

ENTREPRENEURSHIP AND INNOVATION



Dr. Kurt W. Beyer
ASEAN Global Leadership Program

LESTER CENTER FOR ENTREPRENEURSHIP AND INNOVATION
University of California, Berkeley, June 2014

center for
UC Berkeley
executive education

ENTREPRENEURSHIP AND INNOVATION



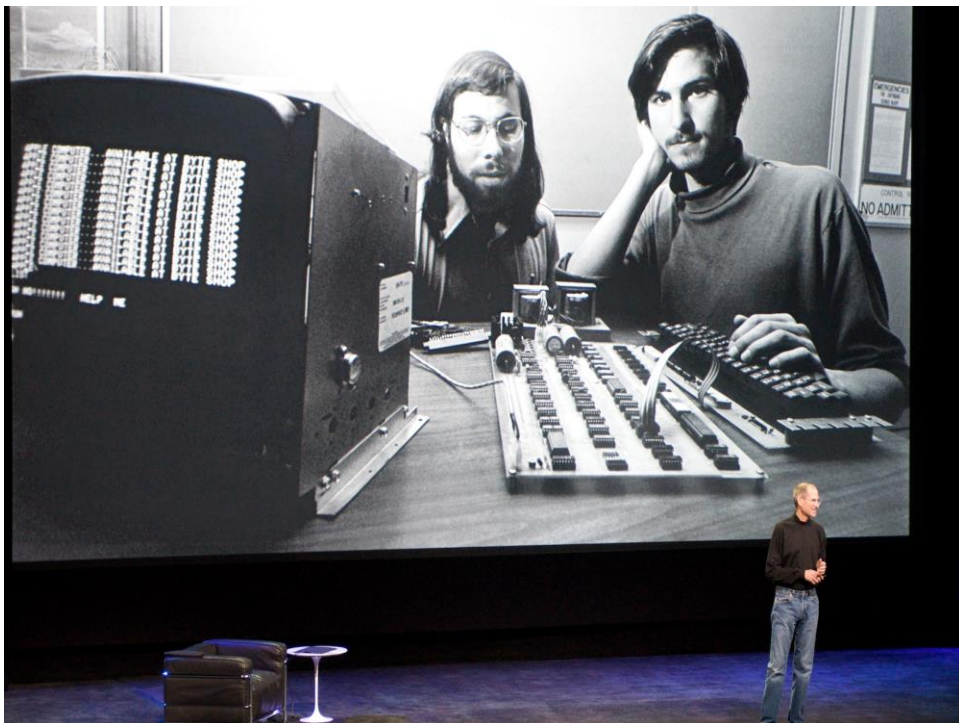
Dr. Kurt W. Beyer
ASEAN Global Leadership Program

LESTER CENTER FOR ENTREPRENEURSHIP AND INNOVATION
University of California, Berkeley, June 2014

