

ENTREPRENEURSHIP **for Computer Science and** **Engineering**

Lecture 2:

Founding Dilemmas

(Founding Team Dilemmas)

Morteza Zakeri
(zakeri@aut.ac.ir)

Outline

- Last Session:
 - Types of entrepreneurship
 - More perspectives on entrepreneurship
- This lecture
 - The reality of startups
 - Should I be a *founder*?
 - If so, solo or team?
 - Founding team dilemmas: The three *R*'s model

Passion: the Necessary but Not Sufficient Condition

- Starting a company **is not easy**
 - It is the exact opposite
- Without a **passion**, you will not be able to keep going through good and tough times (which will certainly happen, without a question!)
- In fact, without passion, you will never succeed in building a startup
- Distinguish yourself from “entrepreneurial tourists” or “exploratory entrepreneurs” who are interested in learning entrepreneurship, but are not ready for a difficult and humbling, yet promising journey

Passion Checklist

- First answer to these questions

	I Understand That:	Yes	No
1	Founding a startup will be really, really hard and I still want to do it		
2	It will be a lengthy process loaded with humiliating failures along the way, and I must learn from them and not take them personally		
3	I cannot potentially do it alone		
4	The path to success is not an algorithm with a set of rules to follow, but an iterative process where I can only increase or decrease the odds of success, but I cannot guarantee anything. Even if I achieve success, it is only temporary		
5	The goal is to make an “anti-fragile” organization– one that gets stronger over time when faced with problems, failures, uncertainty, and surprises		
6	When others provide advice, I will listen, but I will also recognize that it is up to me to choose which advice to implement, and how to implement it, since only I own the final results and accountability		
7	I will have to leave my comfort zone every day to grow and continue to be successful		
8	I am doing this for more than the money. I believe in my cause and my team		

If you did not answer “Yes” to all of the above questions, you are probably not yet ready to start a company.

Why Entrepreneurs Found Startups?

- We answer this question and others using *qualitative* and *quantitative* studies from the **founder's dilemmas book**
 - by **Noam Wasserman**
- Wasserman used surveys for **10 consecutive years** from 2000 through 2009, creating a unique dataset that includes **9,900 founders**
 - more than **19,000** executives in total
 - from **3,607 startups**



Motivations for *Female* Entrepreneurs

- Top four motivations for *females* in their 20s

Rank	Female Entrepreneurs in 20s (Rank for Female Non-Entrepreneurs)	Female Non-entrepreneurs in 20s (Rank for Female Entrepreneurs)
#1	Autonomy (#12)	Recognition (#10)
#2	Power & Influence (#13)	Affiliation (#12)
#3	Managing People (#10)	Security (#13)
#4	Altruism (#5)	Lifestyle (#11)

Motivations for *Male* Entrepreneurs

- Top four motivations for *males* in their 20s

Rank	Male Entrepreneurs in 20s (Rank for Male Non-Entrepreneurs)	Male Non-entrepreneurs in 20s (Rank for Male Entrepreneurs)
#1	Power & Influence (#10)	Security (#13)
#2	Autonomy (#13)	Prestige (#6)
#3	Managing People (#9)	Financial Gain (#4)
#4	Financial Gain (#3)	Affiliation (#11)

