



Medical
Device
Accelerator

Healthcare Innovation: Pathway to Success

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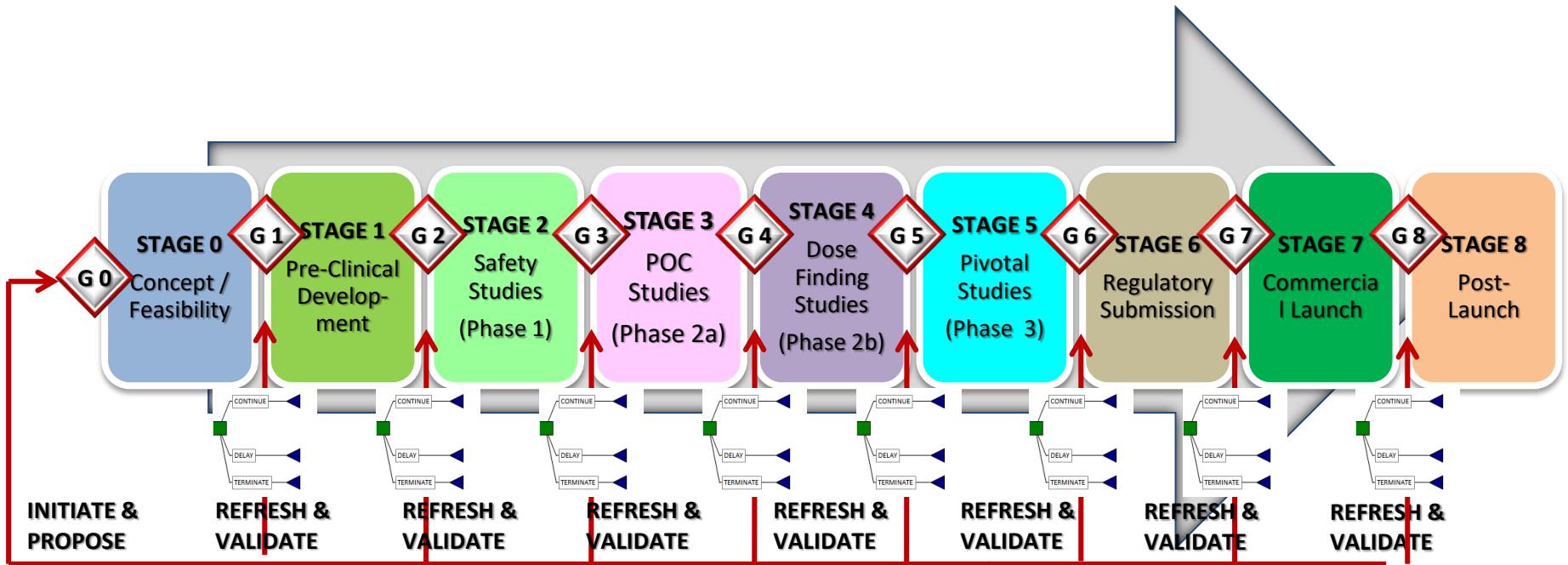
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Important entrepreneurial concepts

