



Market Segmentation (Step #1) & How to Do Primary Customer Research

Class Seven

Bill Aulet

Howard Anderson





Note: *All classes in this course are important but today's might be the most important of all*





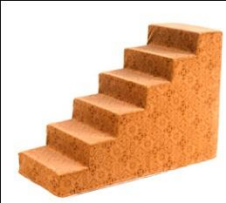
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Market Segmentation & How to Do Primary Market Research

or

*“Now that I have my idea and
team, what do I do next?”*





3 Stories

- DiPol – Revolutionary membrane technology for direct methanol fuel cells
- Lamborghini Dealership
- SensAble

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Entrepreneurship 101 Quiz

What is the singular necessary and sufficient condition to have a company?

1.



Case 2: Lamborghini Dealership

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Photo of a red Lamborghini sports car and photo of silver Volvo SUV removed due to copyright restrictions.





What Should We Be?

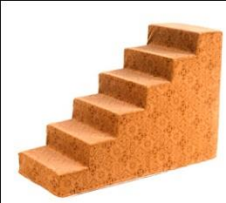
Market-Driven

Target Customer-Driven

Customer-Driven

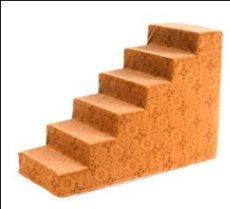
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Basic Concepts in Entrepreneurship

- “Crossing the Chasm” and/or “Inside the Tornado” by Geoffrey Moore
- “Blue Ocean Strategy” by W. Chan Kim & Renee Mauborgne



Strategy to Cross the Chasm

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Diagram removed due to copyright restrictions. See Moore, Geoffrey A. *The Chasm*. Harper Business, 2004, p. 25.





Successfully Crossing the Chasm

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Figure removed due to copyright restrictions. Bowling alley market development.
Moore, Geoffrey A. *Inside the Tornado*. HarperCollins, 2004, p. 38.



Massachusetts
Institute of
Technology



Market Analysis Criteria: How to Chose Beachhead Segment

1. Is the target customer well funded and are they readily accessible to our sales force?
2. Do they have a compelling reason to buy?
3. Can we today, with the help of partners, deliver a whole product to fulfill that reason to buy?
4. Is there no entrenched competition that could prevent us from getting a fair shot at this business?
5. If we win this segment, can we leverage it to enter additional segments?
6. *Can we show results in a time frame consistent with the founders personal agendas?*



Case #3: SensAble Devices

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Thomas Massie's "[Phantom](#)" 1993 from the MIT Museum removed due to copyright restrictions.

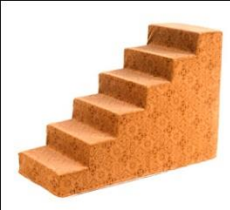




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Illustration removed due to copyright restrictions. **The 24 Steps.**
See Aulet, Bill. *Disciplined Entrepreneurship*. Wiley, 2013.





Step #1

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Illustration removed due to copyright restrictions. Seeing the world through two lenses. See Aulet, Bill. *Disciplined Entrepreneurship*. Wiley, 2013.





Step #1: Market Segmentation/Evaluation

Systematically identify and **evaluate the top market opportunities**. This generally is a long process but it is important to not let it go on indefinitely. There will likely be many paths to success and it is important that you choose one but not necessarily the perfect one. There likely is no perfect one. It is better to try a market and find out if it will work out and learn that it will not rather than be a state of “analysis paralysis”. Set a reasonable time frame and aggressively explore multiple markets in an exploratory fashion (not a sales manner) with primary open mind market research techniques.

