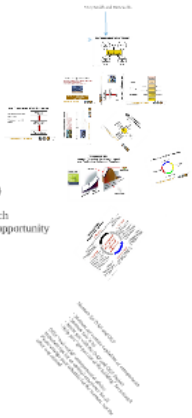


Opportunity Assessment Project (OAP)

- Pick an idea
- "Get out of the building" for research
- Figure out whether it is a business opportunity
- Talk to customers
- Market size
- Business model canvas

- Ticket to introduction to them --> 1 pg. (2 paragraphs) initial opportunity, market, tech., customers
- Due next week at the latest, ungraded, don't spend too much time on it
- Semester is short, get started

Introduction and Background

Chuck Eesley

LELAND STANFORD JUNIOR UNIVERSITY
ORGANIZED 1891

STANFORD TECHNOLOGY VENTURES PROGRAM

IGNITE CLEAN ENERGY
BUSINESS PLAN COMPETITION
LEARN. NETWORK. WIN!

luxcapital

genocea BIOSCIENCES

FLAGSHIP VENTURES

learningfriends

100K MIT ENTREPRENEURSHIP COMPETITION

Lobby 10 Consulting

MITSloan MANAGEMENT

Sun Dance Genetics

What's Different About This Course?

A Science and Engineering Approach

- Scientific method applied to startups

Combines Theory and Practice

- You create a startup, we provide frameworks/experts

Driven by research

- Most e-ship classes are only war stories by successful entrepreneurs

entures ogies er Claris

Our Course Objectives: What Will You Learn?

1. Articulate a process for taking a technology/idea and finding a high-potential commercial opportunity (high performing students will be able to discuss the pros and cons of alternative theoretical models).

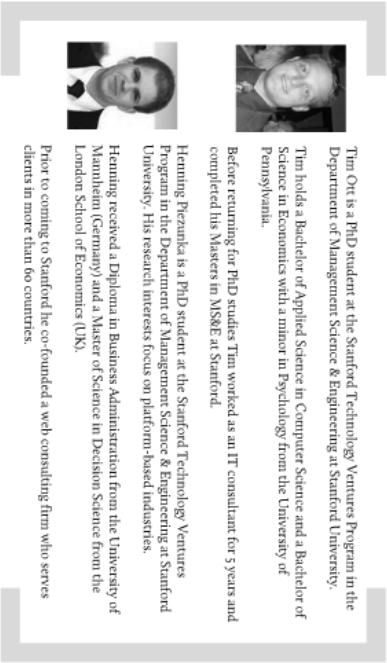
2. Create and verify a plan for gathering resources such as talent and capital

3. Create and verify a business model for how to sell and market an entrepreneurial idea

4. Generalize this process to an entrepreneurial mindset of turning problems into opportunities that can be used in larger companies and other settings

(Skills for 21st-century technology leaders + dispel common myths/misconceptions)

plan.



Tim Ott is a PhD student at the Stanford Technology Ventures Program in the Department of Management Science & Engineering at Stanford University.

Tim holds a Bachelor of Applied Science in Computer Science and a Bachelor of Science in Economics with a minor in Psychology from the University of Pennsylvania.

Before returning for PhD studies Tim worked as an IT consultant for 5 years and completed his Masters in MS&E at Stanford.

Henning Piezunka is a PhD student at the Stanford Technology Ventures Program in the Department of Management Science & Engineering at Stanford University. His research interests focus on platform-based industries.

Henning received a Diploma in Business Administration from the University of Mannheim (Germany) and a Master of Science in Decision Science from the London School of Economics (UK).

Prior to coming to Stanford he co-founded a web consulting firm who serves clients in more than 60 countries.

What is Entrepreneurship?

at is Entrepreneurship?

Our Way of Teaching
Technology Entrepreneursh

1. Teaching of basic terminology and co
the readings and lecture discussions.
2. Critical thinking through case studies.
3. Teamwork through the opportunity analysis and
opportunity execution projects (OAP and OEP)
4. Career planning through the personal business plan.

(Skills for 21st-century techno
myths/misconceptions)

"Entrepreneurship is a management and leadership style that involves pursuing opportunity without regard to the resources currently controlled." - Greg Dees

It can be taught and learned!