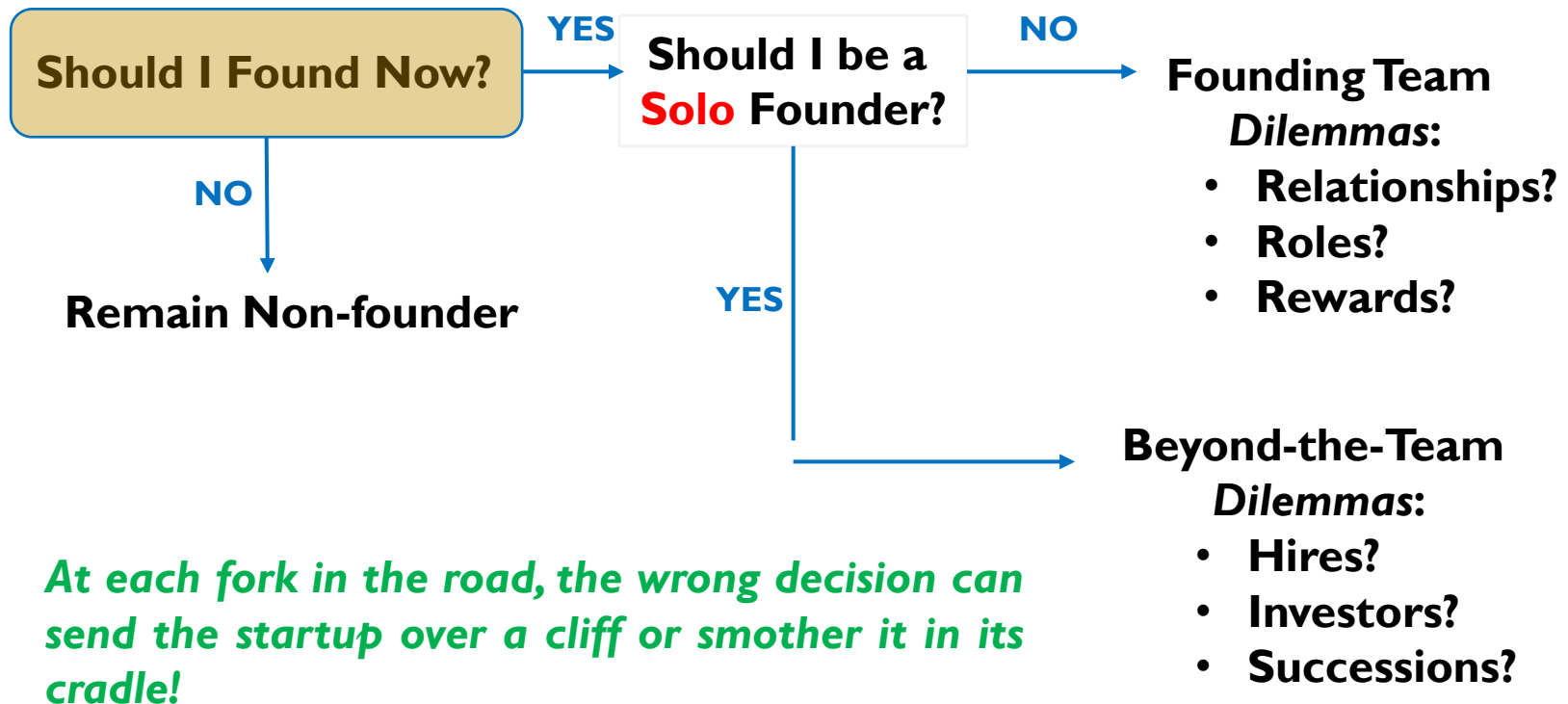
Motivations for Entrepreneurs

- Research shows that motivations for entrepreneurs remain *relatively* stable (but not for non-entrepreneurs) throughout life
- Two of the motivations (i.e., *autonomy* and *power & influence*) persist throughout the 20s, 30s, and 40s of male entrepreneurs, but in their 40s they also become motivated by *altruism* and *variety*
- Male entrepreneurs lag female entrepreneurs by a decade when it comes to prizing variety and by two decades when it comes to altruism!

The Reality of the Founding Process

- It is unfortunate but true that if entrepreneurship is a battle, most casualties stem from **friendly fire** or **self-inflicted** wounds
- The **founding process** is often **chaotic** and **nonlinear**, with founders improvising rather than following a script to build their startups
- Founding decisions need to be made by **design** and **NOT** by default
 - In particular, founders need to see past their instincts and natural propensity for wishful thinking.
 - They need to *expect the best, while preparing for the worst.*
 - They need to make decisions *strategically* rather than *reactively*.

Sequence of Founding Dilemmas



Should I Found Now?

- Research shows that the *stage of life* does not seem to be a strong factor in starting one's own business (*Noam Wasserman, the founder's dilemmas*)
 - Technology founders averaged 13.1 years of prior work experience, and life sciences founders averaged 15.9 years
 - A full 35% of founders had worked 20 years or more before founding, including 47% of life sciences founders
 - A distinct subset founded with only 0 to 4 years of work experience

Found early in career...

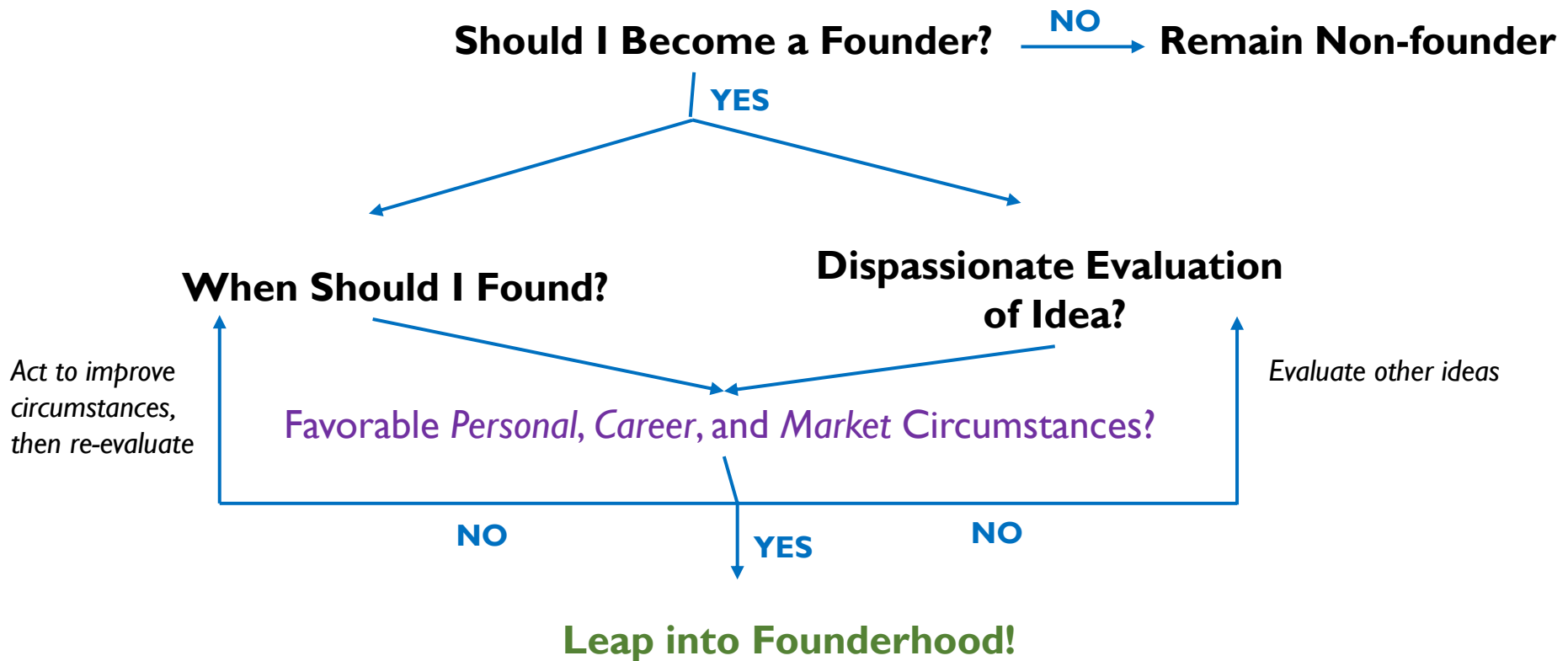
- ... before golden handcuffs get too strong
- ... before family handcuffs get too strong
- ... before becoming too specialized

Wait to found until...

- ... build more *human capital*
- ... build more *social capital*
- ... build more *financial capital*

Where is the “sweet spot”?

To Locate “Your” Sweet Spot...