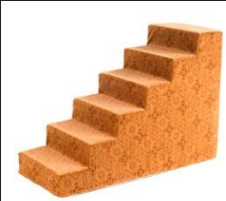


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Industry	Entertainment	Industrial Design	Medical Visualization	Surgical Simulation	Micro Surgery	Geophysical Visualization	Non Visual C.H.I.	Prototyping	V.R.
End User	• Animator	• Stylist • Designer	• Radiologist • Surgeon	• Med student • Surgeon	• Surgeon	• Geophysicist	• Blind person	• Engineer	• Researcher • Designer
Application	• Sculpt • Animation • Paint	• Sculpt • Paint • Modeling	• Segmentation • Navigation • Surgical planning • Diagnosis	• Training • Surgical planning	• Ophthalm. surgery • Neurosurgery	• View enhancement • Drill plan	• H.U.I	• Design review • Model evaluation	• Architect render • Simulation
Benefits	• Ease of use • Reduce cycle	• Reduce cycle • Increase accuracy	• Ease of use • Increase accuracy	• Increase use of new tech. • Increase accuracy	• Reduce cycle • Increase accuracy	• Reduce errors • Increase yields	• Increase access, "mainstream"	• Reduce cycle • Improve designs	• Realism • Increase accuracy
Lead Customers	• Disney • ILM • Dreamworks	• Toyota • Ford • Rollerblade	• Brigham & Women's • German Cancer Research	• U of Colorado • Penn • BDI	• Dr. Ohgami • Ottawa Eye	• BHP • WMC / CSIRO	• Certec • U Delaware	• Volkswagen • Stratasys • Toyota	• Boeing • Corrie Latham • NASA
Market Characteristics	• Early adoption • High-priced talent • High growth	• Dislike CAD & computers • High-priced talent	• Mainstream • High-priced talent • HMO	• Mainstream • High-priced talent • HMO	• Early adoption • High-priced talent • HMO • Not computer automated	• Late main-stream • Oligopoly	• Late main-stream • No money • Gov't sponsor	• Mainstream • Pressure to reduce product cycle	• Early adopt • Fuzzy ROI • Slow accept
Partners/ Players	• Alias • Soft Image • Discrete Logic	• PTC • Alias • Imageware	• GE • Siemens • Picker	• Smith & Neph • Heartport • Ethicon • US Surgical	• Toshiba • Hitachi	• Landmark • Fractal Graphics	• IBM • Apple • SUN • HP • Microsoft	• PTC • Solid Works	• Sense 8 • Division • Coryphaeus
Size of Market	40,000	X00,000	X0,000	X0,000	X,000	X,000	X,000,000	X,00,000	X,000
Competition	Watcom	None yet	None yet	Immersion	None yet	None yet		None yet	None yet
Platform	• SGI • Windows	• SGI • SUN	• SGI • SUN	?	• None	• SGI • SUN	• Windows	• SUN, HF	• SGI • SUN, HF
Needs	• NURBS • Stylus • Dynamics	• NURBS • Stylus	• Voxels • Stylus • VRML	• 6 DOF • Custom devices	• 3-finger scaling	• Voxels • Stylus	• Windows I/F • P300	• NURBS • VRML • Dynamics	• Polygons • Dynamics • 2-finger?

Image by MIT OpenCourseWare.





Class Exercise with Team

- Make a matrix for the various market segments for your team's project
- Just the top line – don't need to fill in the other parts unless you have time



How Do We Fill In the Matrix?

- This is the process of doing primary market research
- You are creating a new market or better yet addressing an existing market that is significantly underserved today.
- It is highly unlikely that anyone has done the research that is appropriate to your opportunity and if they have, you should wonder if it is too late
- Therefore, the best market research is what you will do yourself NOT something you will buy
- Hence you have to learn how to do primary market research with a well defined target market & really understand their needs & opportunities



Zen and the Art of Entrepreneurship

- Become one with your customer
- Become like a great actor
- Make the lines very blurry between you and your target customer



Primary Customer Research

- From MIT Course Catalogue

15.821 Listening to the Customer

Graduate Level, Fall Term; first half of term (H1)

Prereq: None

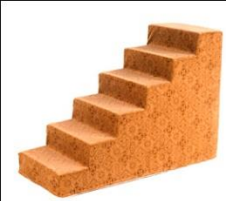
Units: 3-0-3

Lecture: *MW8.30-10 (ENDS OCT 19) (E51-151) or MW10-11.30 (ENDS OCT 19) (E51-151)*

Introduction to soft consumer research methods, useful for getting quick customer input into decisions on product design and development, strategic positioning, advertising, and branding. Covers interview techniques, observational methods, voice of the customer, focus groups, and analyses suitable for qualitative data. Introduces new information-gathering methods in development at MIT.

D. Prelec

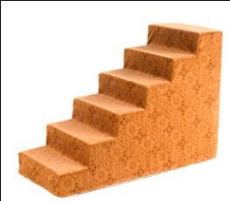
- “Customer Development” - Steve Blank and his disciples but this is at conceptual level but great summary of concepts – phrase “Get Out of the Building”



2 Important Tenets of PCR/PMR

- Inquiry vs. Advocacy
- Immersion: Stew Leonard

<http://www.youtube.com/watch?v=qTWfxZS9dow>



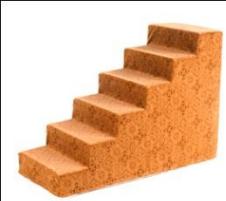
Two Fundamental Steps...

1.

understand
your
customer

2.

understand
what your
customer
thinks about
your potential
product



But, why?

- ...I ***am*** the target customer
 - ▶ No one knows the problem space better
 - ▶ No one knows how to tailor the product better than I do
- This may be the case, but...
 - ▶ You can't assume so because you are a data point of one; not statistically valid yet. If you are right, data will bear you out.
 - ▶ Be very careful of “confirmation bias”. Include a skeptic in the process too.