center for
UC Berkeley
executive education



center for
UC Berkeley
executive education



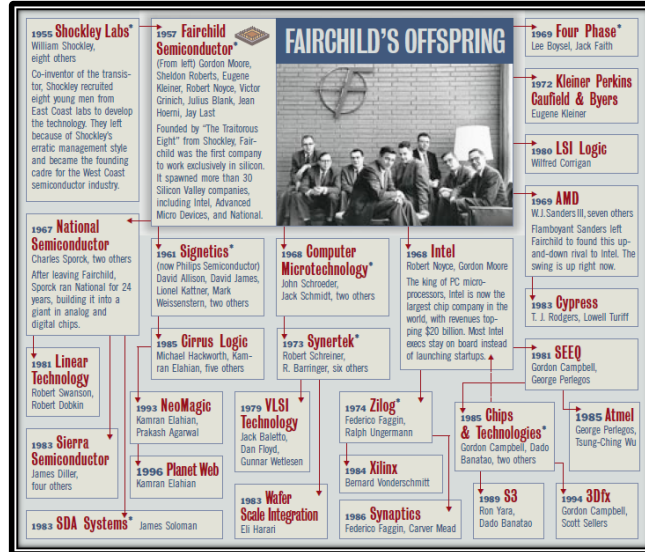


center for
UC Berkeley
executive education

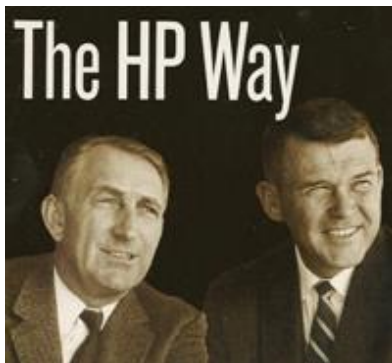
Virtuous Eco-System



center for
UC Berkeley
executive education

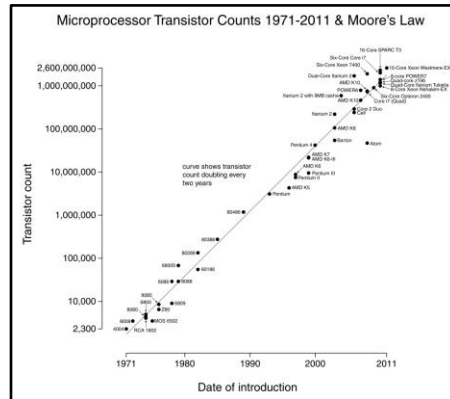
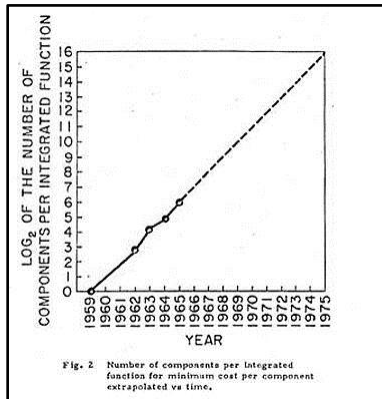


center for
UC Berkeley
executive education



UC Berkeley
executive education

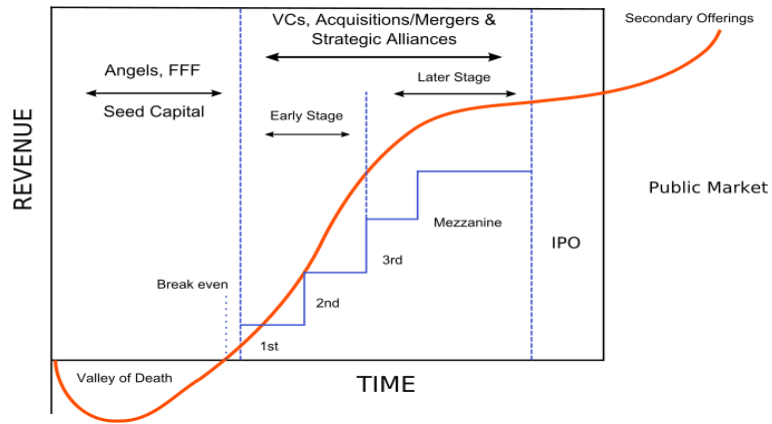
Moore's Law



center for
UC Berkeley
executive education



Startup Financing Cycle



Financial Resources

- Personal Wealth
- Friends
- Family
- Angels
- Venture Capitalists
- Government Grants
- Competition Awards
- Consumers
- Bank Loans





center for
UC Berkeley
executive education

Angel Investors

- Specialized skillsets/networks
- Passion for business
- Smaller amounts
- Better terms
- Flexibility of exit strategy
- Alignment of vision



center for
UC Berkeley
executive education

Venture Capitalists

- Larger amounts of capital
- Multiple rounds
- Preferred term sheets
- Organizational support
- Business development support
- Demand an exit in 5-7 years



center for
UC Berkeley
executive education

What's Hidden In a Term Sheet?

- Pre-money and post-money valuation
- Conditions of Closing
- Dividend Rights
- Liquidation Preference
- Conversion Rights
- Anti-Dilution Provisions
- Voting Rights
- Board Composition
- Protective Provisions
- Rights of First Refusal
- Other Matters