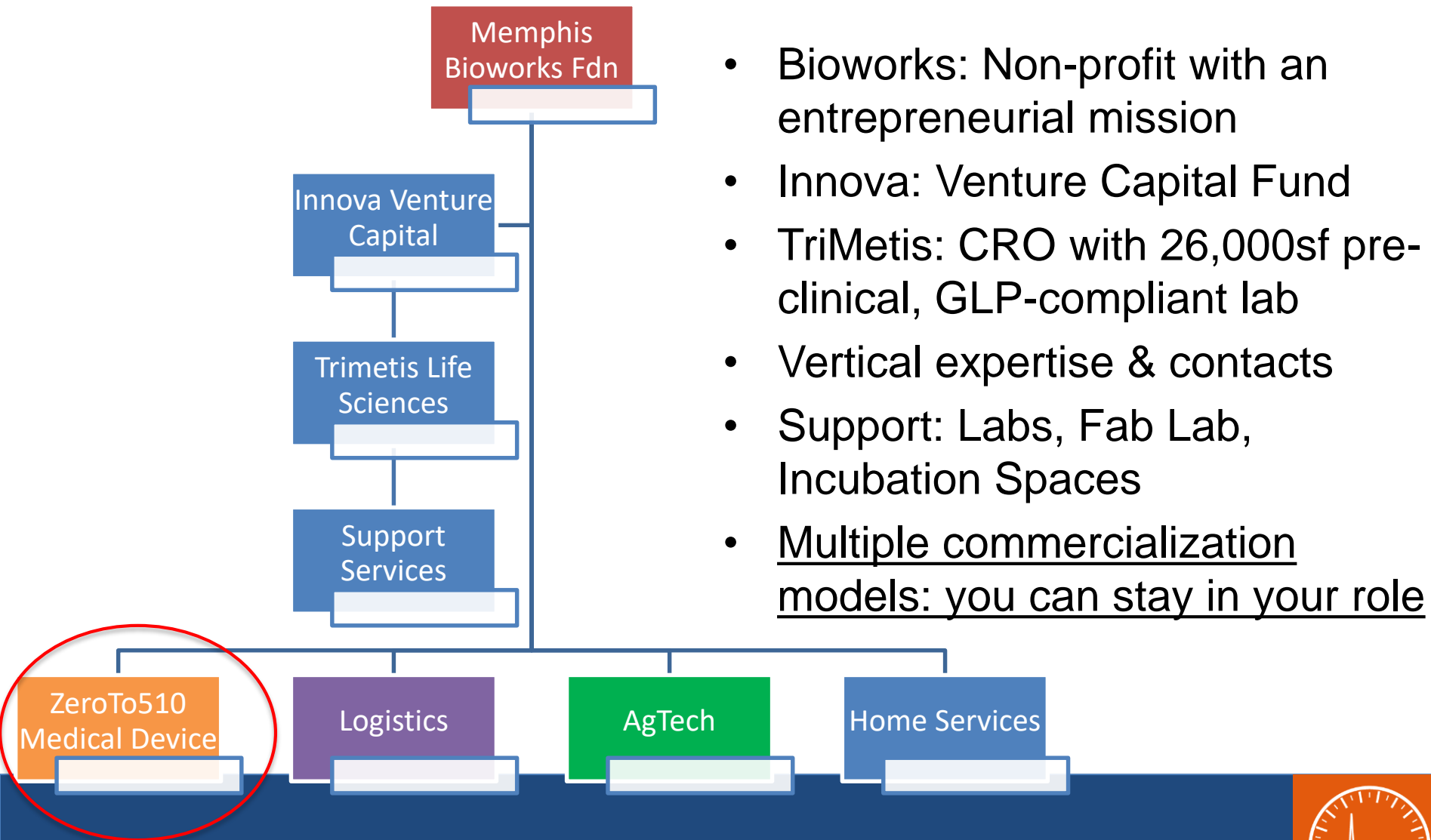
- Necessity is the mother of invention.
- Most innovations fail
 - Use this reality as your null hypothesis
 - If it's going to fail, have it fail fast and cheap!
- Team > I
- The value of your invention is relatively simple:
 - $P(\text{success}) \times \text{NPV}$
- Hurry but don't rush
- We most value Need, Team, Traction

