

***PROJECT, PRODUCT OR COMPANY?***  
***METAPHORS TO EVALUATE PATHS TO THE MARKET***  
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# Metaphors - paths to the market

- **Project** → license it to someone else
  - (competitive landscape tough, "rent the business model from someone else)
- **Product** → build it to sell
  - (it's a niche business, build product(s) - rent most of the business model)
- **Company/Platform** → build a sustainable business on a platform approach
  - IPO potential, but M&A more likely in biotech space
    - the customer isn't really the public any more, it's feeding the BioPharma pipeline!



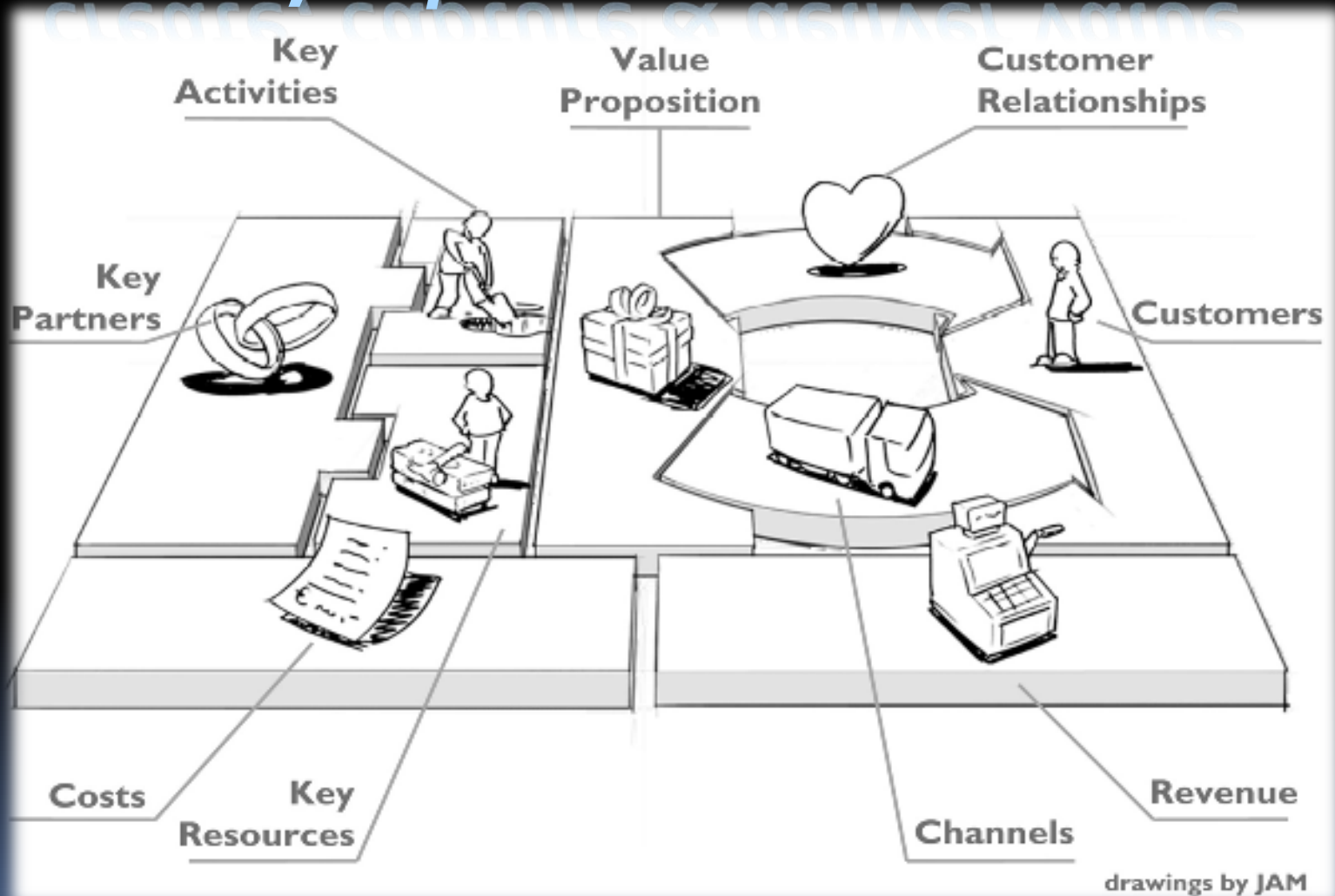
# *Where can you create & capture the most value?*

- Where does the most value accrue?
  - Generally in the sale of a product or service  
→ in “the exchange” (the one who delivers the value)
  - Who has the power in the negotiation?
    - to the one who has the business model to deliver value to the customer?
    - to the one who invents or creates the product?