What is

AMYRIS

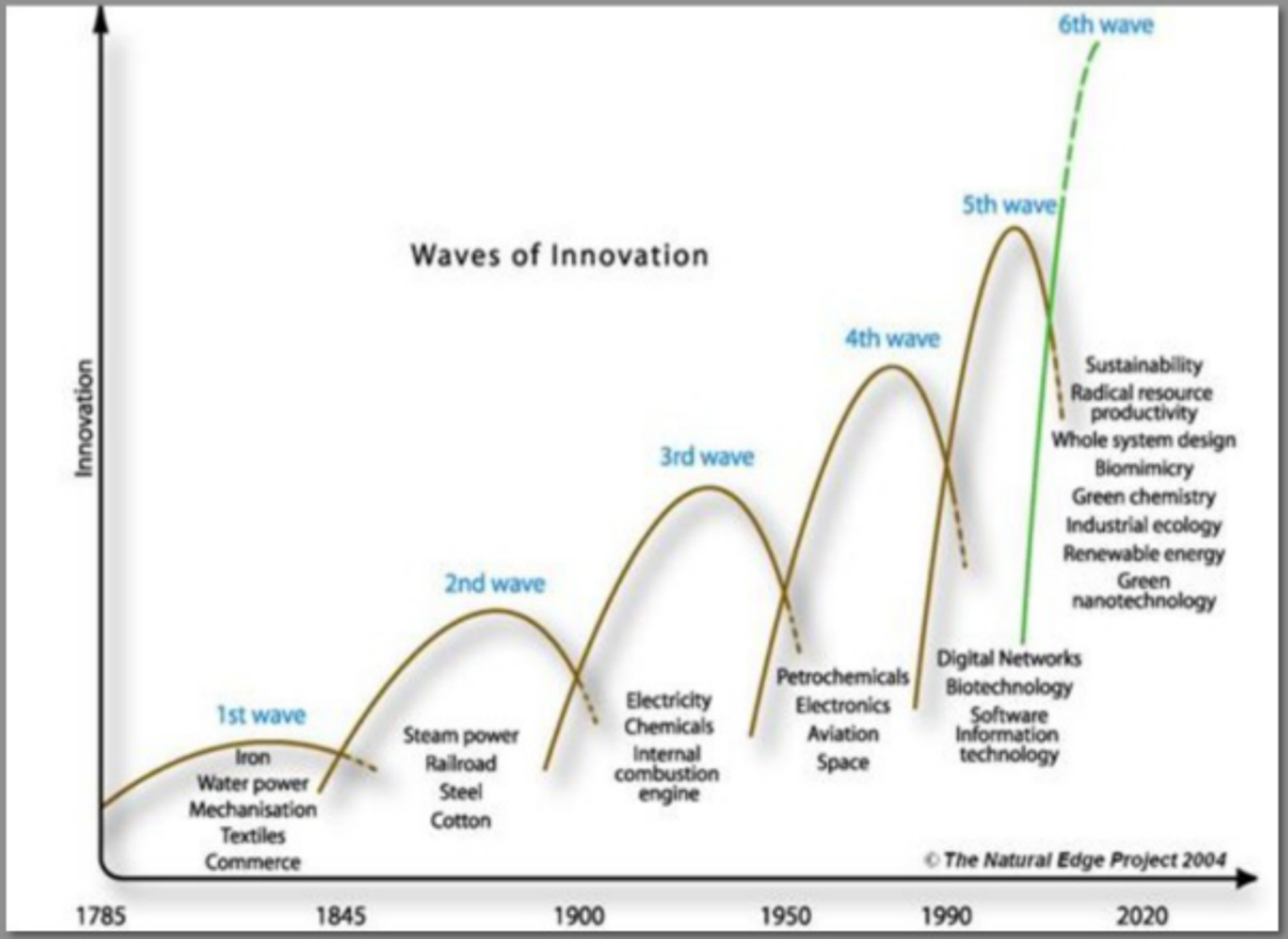
CAL

Closer Look at Entrepreneurship

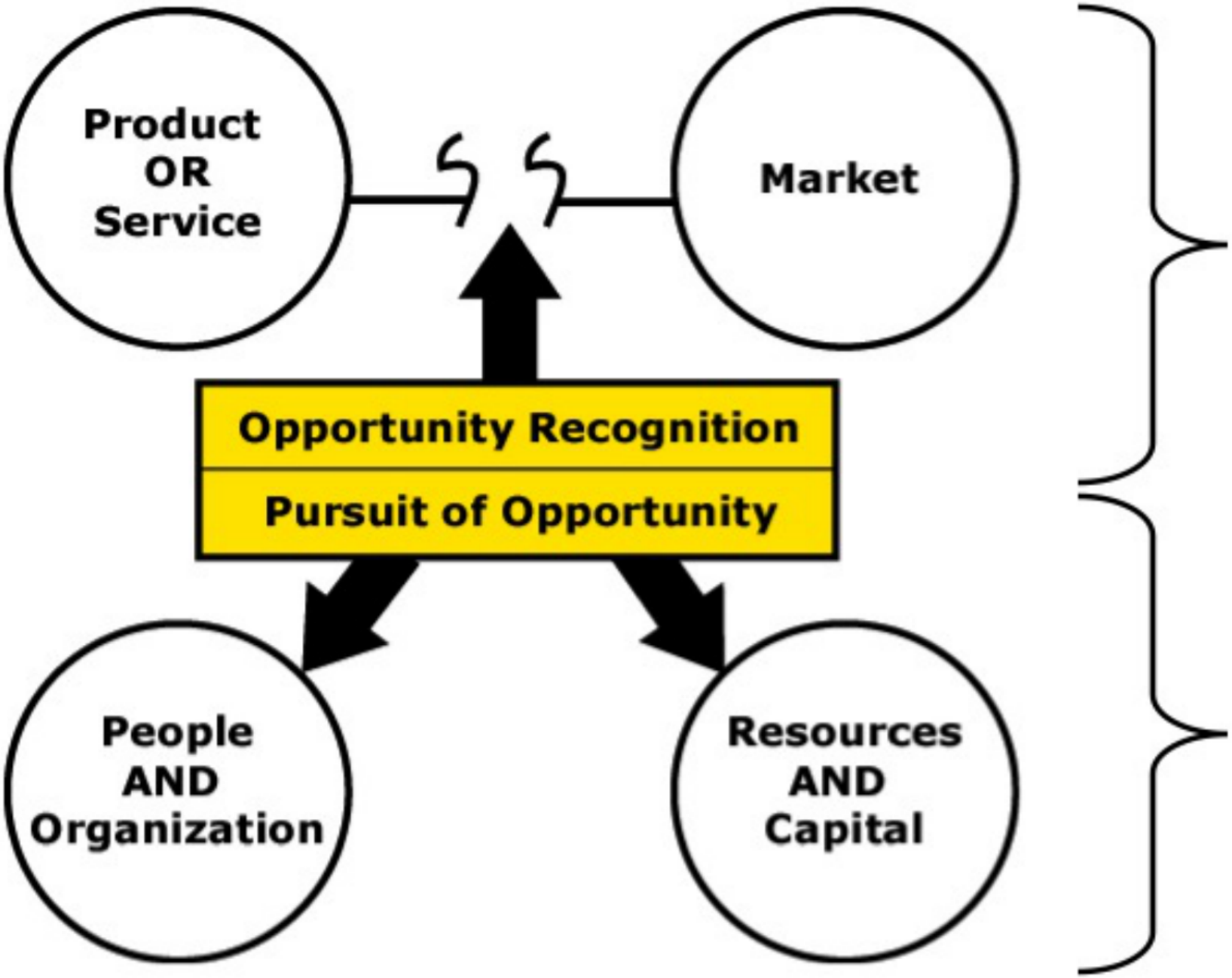
- Key driver of global economic growth
- Startups create 3 million new jobs per year
- Different type of process than starting a small business
- Tech advancements can be either …

  Revolutionary ("brave new world")

  Evolutionary/Incremental ("faster, better, cheaper")


Waves of Innovation
Innovation
1st wave
Iron
Water power
Mechanisation
Textiles
Commerce
2nd wave
Steam power
Railroad
Steel
Cotton
3rd wave
Electricity
Chemicals
Internal combustion engine
4th wave
Petrochemicals
Electronics
Aviation
Space
5th wave
Digital Networks
Biotechnology
Software
Information technology
6th wave
Sustainability
Radical resource productivity
Whole system design
Biomimicry
Green chemistry
Industrial ecology
Renewable energy
Green nanotechnology
© The Natural Edge Project 2004
1785
1845
1900
1950
1990
2020