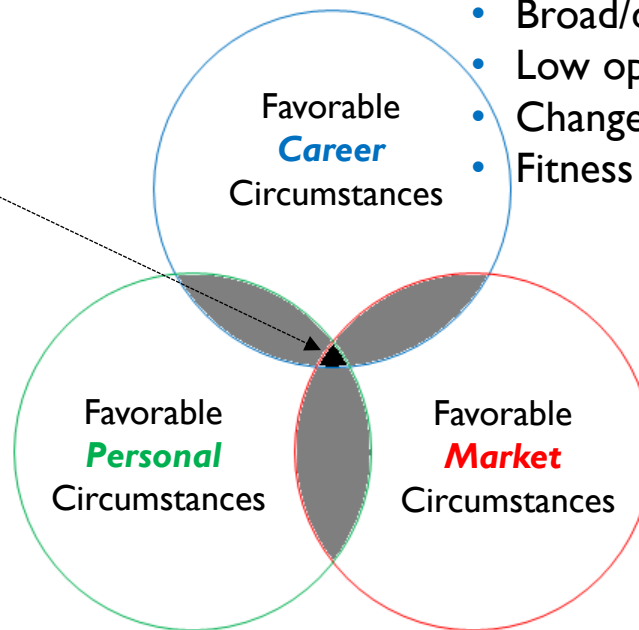


Locate “Your” Sweet Spot

- If ...?

If you are at the intersection of these three “circles”, you should become a founder!

- Entrepreneurial motivations
- Supportive family situation
- Positive role models
- Cash cushion



- Relevant work experience & mental model
- Broad/deep work experience
- Low opportunity costs
- Change in golden handcuffs
- Fitness to found

- Big opportunity
- Favorable context
- Customer willingness to pay
- Ticking clock

What If?

“Gray-Area Obstacles”

“I have everything but an idea”

Potential Solutions for Getting to the “Bull’s Eye”

- Top-down evaluation of potential markets, customers, and business models
- Find “idea founder” whose own holes match your strengths
- Participate in other startups
- Attend conferences and read journals and blogs in your area of interest/expertise

What If?

“Gray-Area Obstacles”	Potential Solutions for Getting to the “Bull’s Eye”
<i>“I have everything but an idea”</i>	<ul style="list-style-type: none">▪ Top-down evaluation of potential markets, customers, and business models▪ Find “idea founder” whose own holes match your strengths▪ Participate in other startups▪ Attend conferences and read journals and blogs in your area of interest/expertise
<i>“But I am not armed for battle yet”</i>	<ul style="list-style-type: none">▪ Work more on your human, social, and financial capitals▪ Find complementary cofounders, advisors, or mentors

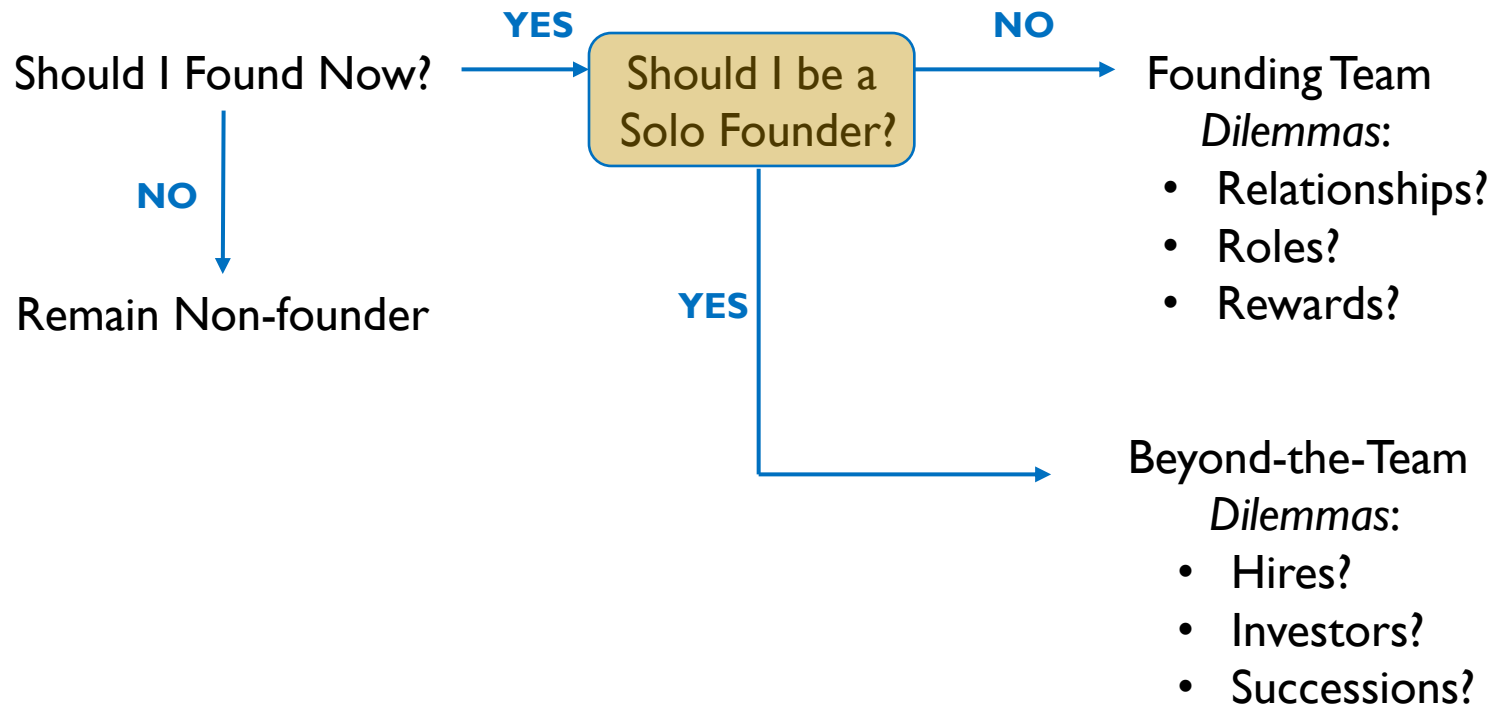
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<i>“But I am going to hurt my family”</i>	<ul style="list-style-type: none">▪ Probe their fears and openly explore ways to address them▪ Explore whether part-time founding is feasible

What If?