# Concept 1 - The Value Chain



# Concept 2 – The Business Model Canvas create, capture & deliver value



# *Capturing Value from IP*

- Value of IP is captured from the business model.
  - Create and build a business model appropriate for the innovation
    - New venture
  - Extend your own business model (build it and deploy it)
    - Or, spinoff a new venture
  - Rent (or lease) parts of a business model from a partner for your technology
    - Employ open innovation by leveraging partnerships
  - License the technology/IP



# *Get out of the building!*

- Understand the market
  - Define the unique, differentiable and sustainable value you create and need in the market
  - Customer development (patients, physicians, providers, payers, regulators → talk with them!
- Understand the risks, and how they will be reduced over time (technology, market, team, regulatory, reimbursement)
  - Explore different business model options
- Develop a lean and capital efficient path forward
  - Market/Customer development – validate need
  - Product development – validate product/market fit
  - Be prepared to respond to market input and feedback (pivot as dictated by the market)

## Concept 3 - The Quick Screen



*Does it fit the Five Anchors of a Good Opportunity?*





# *Other Big Questions?*

- Reconcile your objectives vs. what is possible in the marketplace
  - Create a therapeutic company (FIPCO) and attract management to grow it?
  - Start a RIPCO, tool company or diagnostic, and leverage partnerships to reach the market?
  - Commercialize a technology that is useful for biotech drug discovery, and create niche service or product business(es)
  - Advance R&D and commercialization and then lease a business model to advance it



# *Some Facts*

- A company (startup or existing) is required for commercialization → can't be done in academia
- A NewCo may (or may not) be required to achieve your objective
  - Think about what you can and cannot achieve in a startup vs. a partnership/license to an existing company
  - Single product companies don't live long lives (even if they can get funded)