center for
UC Berkeley
executive education

Myth of the Lone Genius

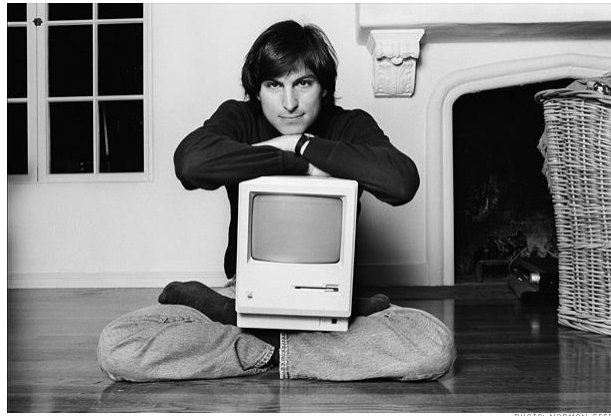
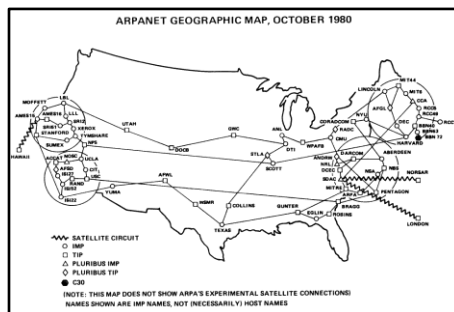
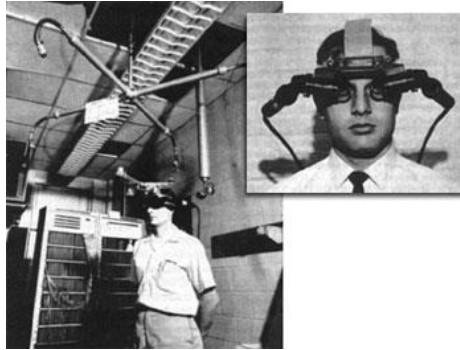


PHOTO: NORTON SEEF

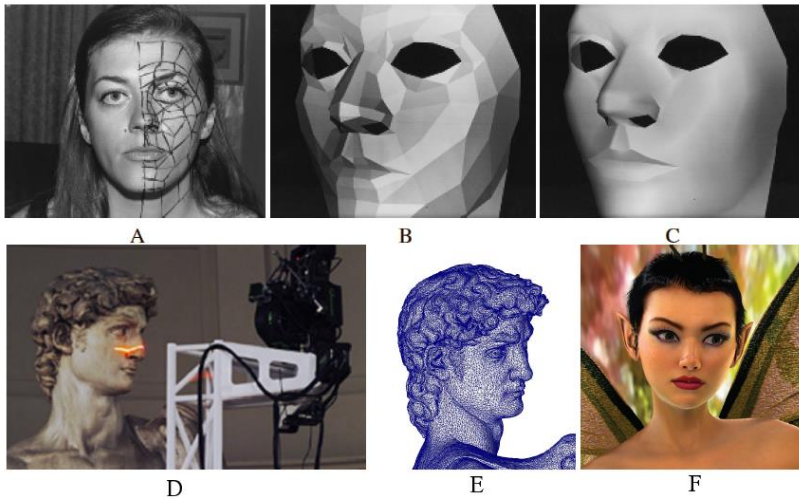
center for
UC Berkeley
executive education



center for
UC Berkeley
executive education



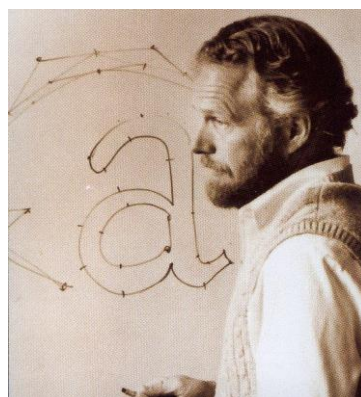
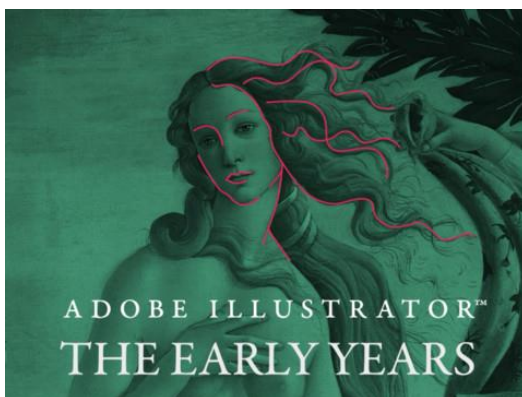
center for
UC Berkeley
 executive education



