

TIM80C

Lecture # 8

4/27/17

## Agenda

(1) Estimation

(2) Product Strategy, Market Strategy, Business Strategy

(3) Project Phase II

(4) Midterm - 5/9

(5) Work on Project (time permitting)

## (1) Estimation

(1) Before estimating, study the topic  
- online? ask around?

(2) Estimate a range [low, high] in order to get a high % accuracy, e.g. 80%.

Ex. Surface temp of sun ( $^{\circ}\text{F}$ ), [5,000, 10,000]

Actual: 10,000 $^{\circ}\text{F}$

(3) Accuracy vs. Precision

Larger  
~~Range~~ Range  $\rightarrow$  Higher Accuracy

Smaller Range  $\rightarrow$  Higher Precision

The more precise the answer (small range)  
the more likely the answer is incorrect.

(4) It's better to estimate in groups rather than individually (wisdom of the crowd).

(5) To estimate, use analogies / similes.

(6) Explain your process.

(7) Practice

(2) Product Strategy, Market Strategy,  $\cong$  Business Strategy

Product Strategy : the plan for how the startup will develop the product

Stages :

(1) Customer Needs Identification

(2) Conceptual Design (FAST, Function Structure (FS), Morphological Matrix (MM), Selection Criteria)

(3) Building and Testing Prototypes

$\alpha$  - proof of concept

$\beta$  - Customer feedback

Production Prototyping (Manufacturing)

(4) Releasing the Product

Market Strategy :

~~Custom~~

## Customer Segmentation

- type and size of the customer

Ex : Cisco Systems

- Service Providers (Comcast, AT&T, Verizon)
- Enterprises (> 1000 employees)
- Mid-sized Business (< 500 employees)
- Small Business (< 250 employees)

- Geographic - country, state, region

Ex Cisco: Americas,

Europe, Middle East, Africa

Asia Pacific (Japan & China)

- Demographics - age, gender, income, education
- Psychographic - lifestyle, personality.
- Behavioral - brand loyalty, sensitivity to price, path dependency
- Segmentation should be done from multiple perspectives
  - high level: identifying a target segment
  - lower level: 4P's of marketing

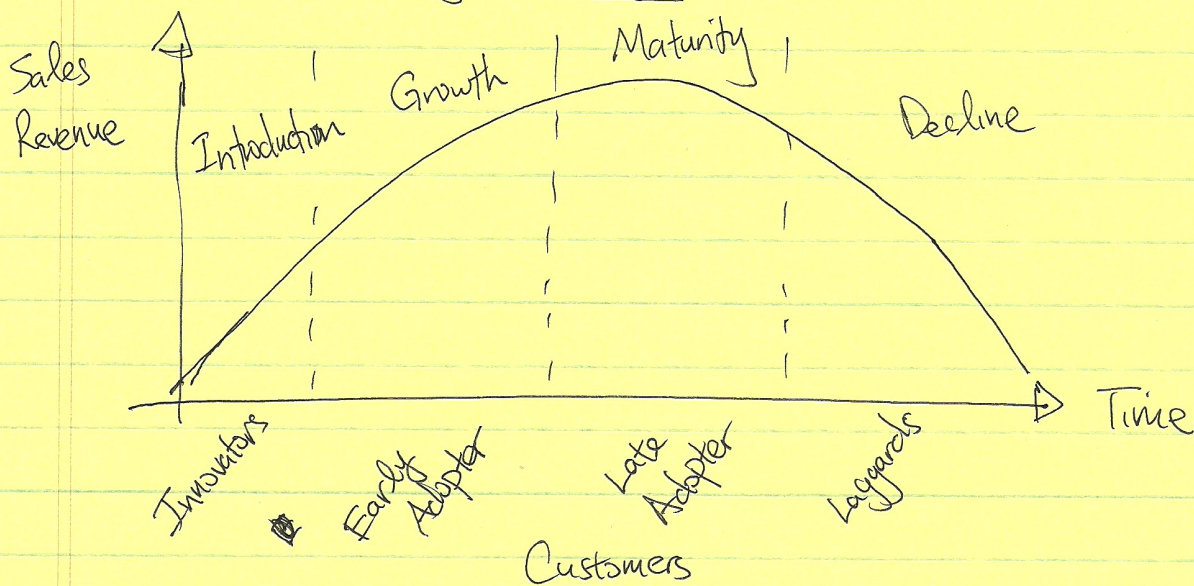
## 4P's of marketing:

- (1) Product - what is the product of interest to this segment?
- (2) Price - what price will ~~we~~ we charge? segment?
- (3) Placement - where will it be sold?
- (4) Promotion - how will we communicate with buyers?

- Segmentation depends on the product and the market

## Business strategy (or competitive strategy)

- Depends on where the product lies in the context of lifecycle analysis



## Competitive Strategies

### Target Customers

### Strategies

Innovators / early adopters → Focus strategy

Early adopters / late adopters → Differentiated

Late adopters / laggards → Price

Focus: unique product for a subset of the market

Differentiated: unique product for the entire market

Price: low cost for the entire market

Technology startups will operate during the early life cycle stages.

### (3) Project Phase II

Emphasis: getting a good product strategy for your product

### Key Steps:

- (1) Obtaining the correct function structure,
- (2) Obtaining a good morphological matrix that emphasizes the design space for your product

- target 5-10 solution principles for each subfunction (use brainstorming & product description)

(3) ~~Gen~~ Generating plan for developing the product (product strategy notes)

(4) Midterm

TIM 80C has 3 parts

- lectures/handouts: learn tools, vocabulary, e.g. structured problem solving, FAST
- HW & exams: practice tools & techniques in a constrained environment
- Project: applying the tools & techniques in a unconstrained environment

Midterm is ~~is 1 week~~ 5/9

Has 1 problem: create a startup company in a particular industry

- Product Strategy: FS, FAST, MM, ...

- Market Strategy: Revenue map, 4Ps, ...

- Business Strategy: Porter's 5 forces, 2x2 competitive strategy matrix, life cycle product, Segmentation diagram

Data on the market will be provided, open notes.