# *Two Sides of Innovation*

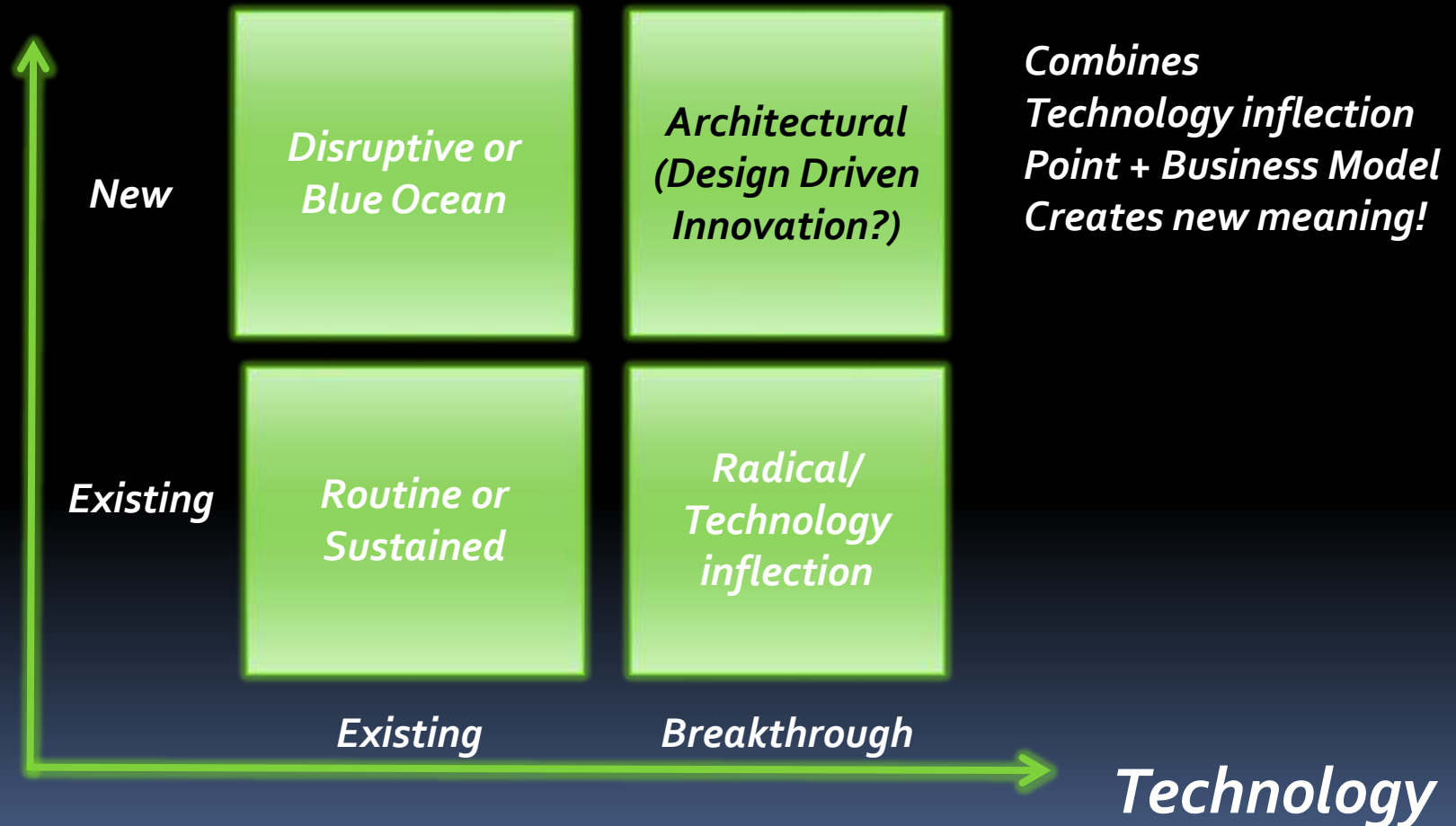
→ in reality it lies between

- Technology Push → application of disruptive technology drives change in the market
  - Radical Innovation - Genomics, CRISPR
- Market Pull → market need and changing conditions attracts innovations and applications
  - Business Model Innovation - Personalized medicine, digital medicine with AI/ML

# Concept 4 – The Innovation Map

Ref. Gary Pisano (HBR , June 2015)