Company	Valuation ($B)	Revenues ($B)	Employees	Stanford Founder	Stanford Degrees	Founding Year
Google	189	29.3	31353	1) Sergey Brin 2) Larry Page	1) MS CS 95; 2) MS CS 98	1998
Cisco	94	43.2	71825	1) Leonard Bosack; 2) Sandra Lerner	1) MS CS 81; 2) MS Stats 81	1984
Hewlett-Packard	88	126	324600	1) William Hewlett; 2) David Packard	1) BA 34, EE 39; 2) BA 34, MS EE 38	1939
eBay	40	9.2	17700	Jeff Skoll (First President)	GSB 95	1995
VMWare	34	2.9	9000	1) Edouard Bugnion 2) Mendel Rosenblum	1) MS CS 96, PHD CS 12 2) CS Faculty	1998
Yahoo!	20	6.3	13600	1) Jerry Yang; 2) David Filo	1) BS EE 90, MS EE 90; 2) MS EE 90	1994
NetApp	18	5.1	10212	1) James Lau; 2) Michael Malcolm	1) MS CS 82; 2) MS CS 71, PHD CS 73	1992
Intuit	16	3.9	8000	Tom Proulx	BS EE 83	1983
Altera	14	2	2666	Jim Sansbury	BS EE 66, MS EE 67, PHD EE 71	1983
Intuitive Surgical	13	1.4	1660	Frederic Moll	MS Business 88	1995
Netflix	12	2.2	2180	Reed Hastings	MS CS 88	1998
Nvidia	10	3.5	6029	Jen-Hsun Huang	MS EE 92	1993
Total	548	235	498,825			


Product
OR
Service
Market
Opportunity Recognition
Pursuit of Opportunity
People
AND
Organization
Resources
AND
Capital

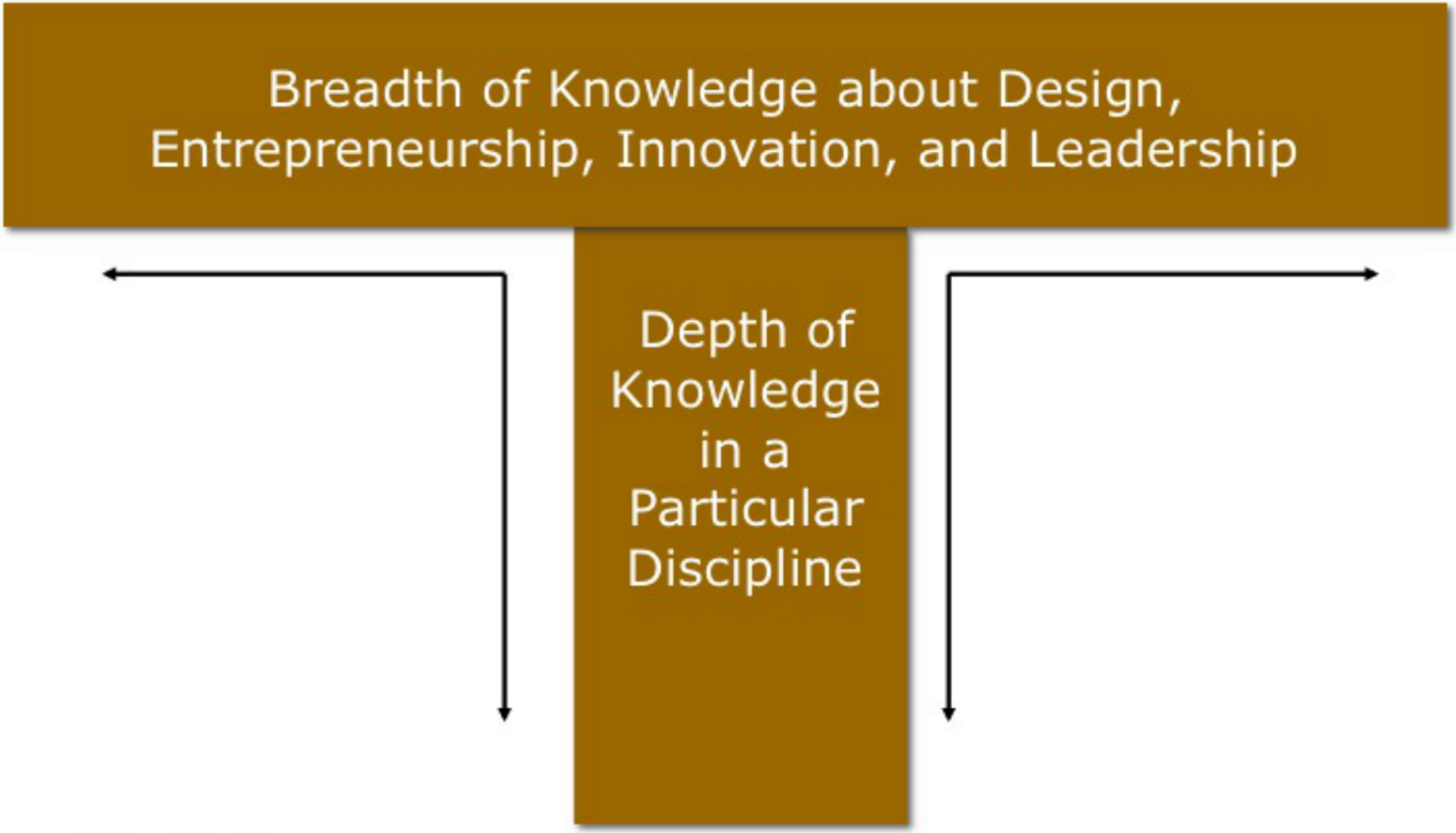
Environment &
Sustainability

Security & Economic
Stability

Digital & Physical
Infrastructure

Human Health &
Education

Creating "T-Shaped" People



Source: David and Tom Kelley

Our

DFJ Entrepreneurial Thought Leaders Seminar Series

Wednesdays, 4:30PM-5:30PM
Hewlett or Skilling Auditoriums

http://etl.stanford.edu

Our Videos and Podcasts at ecorner.stanford.edu

YouTube

Opportunity Assessment Project (OAP)

- Pick an idea
- “Get out of the building” for research
- Figure out whether it is a business opportunity
- Talk to customers
- Market size
- Business model canvas

