

Principles of Innovation and Entrepreneurship -2017-ENTR 3000

Professor Jack M. Wilson

Review summary sheet for Exam 2 – This covers the entire class; Chapters 1-13 & online material <http://www.jackmwilson.net/Entrepreneurship/Principles/JMW-Principles-Schedule-F2017.htm>

For cases and materials listed below be sure you know the definitions and the key examples.

Cases: ILINC LearnLinc, Segway, Privo, Google, DailyWorth, Uber, Tesla. MGHPCC, Harish Hande-SELCO, Stacy's Pita Chips, Applied Biomath, Kickstarter, Snapchat

Ch. 1-What is a Startup & Meet Some Entrepreneurs

Steve Blank: A startup is

- a **temporary organization**
- created to **search**, explore validate, an unmet need
- **for a repeatable and scalable business model**

Why does Innovation and Entrepreneurship Matter? & Ch. 2 Democratization of Startups

1. Address problems and create economic and social opportunity. 2. Avoid failure 3. Succeed greatly 4. Regional economic development. 5. Jobs, cures, community interactions.

Examples of Corporations that failed due to failure to innovate and those that succeeded due to innovation.

Schumpeter- Creative Destruction

Clayton Christenson: Disruptive Innovation, Disruptive Technology, Creative disruption
Digital, Wang, Data General, etc.

Define Entrepreneurship (Schumpeter, Drucker, Timmons)

Types of Innovation: Product, Process, Position, Business Model Innovation (Paradigm)

Disintermediation and Mass Customization as Innovation.

Radical versus Incremental and examples of each

Invention is not (necessarily) Innovation

Ken Olsen, Digital, felt that home computers would never happen.

Entrepreneurial Firms, Lifestyle Firms, Salary Substitute Firms

Corporate Entrepreneurship, Social Entrepreneurship

Social Entrepreneurs: mission driven but can be either non-profit or for-profit. Give examples. No margin -no mission. Triple Bottom Line: 1. Social, 2. Environmental, 3. Financial

Types of Exit Strategies

Gazelles, Unicorns, and Unicorpses

Models of Innovation and Entrepreneurship: Causal, Effectual, LeanLaunchpad, Steve Blank –know a bit about each.

Characteristics of the Entrepreneur, Myths of Entrepreneurship

Passion, Product focus, Tenacity despite failure, Execution Intelligence

Democratization: In many cases the cost to launch is small due to all the service now available.

The World is Flat: the ten flatteners.

Ch. 3-Opportunities

Opportunity, opportunity gap, window of opportunity

Durable has staying power, **Timely**: not too early nor too late. **Attractive**: rewards exceed the cost, **and Adds Value**

Example: UMass Rabies Monoclonal antibody

Forces: Economic, Social, Technological, and Political/Regulatory

Moore's Law, Gilder's Law, Metcalf's Law

Segway Example

"Ideas are a dime a dozen. People who implement them are priceless." – Mary Kay Ash of Mary Kay Cosmetics

Ch. 4 –Approaches to Opportunity Evaluation & Intro to Business Models & LeanLaunchpad

How a company uses its resources, structures its relationships, interfaces with customers, creates value, and returns revenues and profits. Looking at the business model tells you how a company can become self-sustaining

Uber as an example. Compare Uber to Taxis in regard to Business Model.

Dell as an example: compare Dell to previous computer manufacturers.

Core Logic –articulates the mission and business model

1. Value proposition, 2. Target Market; 3. Suppliers, 4. Activities, 5. Kind and how much value created.

Fatal Flaws 1. Misread of customer 2. Window of Opportunity –timing 3. Utterly unsound economics

Disruptive Innovation: Examples

Business concept blind spot. Examples Digital, Wang; Kodak, Polaroid,

Product/market Scope

The Business Model Canvas

Effectual Entrepreneurship:

- Bird in Hand –what and who do you know and what do you have?
- Affordable Loss –.minimize risk
- Lemonade – learn from mistakes.
- Patchwork Quilt – Form partnerships.
- Pilot in the Plane –Control rather than predict. Future is created -not predicted.