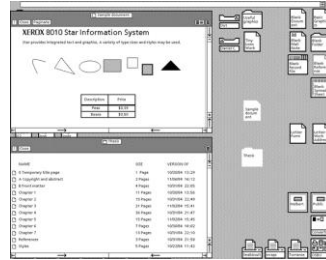
center for
UC Berkeley
 executive education



center for
UC Berkeley
executive education



center for
UC Berkeley
executive education



center for
UC Berkeley
executive education



center for
UC Berkeley
executive education



center for
UC Berkeley
executive education



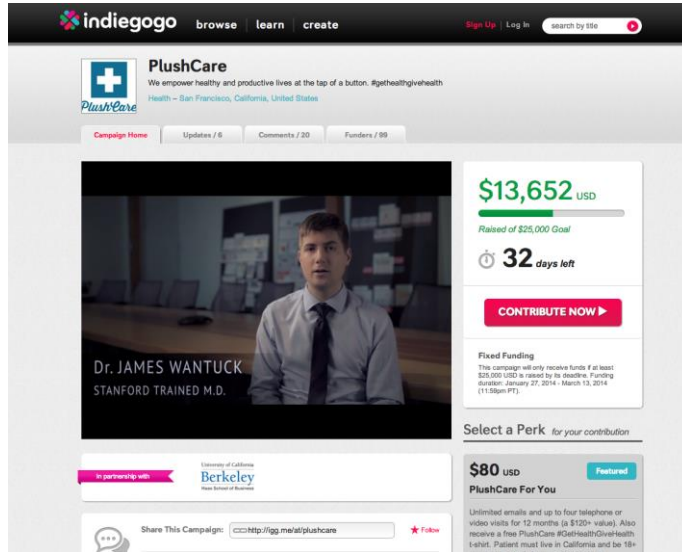
center for
UC Berkeley
executive education