$$P(\text{Success}) = P(S1) \times P(S2) \times P(S3) \times \dots$$



**MEMPHIS HAS A ROBUST
ENTREPRENEURIAL ECOSYSTEM**

4 Pillars of innovation to reinforce our economic strengths



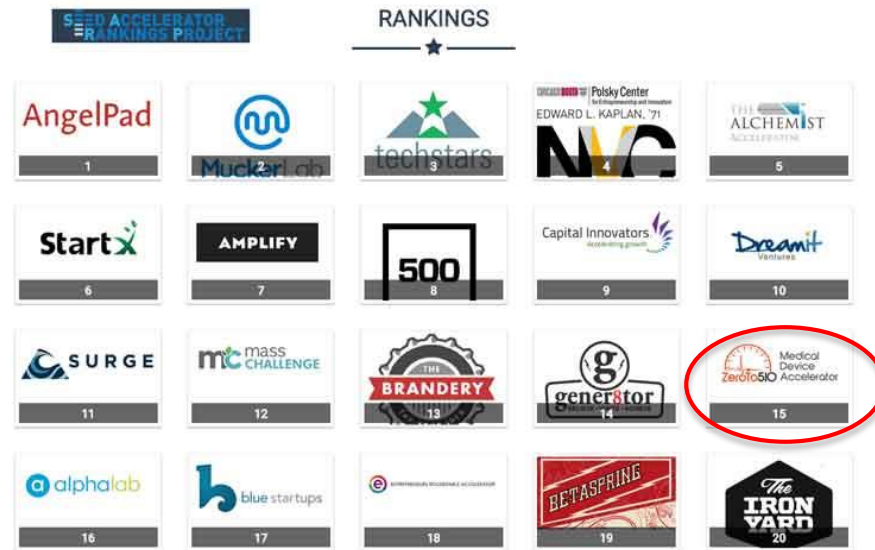
- Bioworks: Non-profit with an entrepreneurial mission
- Innova: Venture Capital Fund
- TriMetis: CRO with 26,000sf pre-clinical, GLP-compliant lab
- Vertical expertise & contacts
- Support: Labs, Fab Lab, Incubation Spaces
- Multiple commercialization models: you can stay in your role

ZeroTo510 is a nationally recognized Accelerator specializing in Medical Device



Med-Tech
INNOVATION

Companies Accelerated	24
Investment	\$13.5M
Got to Market	7
Fails	7
Exits	1



Healthcare innovation presents unique challenges

- Many/most require regulatory approval
- IP defines and protects your idea, but the clock starts ticking the day you file
- Relatively long development horizons
- Development can require significant capital
- Reimbursement can be elusive
- Purchasing process can be opaque

Our pathway

1. Customer Discovery: Define the problem/issue
2. User Needs Definition:
 - What would the ideal solution look like?
 - The Minimal Viable Product (MVP) solution?
3. Product definition: make choices for MVP, chart a course for lifecycle management
4. Design & production: verification/validation
5. Prepare regulatory dossier
6. Launch

Our Business Model Canvas is designed to help you build a coordinated launch plan

Customer Discovery	User Needs	Launch Features/Claims	Pre-Clinical Plan
	Product Definition	Regulatory Pathway	Mfg/Pkg/Quality
		Price/Reimburse.	Commercialization Plan
Patent Strategy			

1. Customer Discovery

What Problem Are You Solving?

- What problem are you solving?
 - Don't be a hammer (invention) – looking for a nail (problem)
- Identify the customers:
 - Users
 - Stakeholders
 - Influencers
 - Gatekeepers
- Understand their relative “pain”

Hint: you don't have a problem until someone will pay for a solution!



Customer Discovery: Cast 21

How did you like your previous cast?

- Love:
- Like:
- Dislike:
- Hate:

2. User Needs Definition:

How would you improve your cast?

- Have each customer type help you build the ideal solution
- Try not to limit their creativity
- Do not sell them on your idea!
- Understand the relative importance of each suggestion
 - Expect
 - Need
 - Want/wish

A simple table can help you organize feedback and spot trends

Customer	Type	Expects	Needs	Wants
Steve	Patient			
Chris	Nurse			
Stefan	Physician			
Richard	Hospital procurement			
Rebecca	Office Manager			
Lakita	IP Attorney			
MRC-X	Regulatory			
Keisha	CFO			

3. Define your product



- Goals:
 - Define the Minimal Viable Product that solves their problem
 - Lay out a lifecycle management plan for V2.0
- Choices, choices, choices!
- This will likely be an iterative process with your previous interviews

The original iPhone is the ultimate example of Minimal Viable Product!