## Business Model

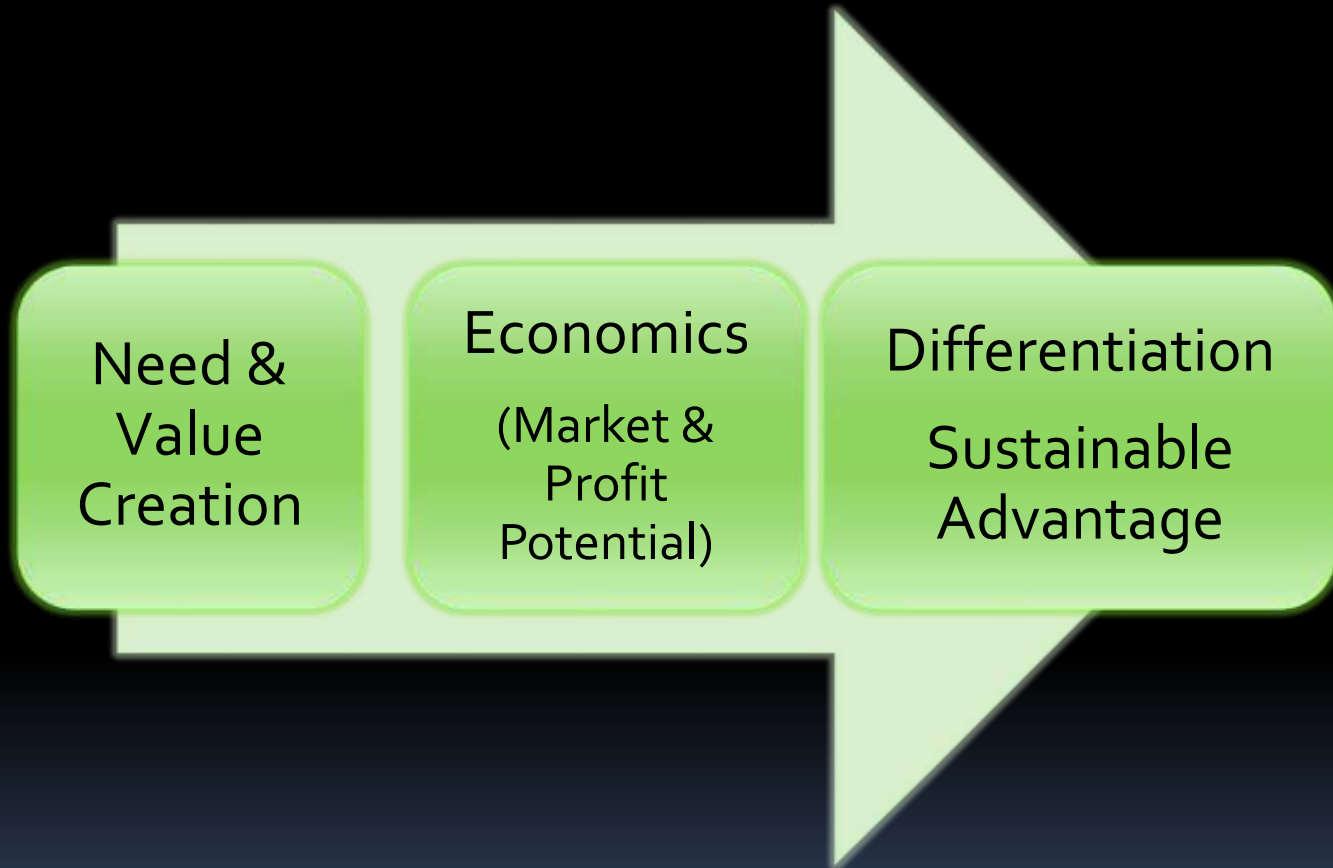




# *You Need a Business Model!*

- Commercialize your product by understanding your technology and your market
  - Invention deals with technology
  - Innovation deals with business
- Business Model – Creating, Delivering and Capturing Value.
  - Customer facing side
  - Company facing side
  - Which parts do you rent, and which parts do you build?