center for
UC Berkeley
 executive education

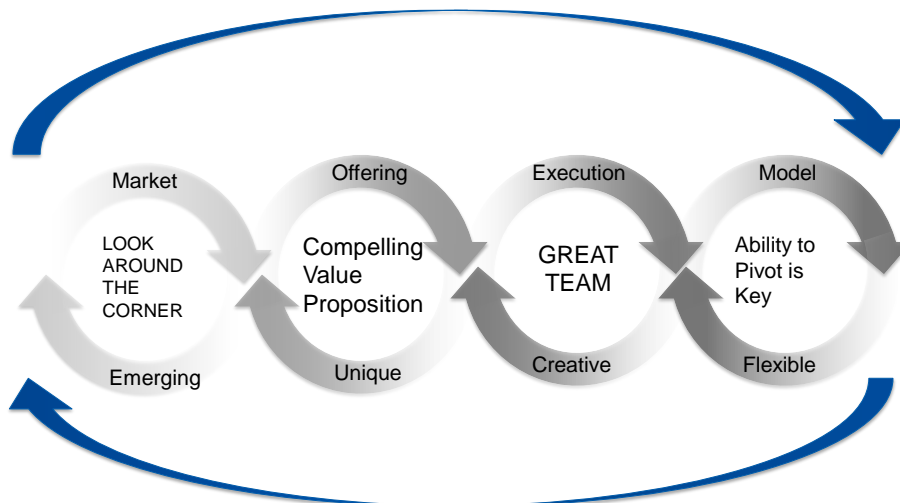


center for
UC Berkeley
 executive education



center for
UC Berkeley
executive education

Identifying A Winner



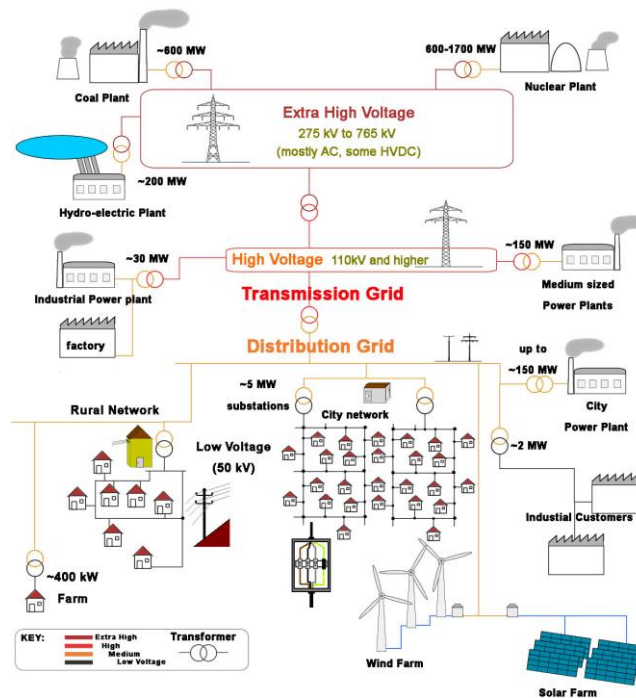
Looking Around The Corner



“The lamp was a small component in his system of electric lighting, and no more critical to its effective functioning than the **Edison Jumbo generator**, the **Edison main and feeder**, and the **parallel-distribution system**.”

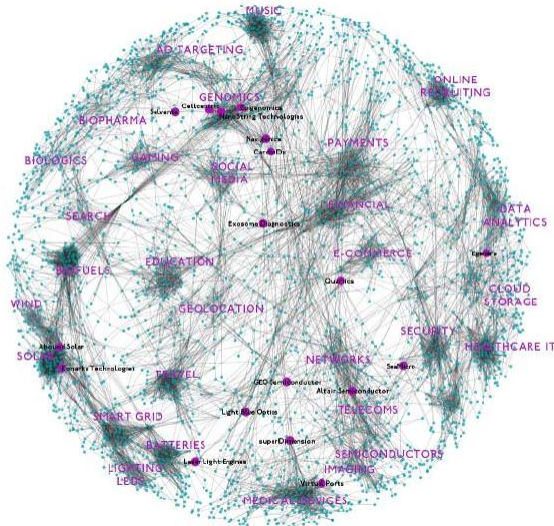
Other inventors [22 prior inventors of incandescent lights] with comparable ingenuity and excellence, have long been forgotten because their creators did not preside over their introduction in a system of lighting.”

center for
UC Berkeley
executive education



center for
UC Berkeley
executive education

Tech Systems



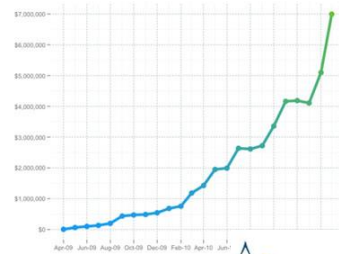
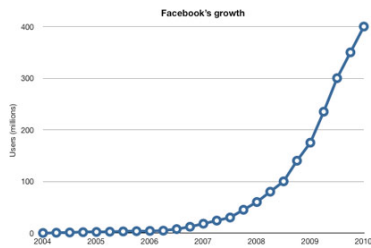
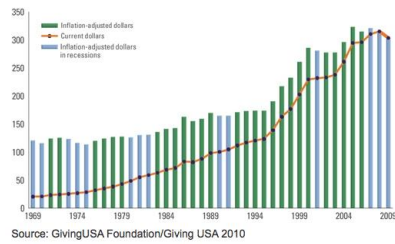
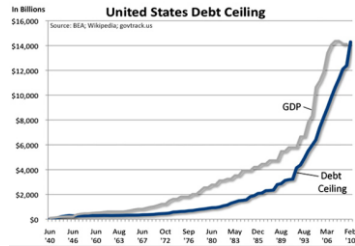
center for
UC Berkeley
executive education