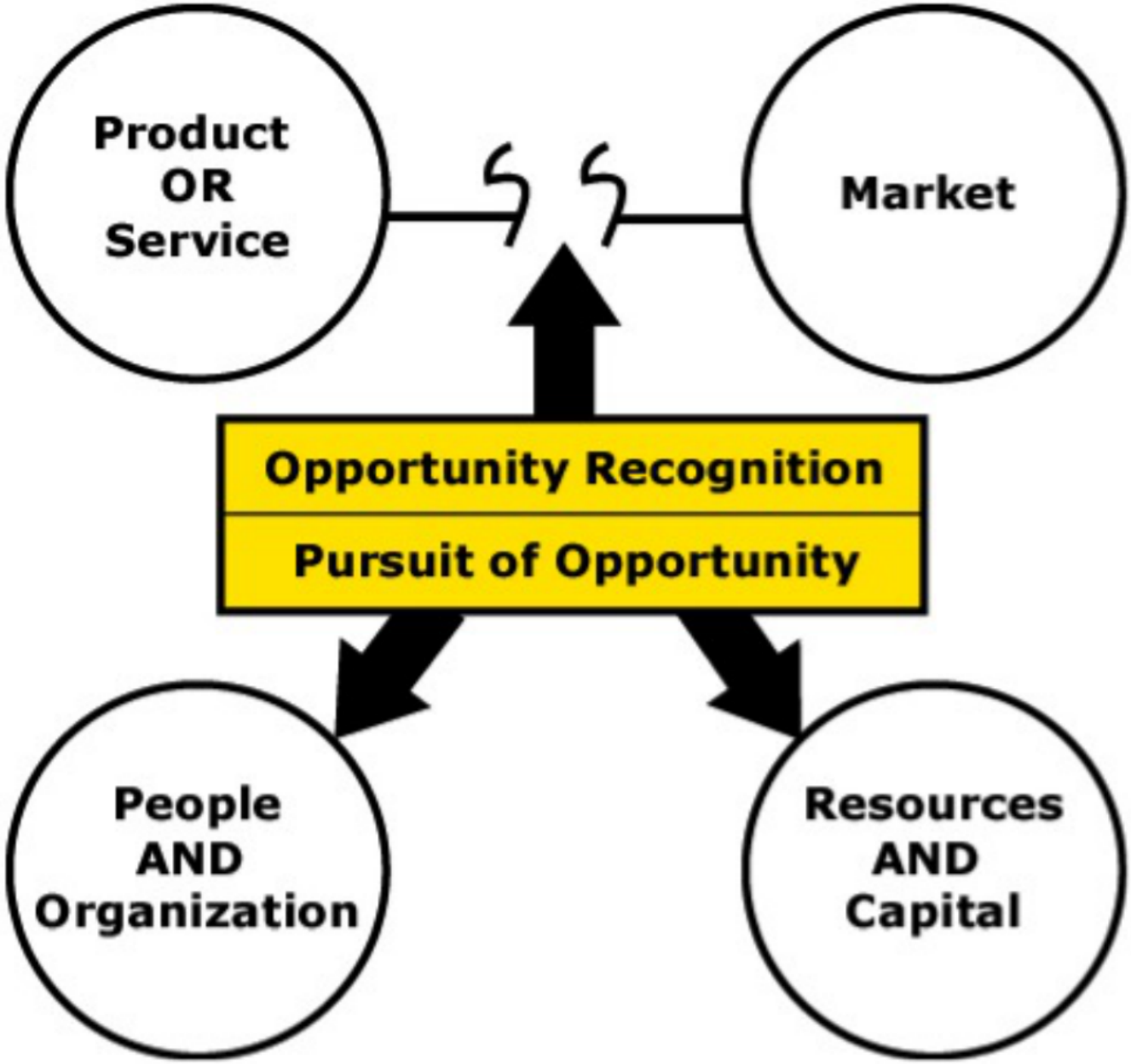
Mentors for OAP and OEP

- Mentors are venture capitalists or entrepreneurs
- Mentors role is to:
- Assist you with the OAP and OEP Project
- Help you “get you out of the building” for research

Offer “real-world” entrepreneurial advice
Important tips for an optimal experience for all
Please arrange your schedule for the mentors, not the other way around

9 Key Models and Frameworks

Key Framework #1: Two "Phases"