# *The Business Opportunity Screen*



*Follows Quick Screen for more in depth analysis*

# Business Issues → Financing Strategy

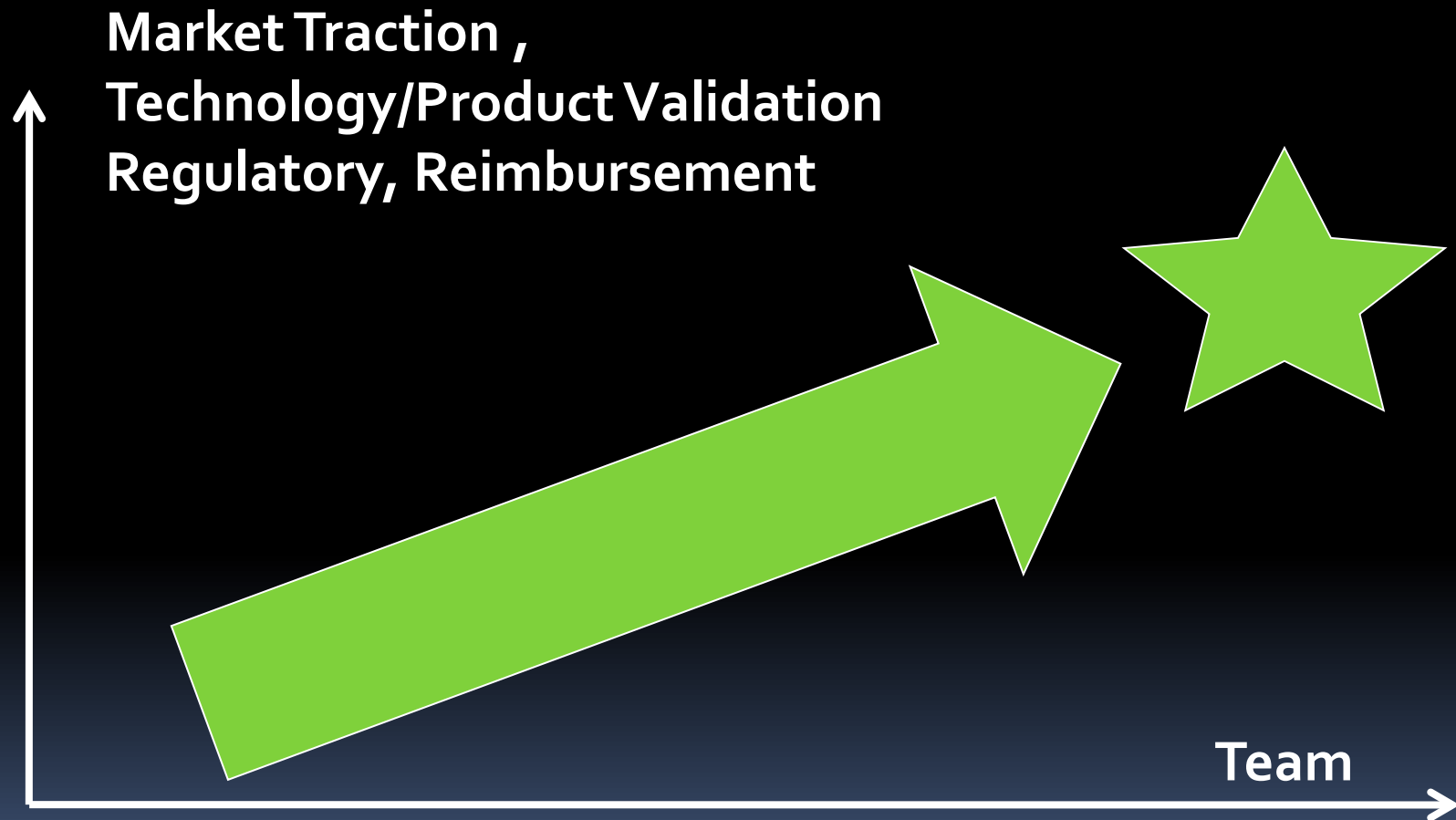
## *Business Issues*

- *A Three Dimensional Screen*
  1. Opportunity for Unique Value Creation and Strong Customer/User Need
    - Is it an opportunity?
  2. Monetary (Economics)
    - Can/how you make money?
    - Can you make enough money to pay back investors with good IRR?
  3. Differentiation/Competitive Advantage
    - Can you win? Competitive advantage and differentiation.

## *Financing Strategy*

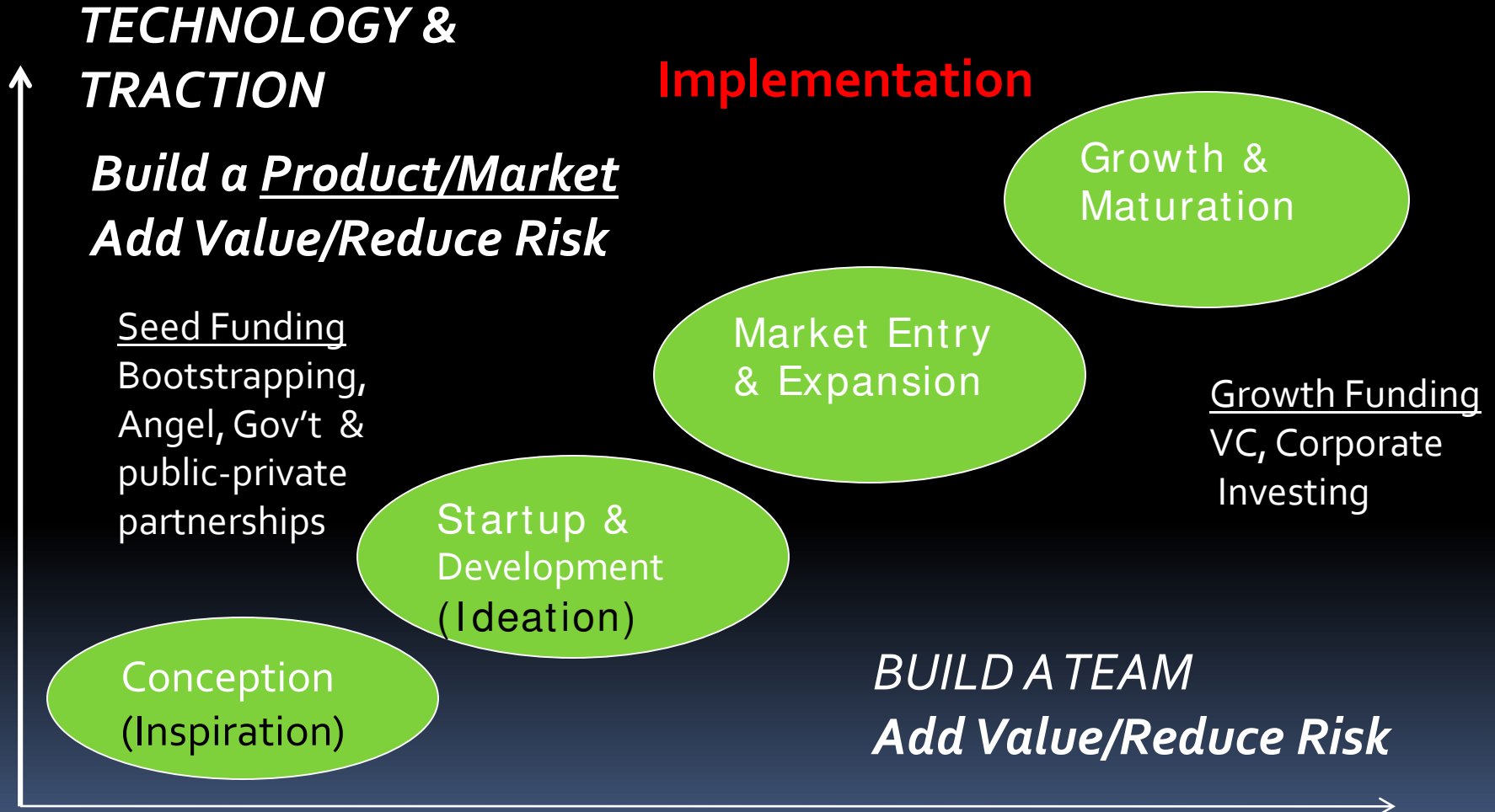
- *Considerations include:*
  - How big can business become?
  - How much return on investment?
  - How long to positive cash flow?
  - How much money is needed
  - How long to exit/return?