Maturing Govt Tech Systems



ley
cation

Macro Trends

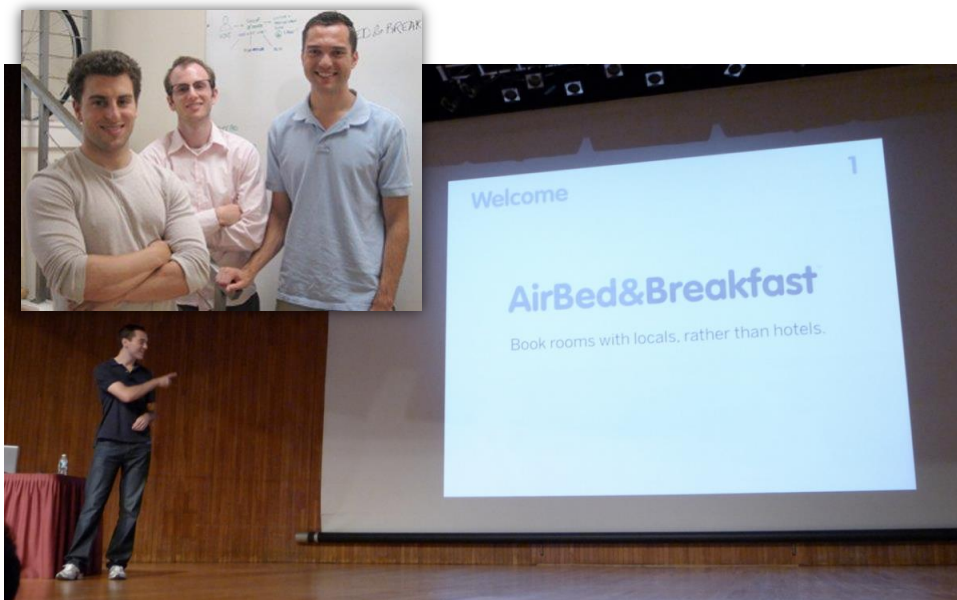


Dr. Kurt Beyer
Lester Center
for Entrepreneurship
executive education

Collaborative Consumption



center for
UC Berkeley
executive education



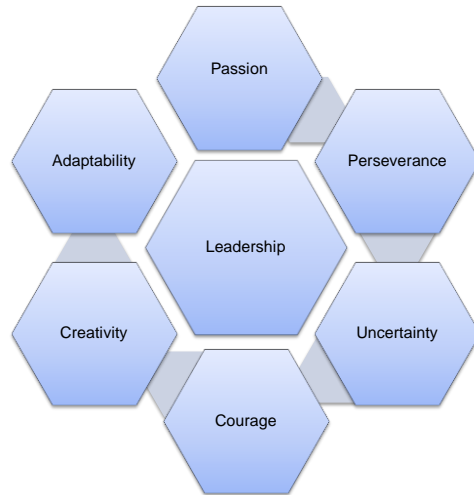
center for
UC Berkeley
 executive education

Great Teams



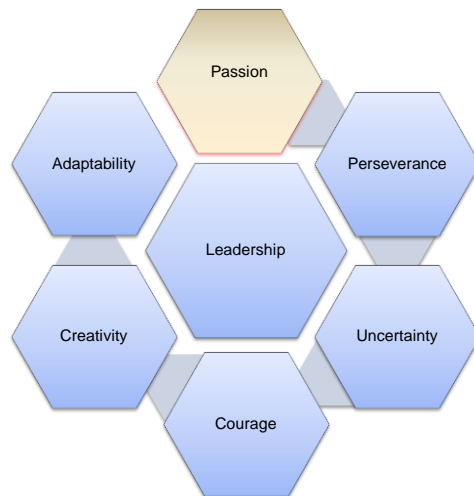
center for
UC Berkeley
 executive education

Desirable Attributes of the Entrepreneur



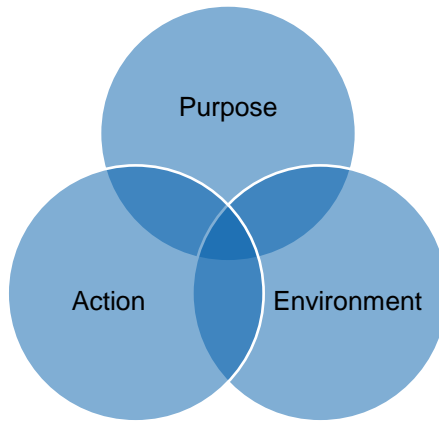
center for
UC Berkeley
executive education