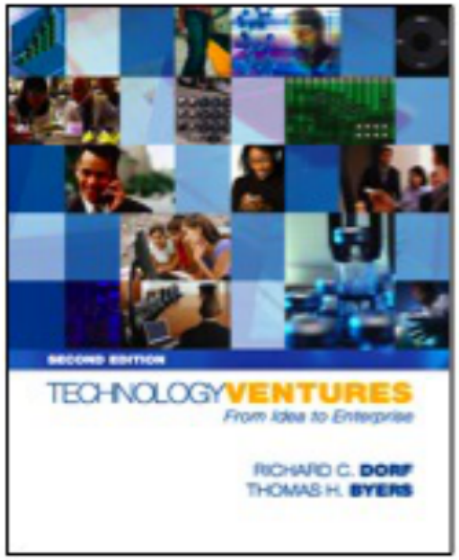
Reference: Mark Rice, Babson

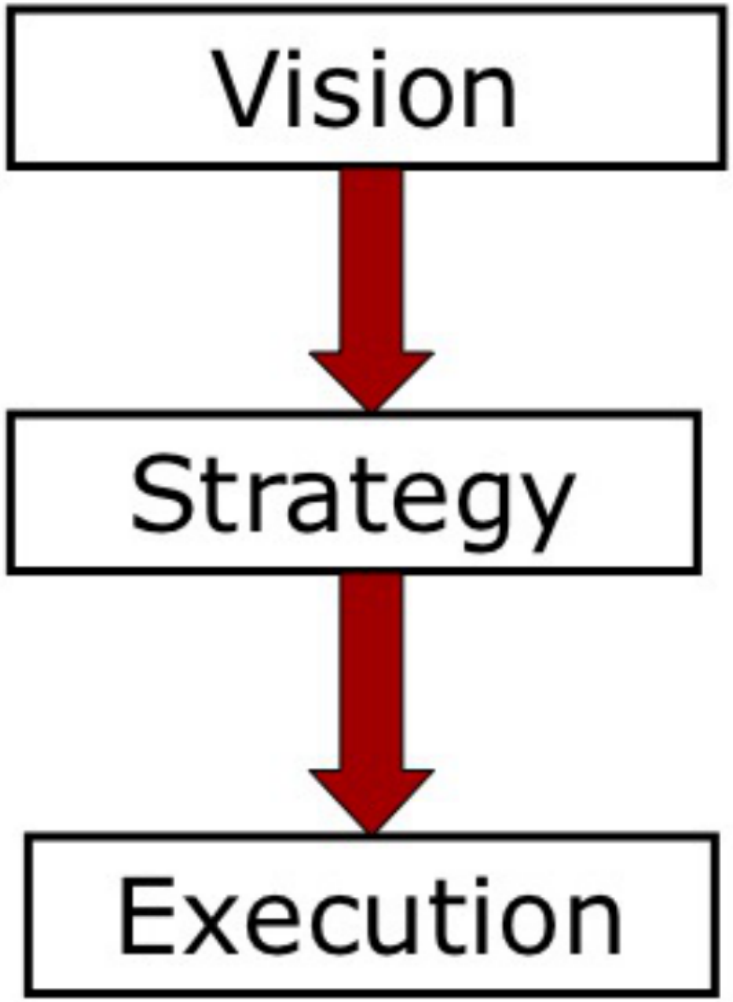
Fundamental Questions: Vision

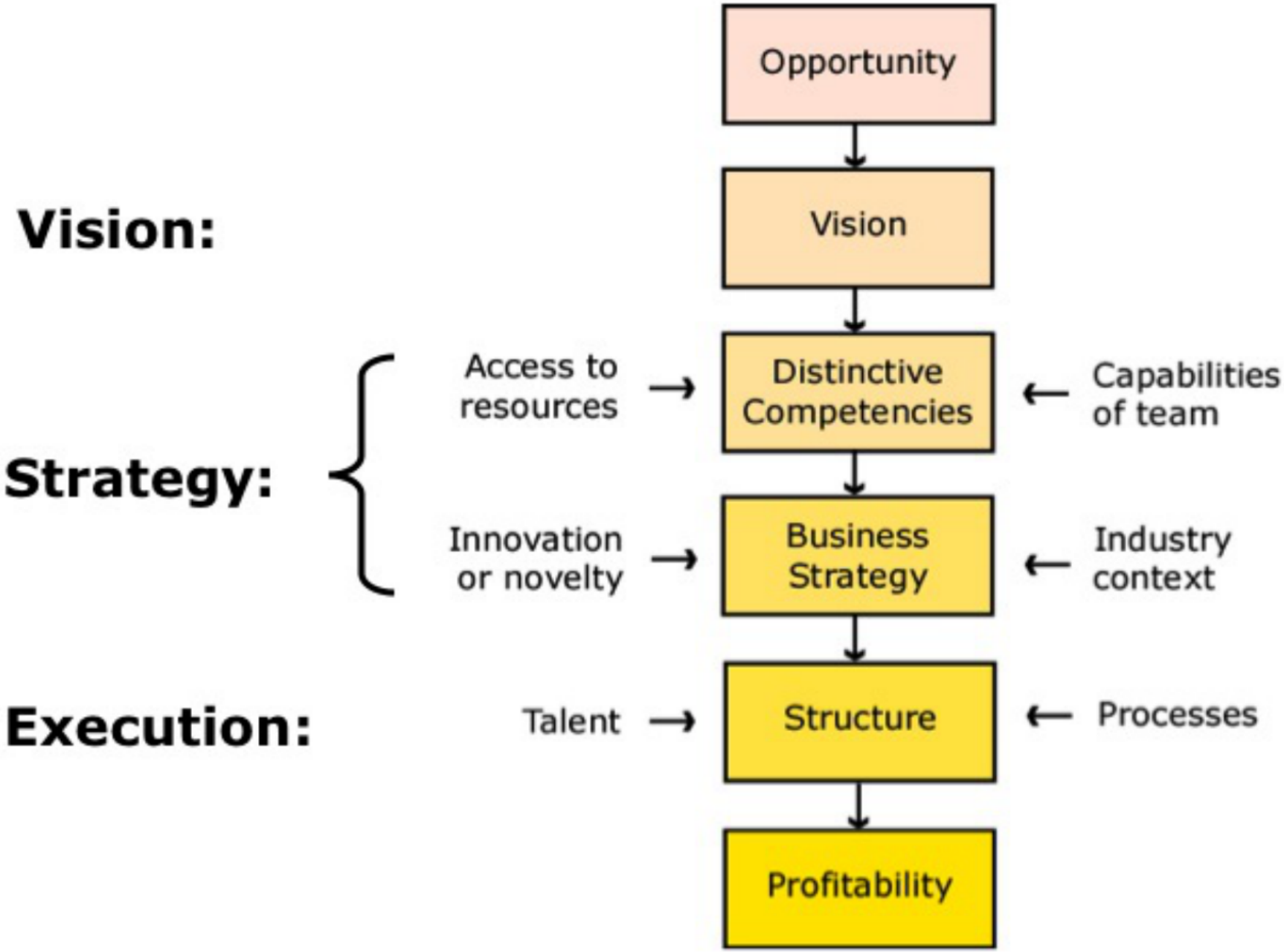
What do the founders wish to achieve with the business?
What is our shared vision and goals?
What is our story and what business are we in?

Examples …what business are they really in:
Yahoo … Internet Directory?
Google … Search?

