONAL (Bottom Layer)

- **Saves time:** Target in-store pickup
- **Simplifies:** Amazon 1-Click
- **Makes money:** Google AdSense
- **Reduces risk:** Charles Schwab Guarantee
- **Organizes:** The Container Store
- **Integrates:** Square payment services
- **Connects:** Red Bull extreme sports communities
- **Reduces effort:** Facebook Messenger money transfer
- **Avoids hassles:** Zappos free shipping/returns
- **Reduces cost:** Nordstrom budget brands
- **Quality:** USAA high-quality services
- **Variety:** Fitbit product range
- **Sensory Appeal:** Starbucks taste/smell
- **Informs:** Vanguard investment advice

EMOTIONAL (Middle Layer)

- **Reduces anxiety:** Discover card freeze feature
- **Rewards me:** Starwood loyalty program
- **Nostalgia:** VW Beetle design
- **Design/aesthetics:** Apple product design
- **Badge value:** Prada luxury recognition
- **Wellness:** Westin fitness & superfoods
- **Therapeutic value:** Dr. Scholl's foot care
- **Fun/entertainment:** Cruise line activities
- **Attractiveness:** Victoria's Secret bold retail
- **Provides access:** CVS in-pharmacy clinics

LIFE-CHANGING (Upper Layer)

- **Provides hope:** Fitbit healthy lifestyle
- **Self-actualization:** Udemy/Coursera courses
- **Motivation:** Spotify running tempo feature
- **Heirloom:** Bitcoin value retention
- **Affiliation/belonging:** Facebook connections

SOCIAL IMPACT (Top)

- **Self-transcendence:** Tesla fighting climate change

9. EXAM TIPS & KEY FRAMEWORKS

When Analyzing a Product/Service

Step 1: Identify the customer segment(s)

Step 2: Map Customer Profile
- Jobs: What are they trying to accomplish?
- Pains: What frustrates them?
- Gains: What benefits do they seek?

Step 3: Map Value Map
- Products: What are you offering?
- Pain Relievers: How do you solve their problems?
- Gain Creators: How do you create benefits?

Step 4: Check for Fit
- Do pain relievers address extreme pains?
- Do gain creators deliver essential gains?
- Does it address important jobs?

Step 5: Position on Pyramid
- What level of value? (Functional/Emotional/Life-changing/Social)
- Multiple elements across levels strengthen value proposition

Customer Development Process Flow

1. **Hypothesis** → 2. **Test with customers** → 3. **Measure/Learn** → 4. **Pivot or Persevere**

Remember the Quote

"No business plan survives first contact with customers" - Steve Blank

10. QUICK REFERENCE FORMULAS

Product-Market Fit Check

✓ Customers getting value?
✓ Word of mouth spreading?
✓ Usage growing fast?
✓ Positive press reviews?
✓ Short sales cycle?
✓ Deals closing?

MVP Validation

- **Minimum:** Least effort
- **Viable:** Works for customers
- **Product:** Solves core problem
- **Purpose:** Maximum validated learning

Agile vs Waterfall Decision

- **Known requirements** + **Stable market** = Waterfall might work
- **Unknown customers** + **Uncertain features** = Use Agile + Customer Development

KEY TAKEAWAYS

1. **Get out of the building** - No facts inside your office
2. **Test hypotheses** with real customers early and often
3. **Iterate and pivot** - Failure is expected and valuable
4. **Build-Measure-Learn** - Speed up this loop
5. **Focus on fit** - Between value proposition and customer needs
6. **Deliver working product** frequently
7. **Validated learning** > Perfect execution
8. **Customer feedback** > Assumptions

Study Tip: Practice applying these frameworks to real companies (Canva, Atlassian, Airtasker, Apple Vision Pro, etc.) to solidify understanding.