Lean Launchpad -- Steve Blank: A startup is

- a **temporary organization**
- created to **search**, explore validate, an unmet need
- **for a repeatable and scalable business model**

Steve Blank: • Get out of the building (physically or virtually) – Talk to customers, ask them questions, and listen. • Sales calls aren't your IQ test or PhD defense • Stop talking and listen to the customers problem • Hire a sales team at the Customer Validation step • Match the sales team to market type

Minimum viable product (MVP), customer development process, get out of the office, agile, iterate, lean, The Pivot

Chapter 5 People and Building a Team

Bet on the jockey and not the horse. An A team with a B idea beats a B team with an A idea. People is to opportunity as location is to real estate

Things to think about in building a team: Bring in co-founders who have the technical expertise, sales background, or social connections that you lack. Creating a more diverse team give you access to a wider, more diverse network. i.e. similar people tend to have similar networks. Avoiding co-founding with friends and family. The eventual conflict far outweighs the value. Creating a clear division of labor helps accountability and creativity to flourish. Having a plan to address problems. Don't avoid conflict; plan for it.

Size, diversity, clarity, passion, coachability, -caution with family and friends.

Authors like teams of 2 to 4.

Talent triangle: domain knowledge, business acumen, operational experience

Mentors, board of advisors, board of directors, customers, social capital –Metcalf's law.

Entrepreneurial awareness –prior experience, cognitive factors, social networks, creativity

Adaptors versus innovators

Culture and climate

Co-creation and examples (like Jobs and Wozniak, Page and Brin, Gates and Allen, and many others.)

Chapter 6 - Needs, Pain and Solutions &

<http://www.jackmwilson.net/Entrepreneurship/Principles/Needs-Pains-Solutions.pdf>

Need to have or like to have?

- Your product or service should address someone's pain. •
- The more acute the pain and the more your solution can relieve the pain, the more likely it is that someone will buy your product. •
- “Are you selling **vitamins or aspirin?**” – Josh Linker Detroit Venture Partners •
- Vitamins are nice to have. Aspirin for a headache or other severe pain is a “need to have.” •
- “Businesses that service burning demands and visceral human needs tend to accelerate faster and require far less marketing push than those that offer stuff customers can easily live without.”

Check the examples given

Supply and demand suggests that when the price goes up the demand goes down. Not always! - Price elasticity of demand

Drivers of Innovation: Product Innovation –radical or incremental, Knowledge push, need pull, process innovation, bottom of the pyramid, crisis driven, mass customization, user innovation, imitation, recombinant innovation, design driven innovation, pure accidents

Forces economic, social, technology, and political/regulatory

Size, durability, and timeliness

Examples: DailyWorth, MGHPCC, Tesla

Chapter 7 New Product Development

Steve Jobs: Start with the customer and work backward; LeanLaunchpad-Customer Discovery/Development.

Ten times better rule. Creative Destruction and Disruptive Innovation

Andy Grove: “Only the Paranoid Survive”; Netflix and Blockbuster example.

Diffusion of Innovation –Rogers; types of decisions: individual or Collective or Authoritative;
S-curve of adoption from innovators to early adopters to early majority to late majority to laggards. Crossing the Chasm from early adopters to early majority. Then in the “bowling alley” of early majority to “tornado” to late majority to main street.

Barriers to adoption: Economic, Behavioral, Organizational, Structural
Factors: Relative advantage, compatibility, complexity, trialability, observability

Intellectual property (IP) Patents, Copyright, Trademark, Trade Secrets

Entrepreneurship is Global

Why study? Larger and faster growing markets, consumers worldwide, movement of goods, labor, services, IP;
risk of not reaching the 98.5% of the world market (US 1.5% of consumer market)
New opportunities in communication, regulation, and transportation

Why countries, cities, and regions care? GDP correlates with innovation ; jobs and economic advantage.

Enablers: 1. Tech. advances 2. Free trade agreements, 3. Freer movement of people

Research Universities appear to be a great resource

Global Supply chains offer opportunities. “Flat World”

Spillovers –movement of ideas and intellectual property across borders –legal and illegal.

Cluster development –Boston, Silicon Valley, Beijing, Bangalore,

“The Bottom of the Pyramid,” large markets in less affluent regions. Tata Nano; Selco, Grameen, etc.

National Systems of Innovation –positives: large economy, foreign completion in domestic markets, public R&D, venture capital. –negatives: fragmented markets, high corporate taxes, prosperity/complacency.

Specific opportunities: natural resources, local demand, high regional prices, local skill sets

The Rise and Fall of the BRICS.