Key Framework #2: Byers, Dorf & Nelson





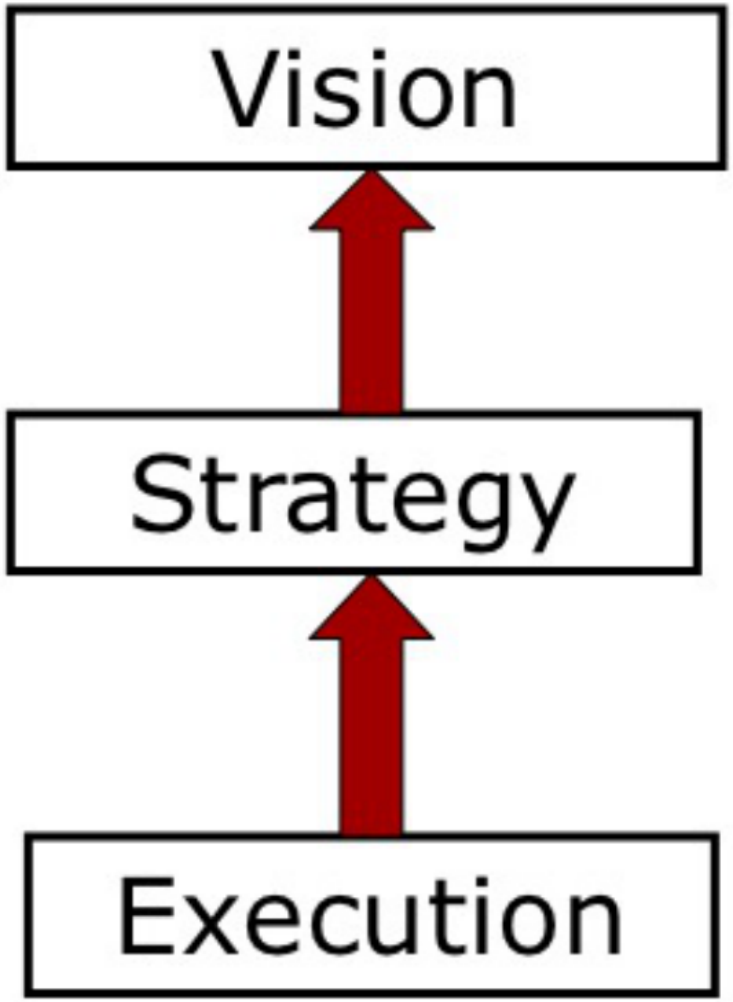


Reference: Byers, Dorf & Nelson (Figure 7.1)

Key Framework #9: Effectuation

What resources do I have now?

What can I do with them?



Fundamental Questions: Strategy

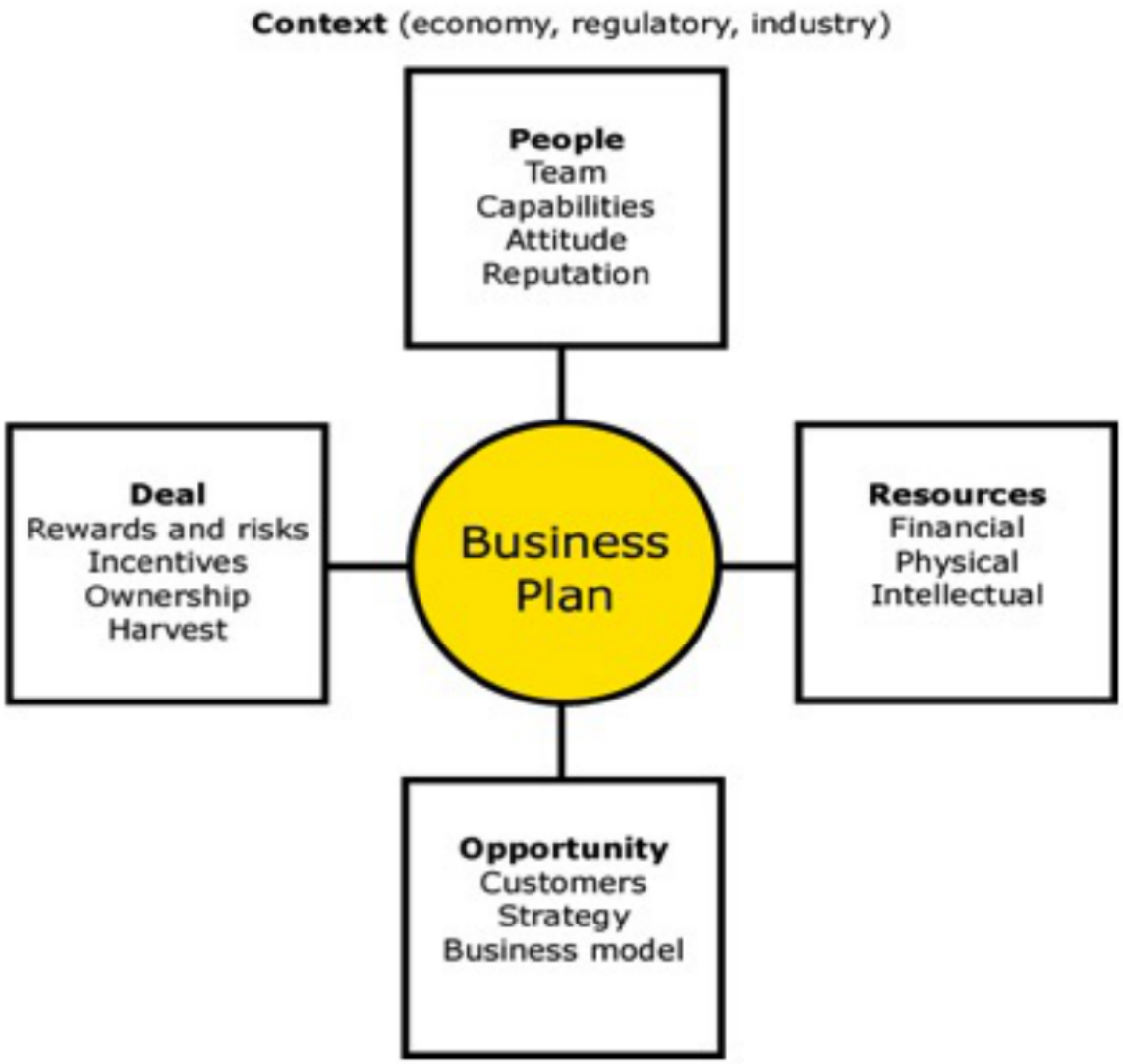
Do we have the right strategy?
Who is going to buy?
What are we selling?
Why are we better?

Fundamental Questions: Execution

Can we do it?
What resources are needed?
What is the blueprint for growth?
Can we adapt?

