

Week 1 Slides

Key Take-Away #1: Every company needs both **deep-and-narrow engineers** and **full-cycle engineers**. They are equally important and play different roles

- solve the problem
- sell the problem
- manage the money

What motivates a company to hire u

- increase its **bottom-line profits**, grows **profitability**
 - Revenue(Sales)(the top-line)
 - Profit(Net Profit)(the bottom-line)
- increase **equity**
- generates sufficient **cash flow**

Key Take-Away #2: No business can thrive or even survive long without **differentiation** (or perceived superior value to the customer). **Differentiation requires insight and innovation.**

Key Take-Away #3: Engineers who understand **innovation, entrepreneurship & business** are powerful!

Key Take-Away #4: This course content is as important for mature businesses as start-ups.

Key Take-Away #5: Don't be fooled by the qualitative nature of this course content. **Precision** of thought and communication are critical.

Problem List your customers' top 3 problems	Solution Outline possible solutions for each problem	Unique value proposition Singular, clear, compelling statement that turns an unaware visitor into an interested prospect	Unfair advantage Something that can't be easily copied or bought	Customer segments List your target customers and users
Existing alternatives List how these problems are solved today	Key metrics List key numbers telling how your business is doing today	High-level concept List your X for Y analogy (e.g., YouTube = Flickr for videos)	Channels List your paths to customers	Early adopters List characteristics of your ideal customer
Cost structure List your fixed and variable costs			Revenue streams List your source of revenue	

Key Take-Away #7: WIDGET –a model for how works gets done, and who does it. It is also a way to understand your gifts (and frustrations!).

- Ideation
 - **Wonder**
 - Asking questions & gathering insights
 - **Invention**
 - coming up with ideas
- Activation
 - **Discrement**(洞察力)
 - **Galvanizing**
- Implementation
 - **Enablement**
 - **Tenacity**

Key Take-Away #9: Innovation is a mindset & a skillset. These are learnable.

- Desirable
 - Do customers want it?
- Viable

- Can we monetize it?
- Feasible
 - Can we build this?

Different types of innovation

- incremental, sustaining innovation
 - gradual, continuous improvement
- radical innovation
 - entirely new approach
- disruptive innovation (Netflix)
 - make products much more accessible and affordable, attractive to early adopters

Key Take-Away #10: Every innovation starts with an insight—most commonly customer insights & technology insights. Curiosity, questioning and awe open the door to gathering insights.

- customer insight(problem)
- technology insight(solution)

Strong innovators

• Discovery skills

- Questioning
- Experimenting
 - visit new places, try new things, seek new information
- Networking
 - test ideas through a diverse network
- Observing
 - carefully watching customers to gain insights

• Integration Skills

- Associating
 - puts the poeces together like a puzzle

• Delivery Skills

- Planning
- Analyzing
- Disciplined, efficiency-oriented executing

- **Awe**

- The feeling when we encounter vast mysteries that transcend our understanding of the world.” It reminds us that the tapestry of life is vast, that life is full of beauty, that we are all connected.