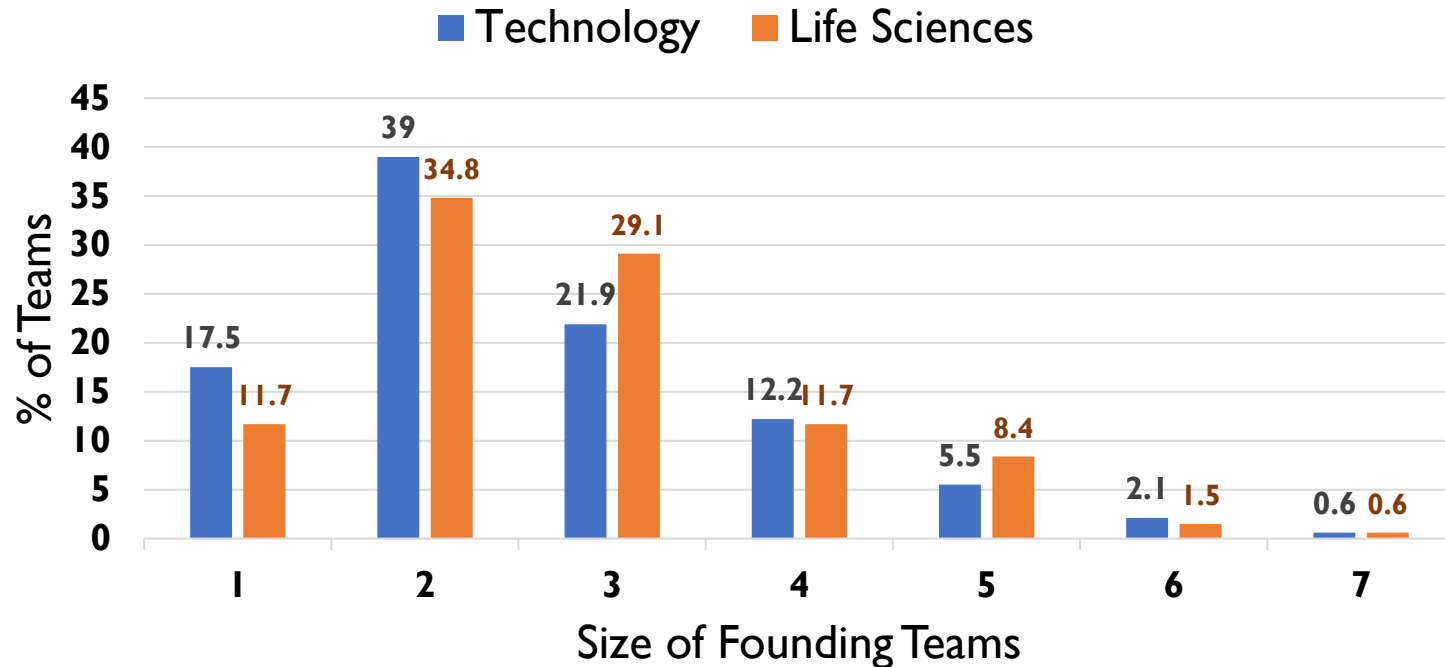
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<i>“My handcuffs have gotten too strong.”</i>	<ul style="list-style-type: none">▪ Save money to supply cash cushion and seed capital▪ Maintain low “personal burn rate”▪ Make the leap and do not wait for negative shocks to release handcuffs!