Global Sourcing; Global Supply Chain

Immigration and Emigration and Entrepreneurship

Chapter 8 Marketing

The 4 Ps: Product, Price, Promotion, Place/Position

Goliath Paradox –entering a large market with dominant provider need 10x to overcome barriers

Crossing the chasm strategies: Piggybacking, industry placement/position, publicity

Blue Ocean Strategy: Unexploited Market; examples: Cirque du Soliel, Netjets, Southwest Airlines, Curves, Home Depot, Dyson, China Mobil, Wii, Tata Nano, Starbucks

Product/market Fit: “*Customer Validation proves that you have found a set of customers and a market who react positively to the product*” –Blank (they bought it!). Mark Andreessen; “*the life of any startup can be divided into two parts – before product/market fit and after product/market fit.*” He goes on to write: “*When you are BPMF, focus obsessively on getting to product/market fit.* Darwin: *Adapt or die.*”

Segmenting (Example: UMassOnline) and finding the target market then developing the positioning strategy.

Establishing a brand. Don’t confuse prestige and brand.

Pricing tactics.

CPA –cost per customer acquisition. CLV- Customer lifetime value. APRU-Ave. Rev. per user. Gross margin. R-Retention rate.

Selling –keys to success. Prospect-Cold contact-qualify-present-meet objections-close (never talk past the close)-followup.

Chapter 9 Plan

Review LeanLaunchpad and Business Model Canvas from above.

Chapter 10 The Pitch and Business Plans or Not

Parts of the traditional business plan: •

- Cover Page
- Table of Contents
- Executive Summary of 1-2 pages (critically important) •
- Industry analysis
- Company
- Economics
- Marketing Plan (marketing strategy)
- Product/Service Design and Development Plan (product, service, or virtual prototype)
- Operations Plan
- Management Team and Company Structure (B of Directors, B of Advisors, Org Chart)
- Overall Schedule
- Financial Projections –) •
- Summary and Appendix

Business plan rejection –Steve Blank

Red flags: No skin in the game; poorly documented plan; broadly defined markets; wild financials, sloppy.

The Elevator pitch or Rocket pitch

Chapter 11 Fundraising

Available funding has grown relentlessly for the last 15 years.

How much money do you need? – Capital requirements –Do you need funding for capital items, facilities, or equipment? – Operating requirements –How much will you need to have to cover operations until sufficient cash flow begins? – Break Even Analysis -At what point, in both time and money, will you begin to break even? – Overall attractiveness of the investment -Does the investment look like it will return enough profit to make the risk worthwhile?

Where to find it. • Personal Savings • Friends and family •Crowdfunding • Bootstrapping • Business angels • Venture capitalists • Corporations • Banks • The SBA Guaranteed Loan Program • Leasing • Government grants (SBIR-Small Business Innovation research)

Investors desire: Great team, An excellent business opportunity with Large and desirable market, Appropriate growth strategy, Compelling product description, Solving a business or social problem (or both!), Competitive advantage.

Bain Capital example

Funding the non-profit corporation. No margin no mission.

Chapter 12-Pitfalls or How to Fail at Entrepreneurship

Founder red flag statements

- “The market is wrong”
- “We have not yet discovered our customers”
- “We do not own (patent or other protection) the solution.”
- “making money is not our primary goal” • Even social entrepreneurs need to focus on making money to support the social mission.
- “The Goliath in our market just does not get it.”
- “We have not figured out our revenue model.” • Mr. Wonderful, Kevin O'Leary, is ready to pounce.
- “We have no competition” -unlikely –
- “Our financials are conservative.” • Prove it. These are all untested assumptions.
- “We only need 2% of the market.” • If that were easy to get, then why did someone else not get it first?

Avoid troublesome people. Ex Uber and Travis Kalanick

Key person dependency –what if you get hit by a bus?

Self deception - if you suspect this is happening, consult others.

Chapter 13 Don't Quit your day job unless...

Passionate about the space

Able to execute the solution – Ideas are nice, but execution builds value.

Certain that the problem is a need (as opposed to a want) –. Build solutions that are aspirin not vitamins. Find services that have inelastic demand.

Certain that the problem is shared by a large (and growing) market

Able to offer a solution that is 10x better than anything else in the market

Ready to “burn the ships”

Able to access potential customers

Able to spend 6 months without personal income

Able to garner enough people, users, and money to create a minimum viable product (mvp)

Prepared to get into the weeds and do the grunt work – you are your startup. There are no shortcuts.