Desirable Attributes of the Entrepreneur



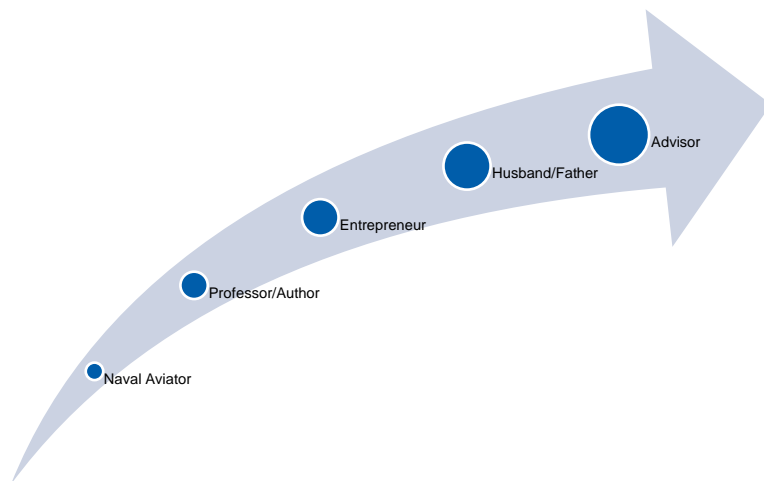
center for
UC Berkeley
executive education

Passion



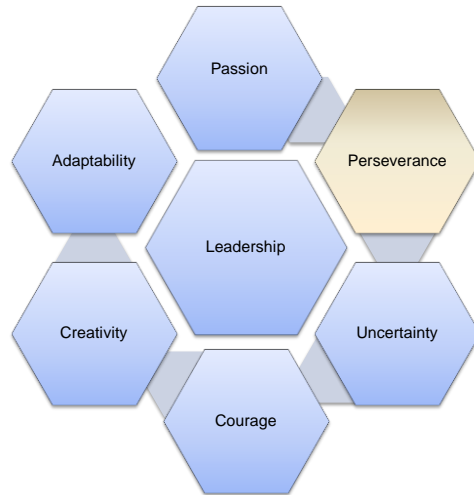
center for
UC Berkeley
executive education

Life Trajectory



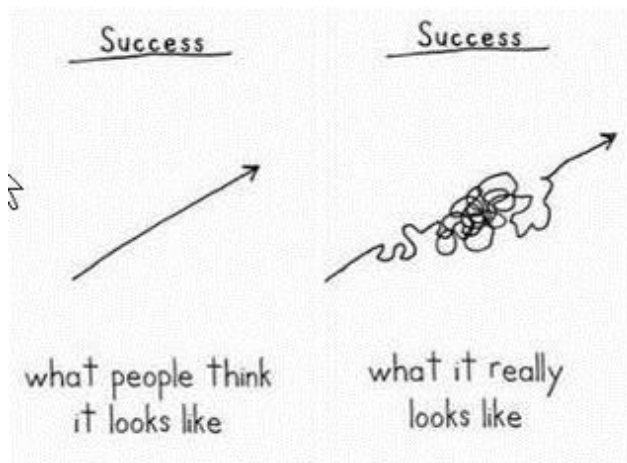
center for
UC Berkeley
executive education

Desirable Attributes of the Entrepreneur



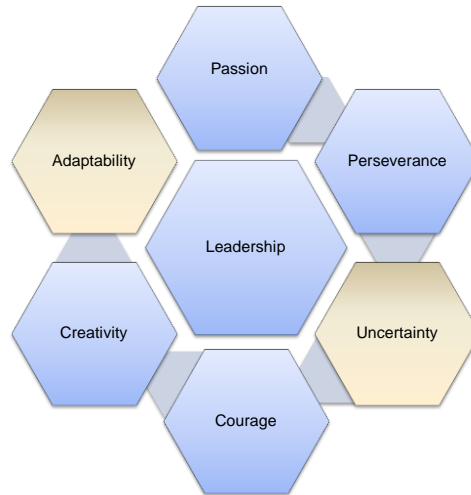
center for
UC Berkeley
executive education

Perserverence



center for
UC Berkeley
executive education

Desirable Attributes of the Entrepreneur



center for
UC Berkeley
executive education

Successful Pivots

Pivot

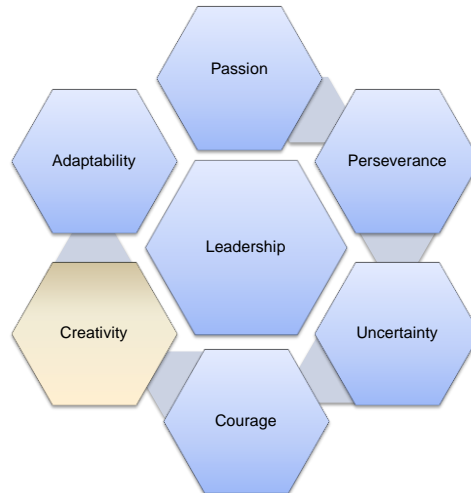


Examples

- PayPal: MVP = Final product
- YouTube: MVP platform becomes end in itself
- Yelp: MVP function becomes core of product
- Groupon: MVP becomes “repurposed”
- Scripted: Consumers of MVP become Employees

center for
UC Berkeley
executive education

Desirable Attributes of the Entrepreneur



center for
UC Berkeley
executive education

What is a “Minimum Viable Product”