Sequence of Founding Dilemmas

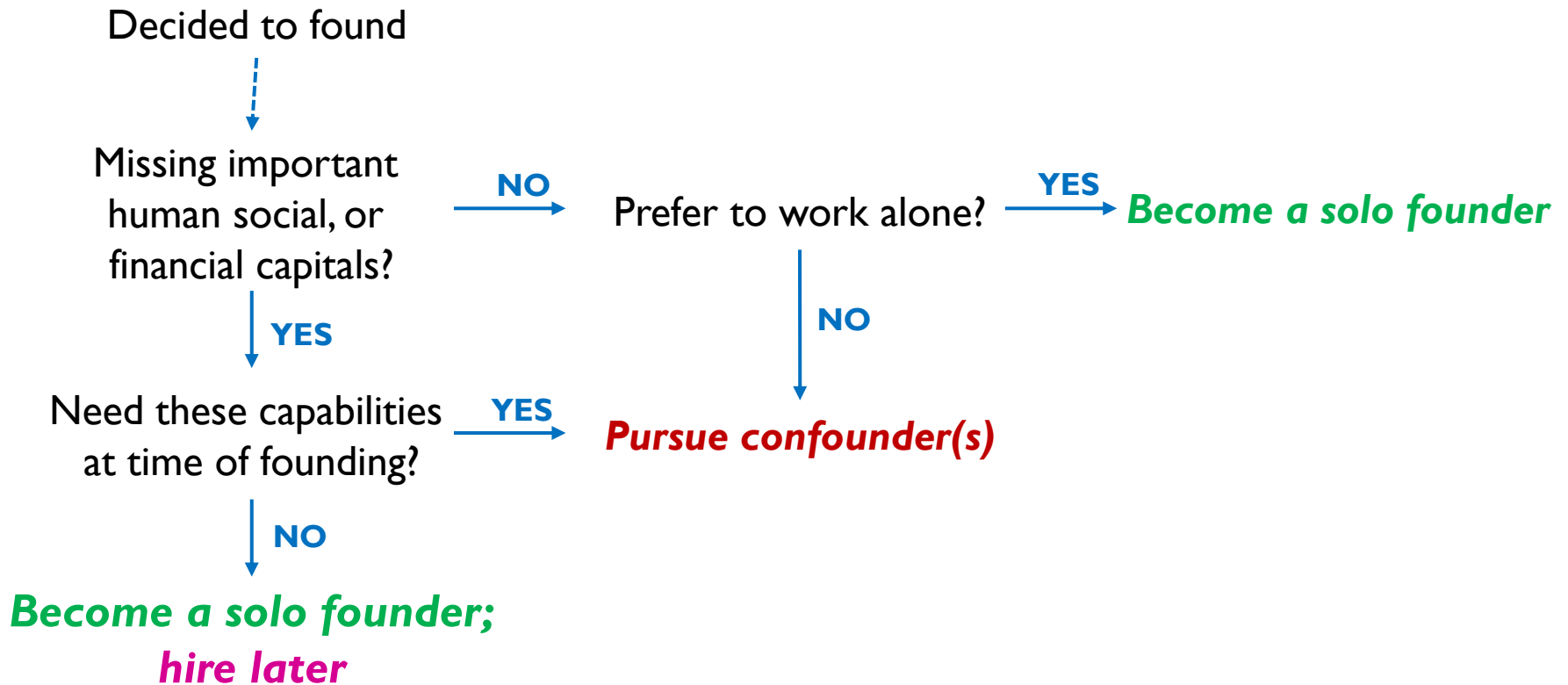


Sizes of Founding Teams

- Sizes of Founding Teams for Technology and Life Sciences



Central “Solo vs. Team” Questions



Solo vs. Team Dilemma

Solo-found when...

Build a founding team when...

- ✓ You have deep human and social capitals (and sufficient financial capital) that are relevant to the startup's industry

Solo vs. Team Dilemma

Solo-found when...

- ✓ You have deep human and social capitals (and sufficient financial capital) that are relevant to the startup's industry
- ✓ You have a strong preference for maintaining full control of all decisions

Build a founding team when...

Solo vs. Team Dilemma

Solo-found when...

- ✓ You have deep human and social capitals (and sufficient financial capital) that are relevant to the startup's industry
- ✓ You have a strong preference for maintaining full control of all decisions
- ✓ You do not have a strong need for support or validation

Build a founding team when...

Solo vs. Team Dilemma

Solo-found when...

- ✓ You have deep human and social capitals (and sufficient financial capital) that are relevant to the startup's industry
- ✓ You have a strong preference for maintaining full control of all decisions
- ✓ You do not have a strong need for support or validation
- ✓ The business is small and in a slow-moving industry

Build a founding team when...

Solo vs. Team Dilemma

Solo-found when...

- ✓ You have deep human and social capitals (and sufficient financial capital) that are relevant to the startup's industry
- ✓ You have a strong preference for maintaining full control of all decisions
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Build a founding team when...