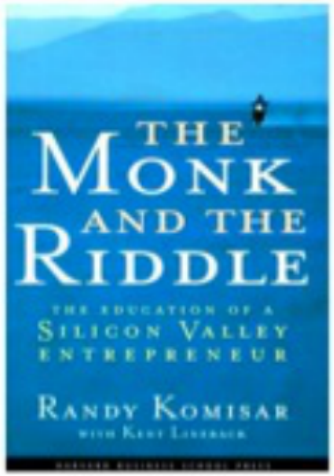
Reference: Steven Brandt

Key Framework #3: Sahlman's Concept of Fit



Reference: Sahlman's "How to Write a Great Business Plan"

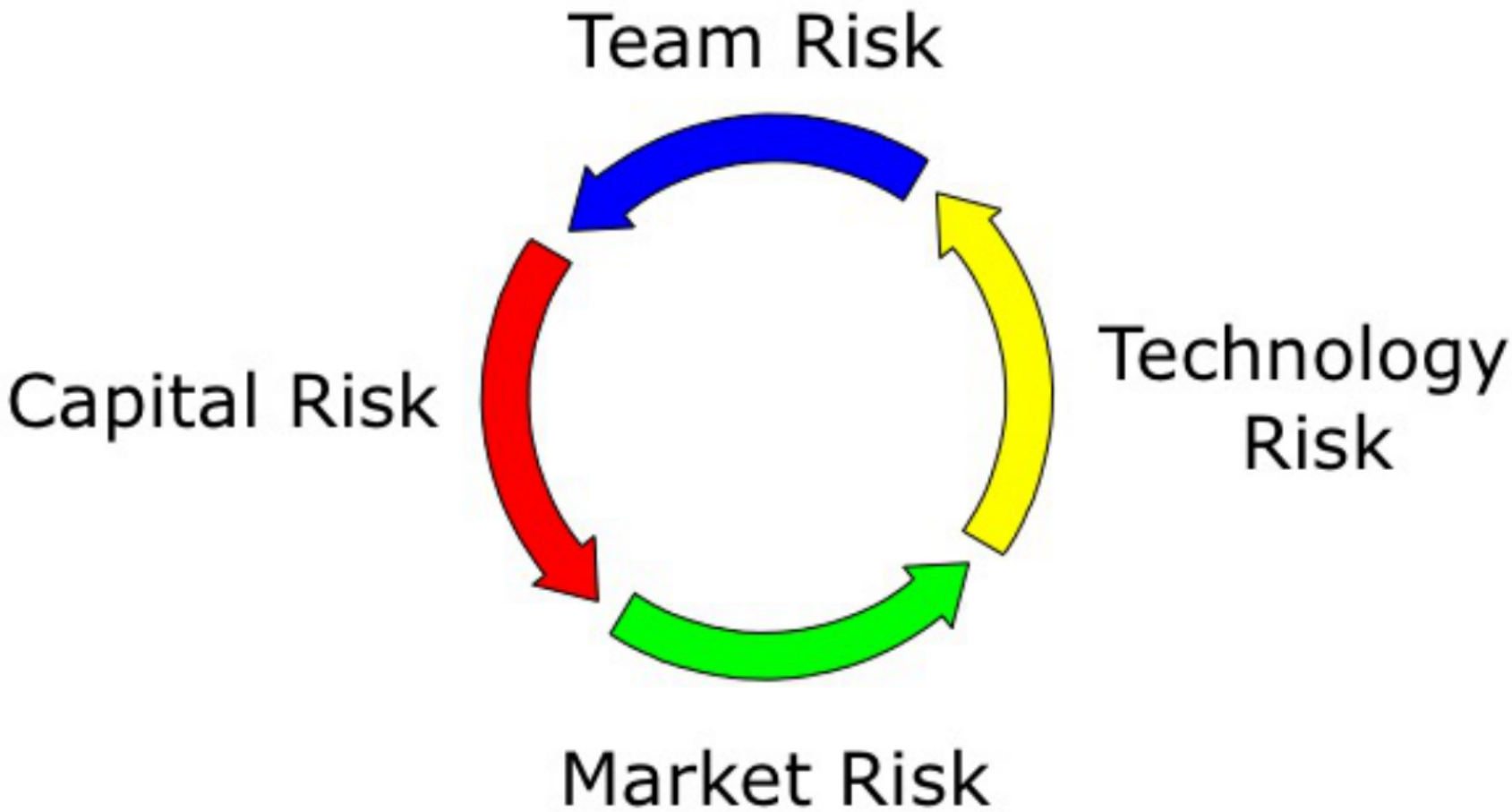
Framework #4: Komisar's "3 Questions Every Venture Capitalist Wants to Know"



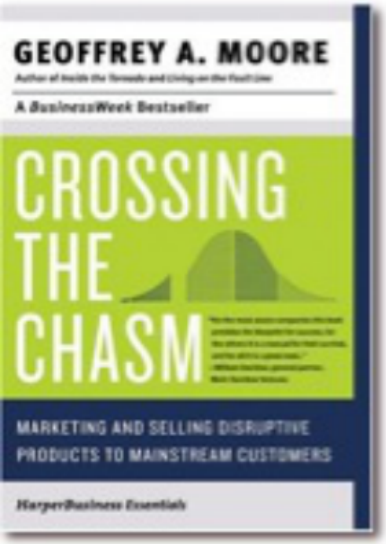
1. Big Market?
2. Winning Strategy?
3. Excellent Team?