# *Increase Value - Reduce Risk*



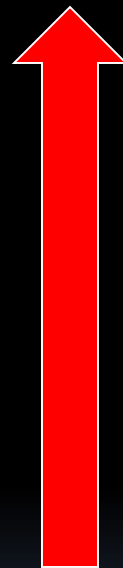


# *Innovation/Company Life Cycle*



# Positioning Matrix

*Uniqueness*



Product  
(Only part of  
solution)

Company



Find your next  
research  
project!

Project  
(Competitive  
issues)



*Value to Customer/User*

# *Project*

## ■ Opportunity - low

- Small market
- Value to customer not compelling

## ■ Monetary – low

- Money making potential insufficient to provide ROI

## ■ Competitive Advantage - low

- Competitive companies
- Other possible solutions
- IP possible but limited claims, and freedom to operate limited

## ■ Approach

- License to existing company
- Fund development via government and partner
- Earn money via royalty, fees and milestones

# Product

## ■ Opportunity - medium

- Niche market
- Single product, not complete solution

## ■ Monetary - medium

- Small but appealing
- Relatively low investment

## ■ Competitive Advantage-medium


- Complementary solution to market leaders

## ■ Approach

- Launch company to develop product
- Fund via government and/or partnerships
  - Possible angel funding
  - R&D in university and company
  - Company continues or exits via M&A
  - Single product companies don't last long!
- Consider acquiring other players to build more significant opportunity

# Company

- Opportunity - high
  - Compelling solution to major problem in growing market > \$200M addressable
- Monetary - high
  - Potential for significant revenues and profits
  - Good risk/reward ratio
    - VC and partner fundable and modest amounts
    - Exit potential in investor time horizon with high IRR > 30%
- Competitive advantage - high
  - Unique, differentiable solution
  - Sustainable competitive advantage with strong IP
- Approach – build a sustainable organization with multiple product potential (a platform)
- Advance the science and IP to demonstrate the potential (reduce the risk)
- Build a fundable team
  - Balance science with business (marketing, strategy)
- Line up winning funding sources
  - Angels for risk reduction
  - Strong VC syndicate early
  - Partnerships



# *Commercialization isn't easy & biotech is really hard?*

- “Entrepreneurs must lack the prudence gene.”
  - Geoffrey Moore, author of “Crossing the Chasm”



# *New Special Edition of Journal of Commercial Biotechnology*

- “The Business of Commercialization and Innovation”
  - Part One – Industry Agnostic Overview
  - Part Two – Overview of Biotech, MedTech, and Digital Medicine and Mini Case Studies
- *J. Commercial Biotechnology, Vol. 24, No.1 (2018), Arthur A. Boni, Special Edition Editor*
  - *And, on Amazon*