- ✓ You have critical holes in human, social, and/or financial capitals

Solo vs. Team Dilemma

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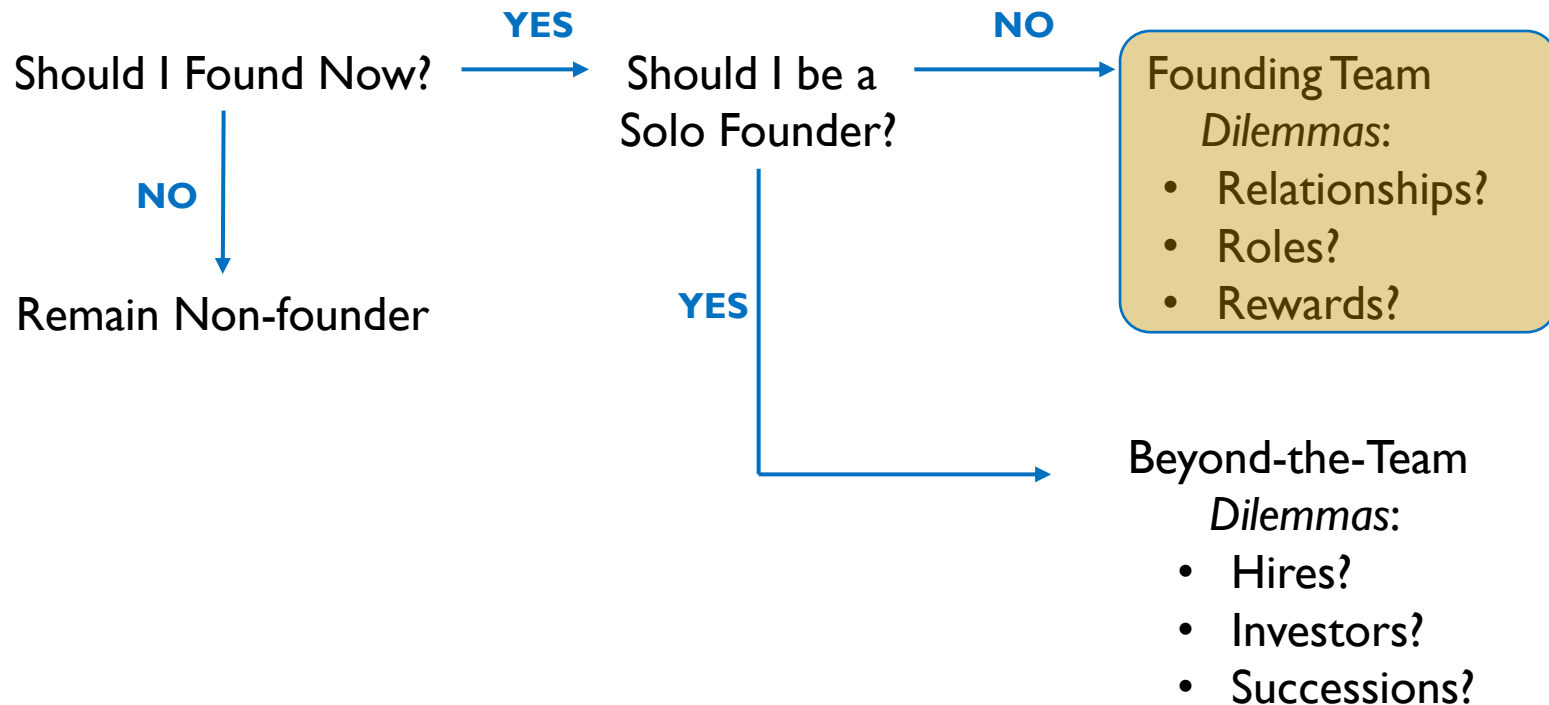
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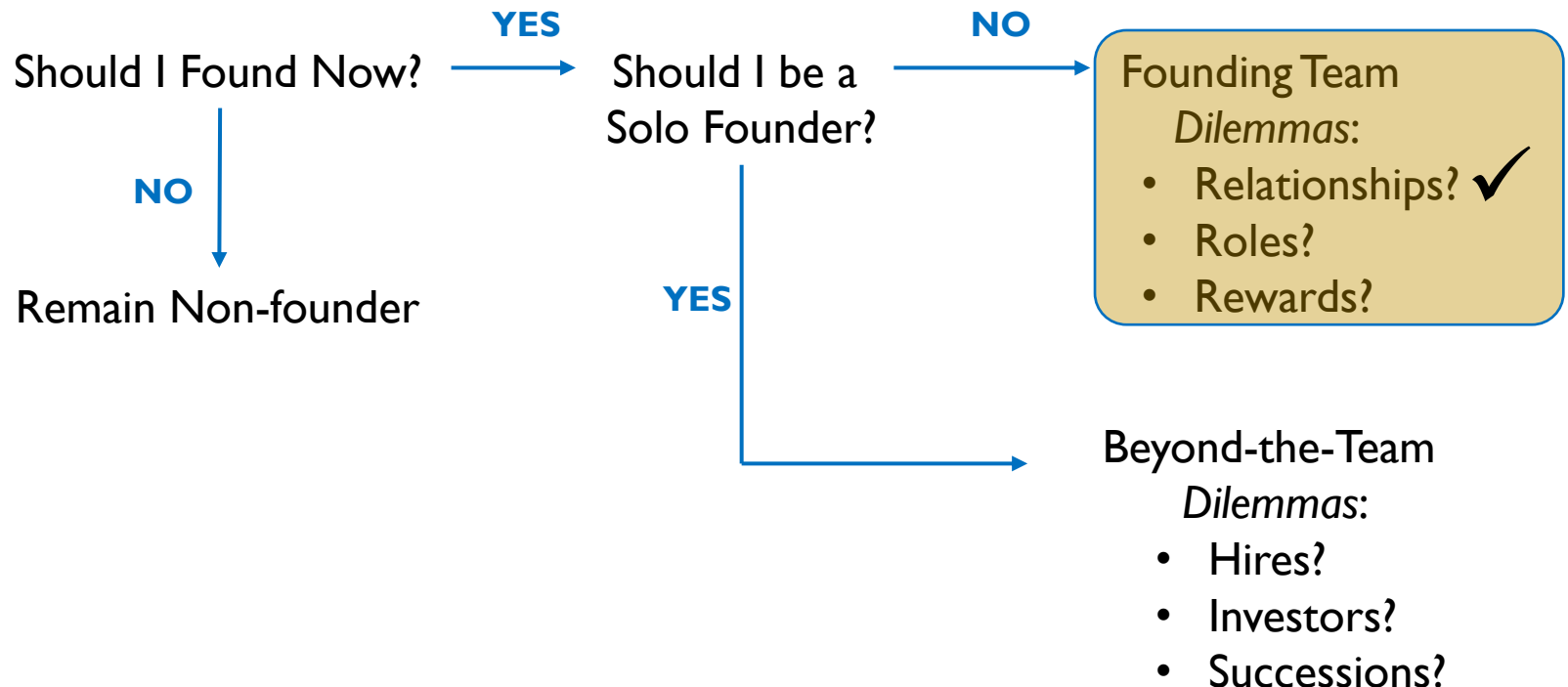
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Sequence of Founding Dilemmas