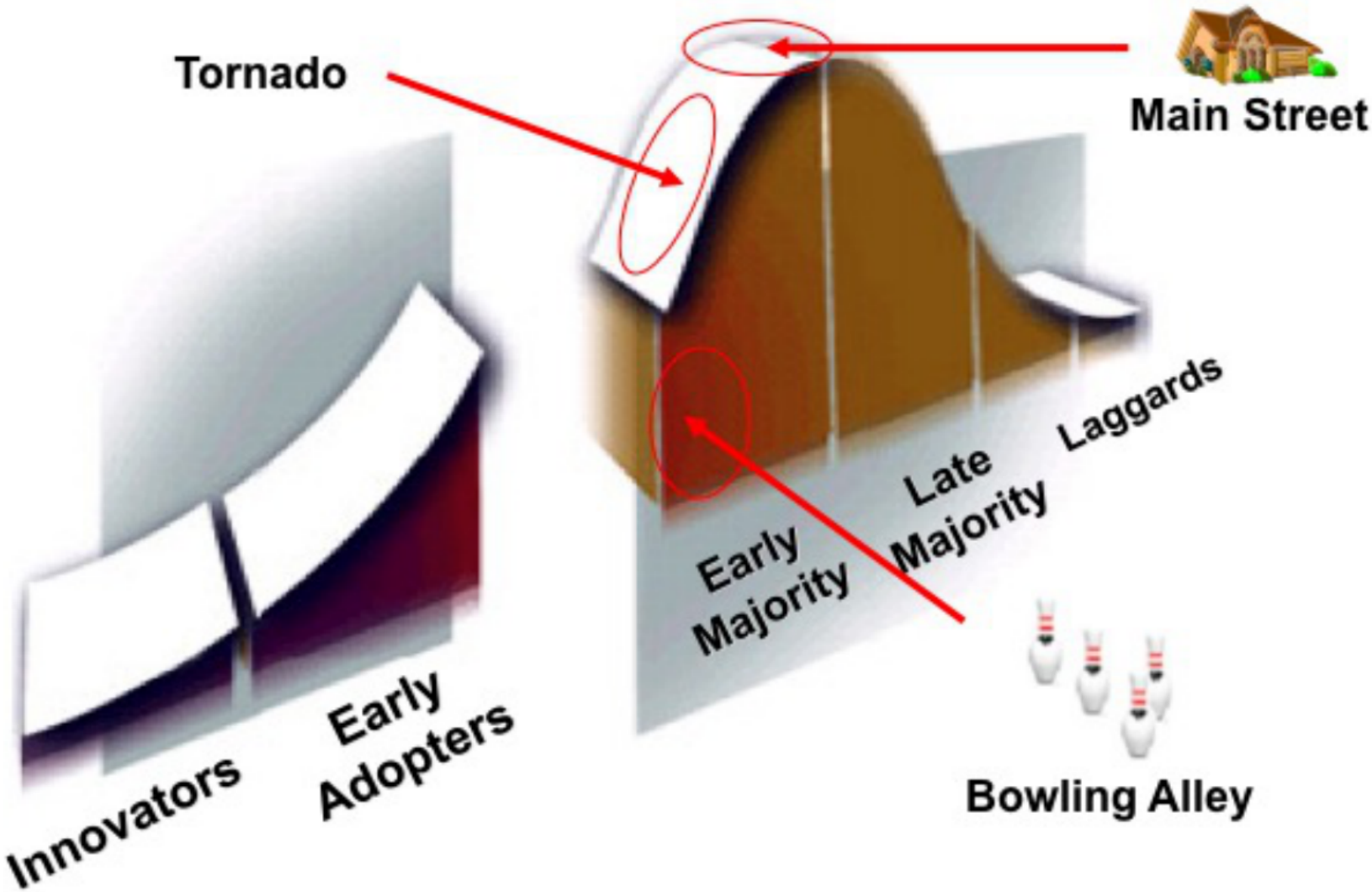
Reference: Randy Komisar, KPCB

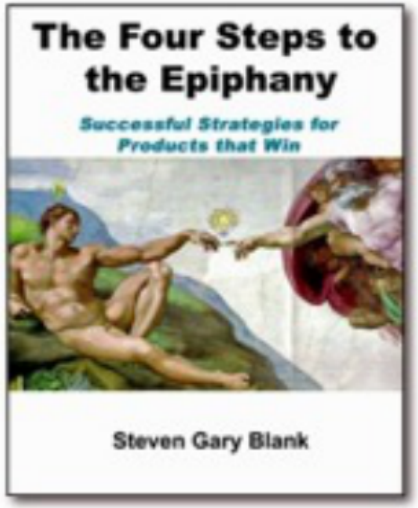
Framework #5: Risk Reduction



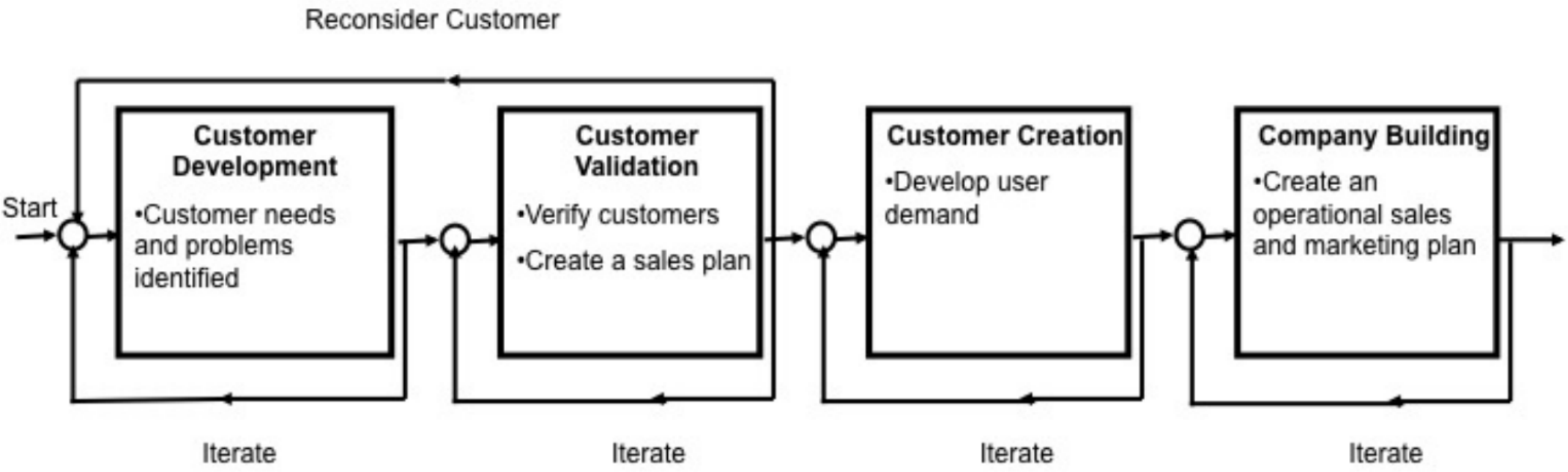
Framework #6:
Moore's "Crossing The Chasm" Model and Positioning Statement Template







#7 Blank's Customer Development Process



"Get out of the building" and talk directly with customers, users, and partners.

Framework #8: Kaplan's Startup Race

(1) Founding:

An entrepreneur begins with a vision and shares of stock in the new venture.

Entrepreneur trades stock for ideas, money, and people

Value has been successfully created.

(2) Seed Stage:

- Venture capitalists provide money in return for stock
- Employees join via friends & associates in return for cash salary and stock options
- Ideas become intellectual property which represents the initial value in the company

A race against time to create value and reduce risk

(4) Exit Stage:

- IPO or M&A
- Entrepreneur, investors, and employees can cash in stock for money
- A viable company has been created or expanded
- Each entrepreneur continues to build the company, retires, or starts the game again

Further growth is delayed until milestones are reached and risk of failure is reduced

(3) Growth Stage:

More money, ideas, and people are obtained, but for much less stock than in the earlier stage due to lower risk

Company balances earning cash, taking investment, and spending cash to create value

Reference: Start-Up by Jerry Kaplan