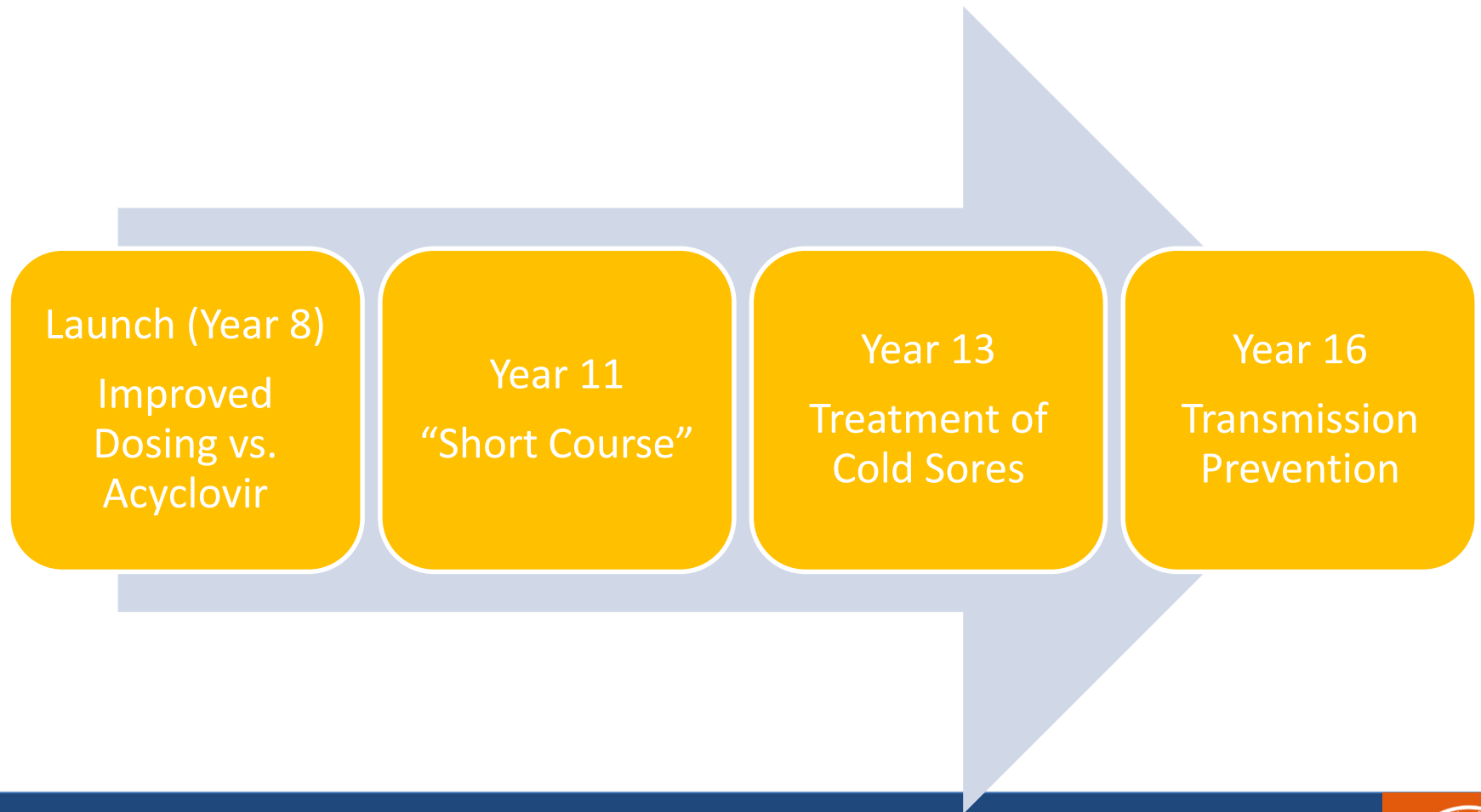
Value Proposition

- Wide-screen iPod with on-screen touch controls
- Mobile phone
- Internet communicator

They relied on
OUR DISSATISFACTION
for future improvements



VALTREX: great example of lifecycle management, “Incremental Blockbuster”



4. Design & production: Verification and Validation

- Verify with customers that product meets their stated and implicit needs
- Validate via testing that product performs in expected & repeatable
- Identify manufacturing partner
- Regulatory filing requirements

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