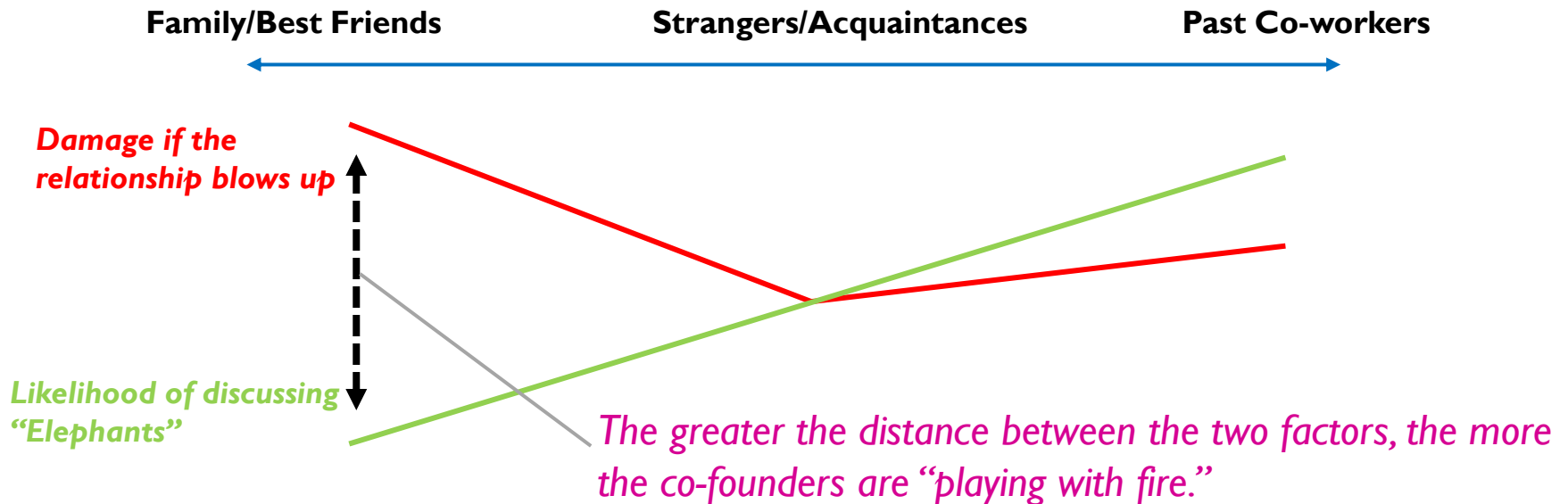


Sequence of Founding Dilemmas

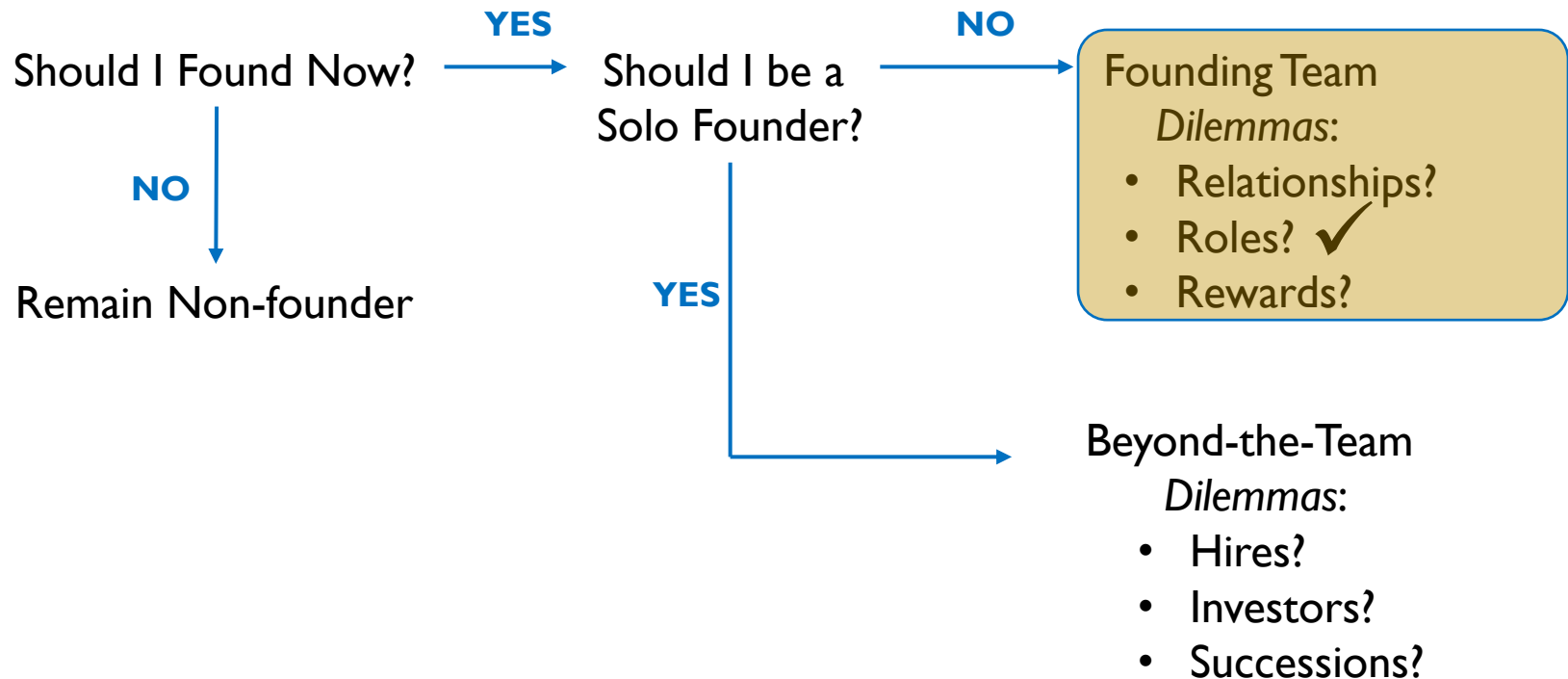


Relationships: The Playing-with-Fire Gap

- The type of *prior relationship* had a significant impact on team turnover



Sequence of Founding Dilemmas



Roles: Overlapping vs. Division of Labor

Roles	Strengths	Weaknesses
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**Division of
Labor**

**Overlapping
Roles**

Roles: Overlapping vs. Division of Labor

Roles	Strengths	Weaknesses
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Overlapping Roles		

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Homogeneous or Heterogeneous Team?

- A **solid** team should encompass at least **four** things:
 - A common vision (*homogeneous on this aspect*)
 - Shared values (*homogeneous on this aspect*)
 - Complementary networks (*heterogeneous in this aspect*)
 - Complementary skills (*heterogeneous in this aspect*)
- It may help to think about the balance and skills of your team in terms of the **3H model- Hacker, Hustler, and Hipster**
 - Who in your team is the “hacker”? (Hacker is the one who will build the product)
 - Who in your team is the “hustler”? (Hustler is the business person)
 - Who in your team is the “hipster”? (Hipster is the one concerned with the customer experience and design)

Egalitarian vs. Hierarchical Decision Making

- How can the team make decisions?