(minimum viable product)



(product)

center for
UC Berkeley
executive education

Desirable Attributes of the Entrepreneur



center for
UC Berkeley
executive education



center for
UC Berkeley
executive education

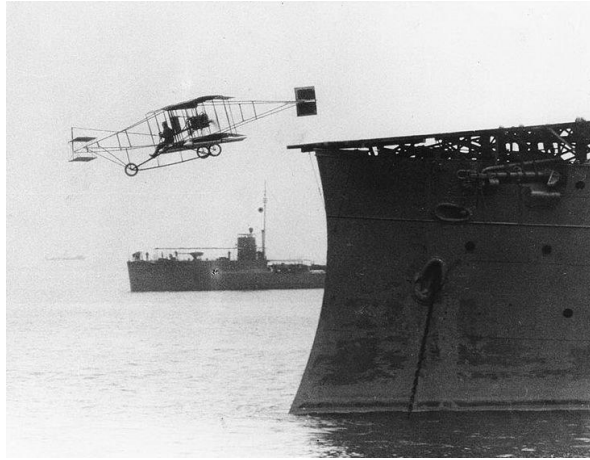
Desirable Attributes of the Entrepreneur



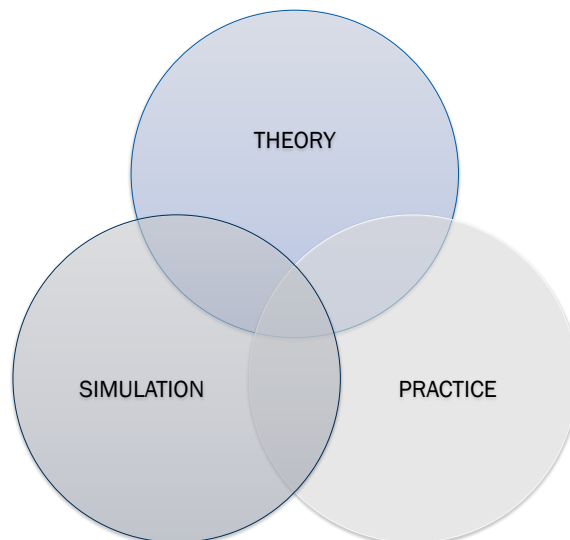
center for
UC Berkeley
executive education



center for
UC Berkeley
executive education



center for
UC Berkeley
executive education



center for
UC Berkeley
executive education

Theory

NASA **Flight Equations with Drag** (no thrust - constant mass) **Glenn Research Center**

Vertical Ascent

$F_{net} = -W - D$

$a = -g - \frac{Cd A \rho V^2}{2m}$

$\dot{V} = V_i \frac{V_o - V_i \tan(t g / V_i)}{V_o + V_i \tan(t g / V_i)}$

$y = \frac{V_i^2}{2g} \ln \left(\frac{V_o^2 + V_i^2}{V_i^2 + V_o^2} \right)$

$y_{max} = \frac{V_i^2}{2g} \ln \left(\frac{V_o^2 + V_i^2}{V_i^2} \right)$

$V_i = \sqrt{\frac{2mg}{Cd A \rho}}$

$t_{(y=0)} = \frac{V_i}{g} \tan^{-1} \left(\frac{V_o}{V_i} \right)$

Horizontal:

$F_{net} = -D$

$a = -\frac{Cd A \rho U^2}{2m}$

Vertical Descent

$F_{net} = -W + D = 0$

$a = 0$

$V = V_i$

Horizontal:

$U = \frac{V_i U_o}{V_i^2 + g U_o t}$

$x = \frac{V_i^2}{g} \ln \left(\frac{V_i^2 + g U_o t}{V_i^2} \right)$

center for
UC Berkeley
executive education

Simulation



center for
UC Berkeley
executive education

Practice



center for
UC Berkeley
executive education