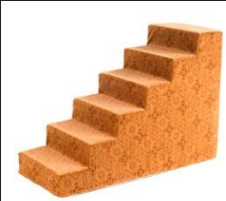


1. Understand Your Customer

- Ask yourself:

How is the customer overcoming the problem I'm solving?

What insights can I draw from the customer's current behavior?



Nature of Primary Research

- Primary Market Research requires you talking to real potential customers
- Profile them so you can statistically evaluate their feedback by group
- Don't ignore qualitative data
- There are no customers in Frost & Sullivan reports
- Talk to people
- Can use Social Media too to engage



Guidance

- Don't introduce the product too soon
- Understand the customer first
- Don't put the onus on them to find the solution for your crazy technology



2. Customer & Your Product

- Ask yourself:

Does my
solution make
sense?



Simple Math

- Step 1 + Step 2 =

Market
knowledge that
will drive your
product



Suggestions

- Strategy: Get to Step 2 as quickly as possible
 - ▶ Develop test approach
 - ▶ Create draft brochure as soon as possible
 - ▶ Iterate

- Tools:

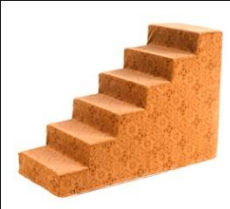


Observation

Surveys

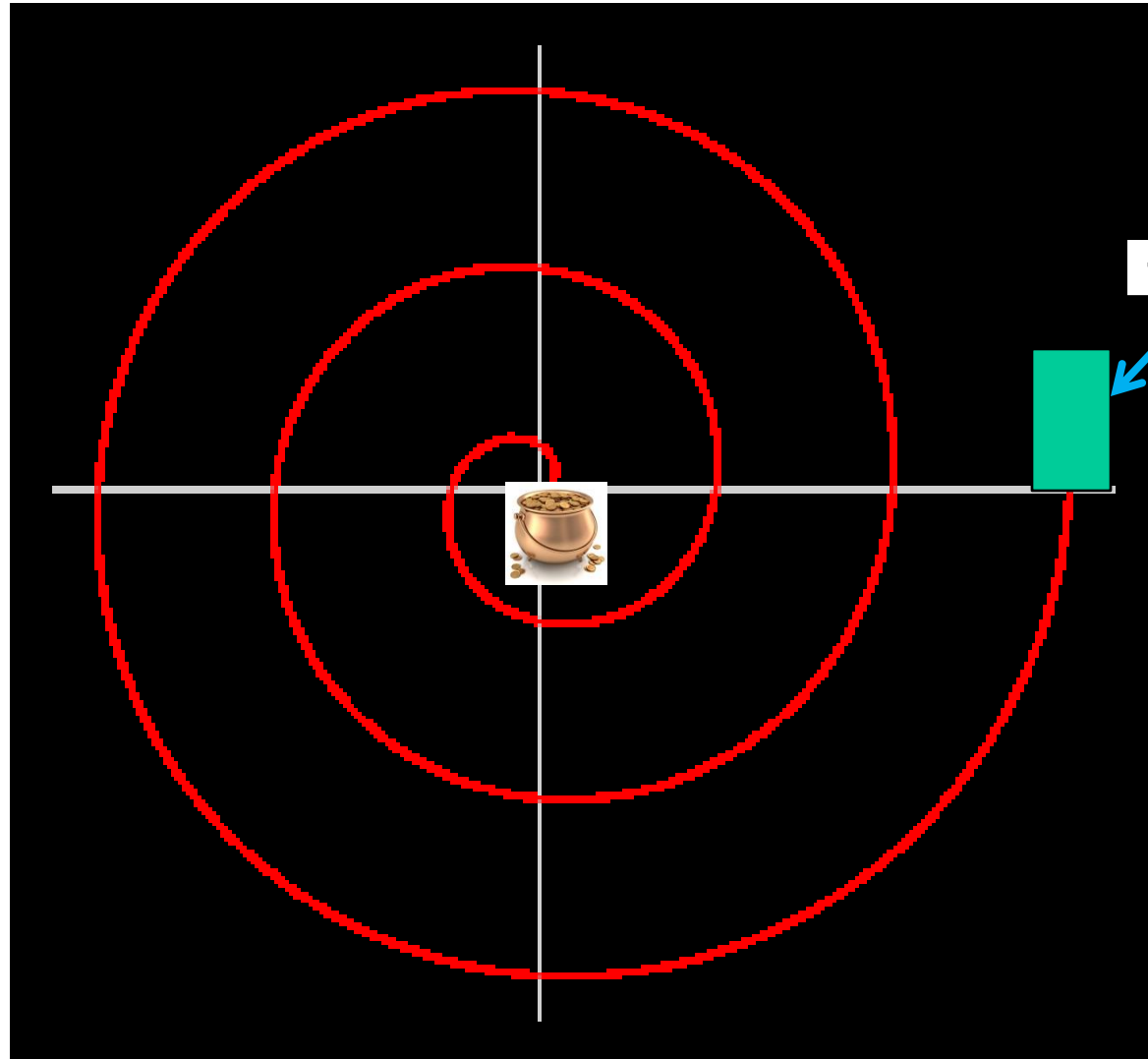
Interviews

Focus
Groups



Spiraling to a Solution

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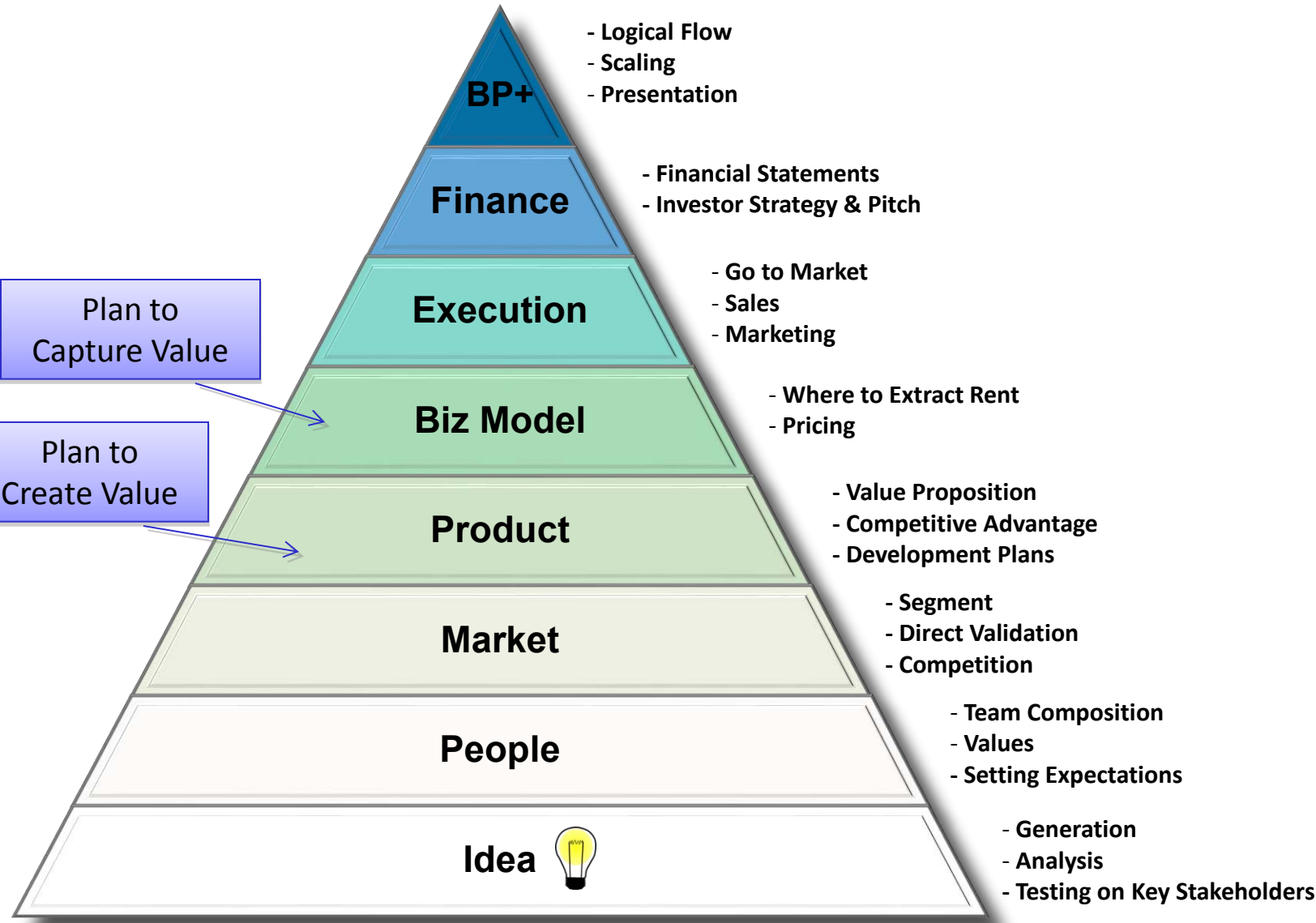
1st draft brochure





Logical Flow of Course

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