Egalitarian ←————→ **Hierarchical**

Advantages:

- Can help build trust among groups of strangers
- For teams of friends, affirms expectations of equal treatment

Disadvantages:

- Consensus-building often takes too much time; this may be problematic for high-velocity entrepreneurial environments
- Accountability is less clear

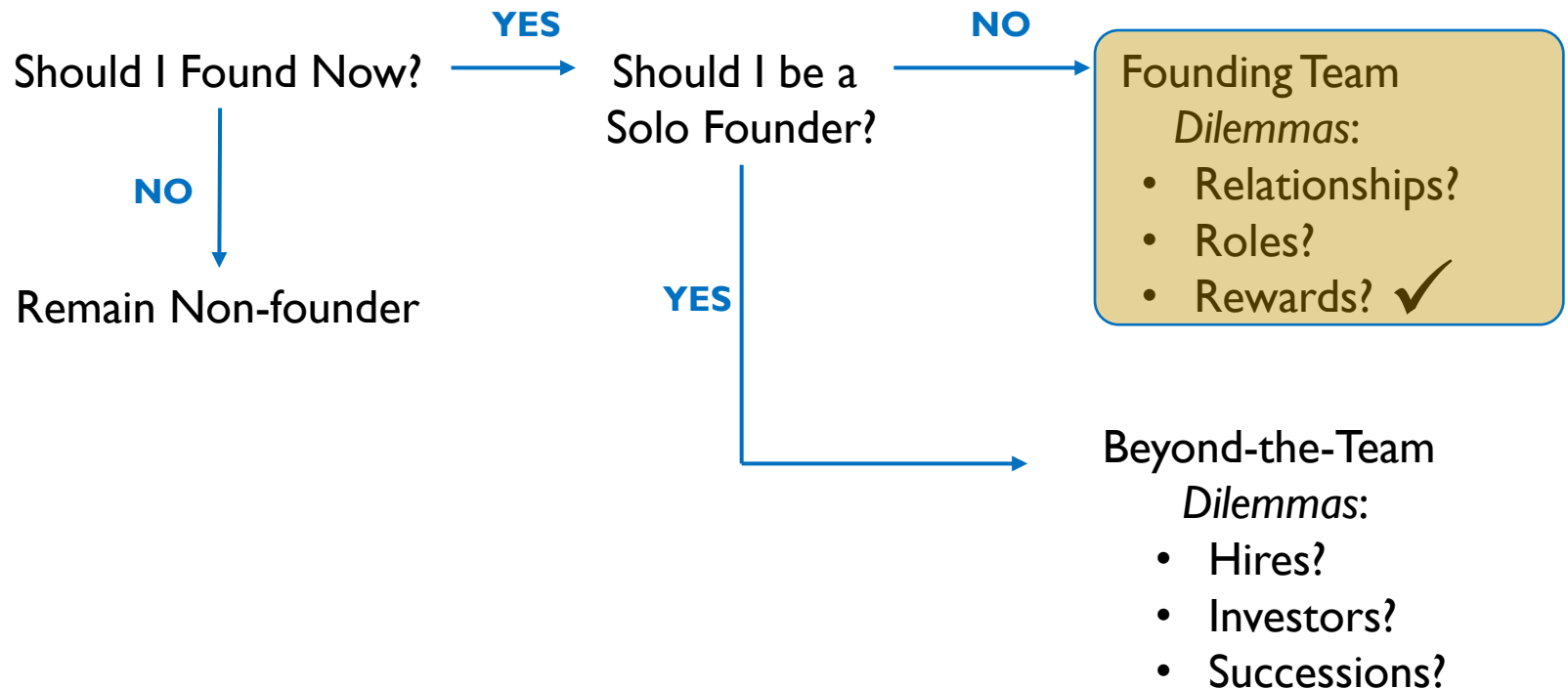
Advantages:

- Decision-makers can quickly mobilize resources behind a new initiative
- Clear accountability

Disadvantages:

- Complex environments cannot be processed by one person; input from multiple people with specialized knowledge usually leads to better decisions

Sequence of Founding Dilemmas



Rewards: When to Split?

- When and how to split rewards

Split Earlier ←————→ **Split Later**

- Attract key players who need equity incentives
 - If you have already worked extensively with cofounders in another startup
 - Negotiate calmly before you are under pressure to split
- Learn about cofounders' contributions
 - Solidify the startup's strategy and business model
 - Solidify roles
 - Learn about cofounders' commitment; strengthen incentives
 - Avoid continual renegotiations as things change

Criteria For Equity Splits

- There are no “right” answers and no objective criteria that can be used to split equity
 - The outcome is fully subject to negotiation between the founders
- However, research shows that at least **four** criteria can be utilized to help craft a sustainable agreement
 1. Past Contributions
 2. Opportunity Cost
 3. Future Contributions
 4. Founder Motivations and Preferences

(I) Past Contributions

- How much has the founder contributed to building the value of the startup so far?
 - **Idea Premium:**
 - Founders who contribute the original idea on which the startup is based have made a unique contribution to the venture
 - Research reveals an *idea premium* of 10% to 15% of extra equity
 - **Capital Contribution:**
 - Founders who have made larger contributions to the startup's seed capital should see a proportionate increase in their equity ownership

(2) Opportunity Cost

- What are the founders sacrificing to pursue the startup?
 - Are they *employed* or *not employed*?
 - If not employed, the opportunity cost will be lower
 - If employed, do they hold low- or high-level positions that they enjoy and give them financial security?
 - High-level positions entail a higher opportunity cost and, accordingly, a higher equity stake

(3) Future Contributions

- Most of the work required for the startup to be successful will come in the future, but these are hard to anticipate.
- How much can each founder be expected to contribute to the value of the startup down the road?
 - **Successful Serial Founders:** Research shows that these are usually given a premium of 7% to 9% of extra equity.
 - **Level of Commitment:** full-time or part-time?
 - **Titles:** Official positions influence equity splits, with CEOs receiving a substantial equity premium (*i.e.*, 14% to 20% of extra equity)

(4) Founder Motivations and Preferences

- Motivation affects how much priority a founder places on gaining equity (*benefit is long-term*) versus cash compensation (*benefit is short-term*)
- Personality (e.g., having tolerance for conflict) affects a founder's willingness to engage in negotiations
 - The higher the tolerance for conflict, the higher the likelihood of pursuing a late equity split (quick *equal* splits are typically made to avoid difficult negotiations)
- Prior relationships affect expectations about equity splits
 - This brings about an important theory in entrepreneurship called *equity theory*

Equity Theory

- Equity theory highlights the tight linkage between **social factors** (**relationships**) and **economic factors** (**rewards**)
- Founding teams usually operate under **social logic** or **business logic**
 - For teams operating under social logic, preserving personal relationships takes precedence over maximizing business success
 - These teams typically follow the rule of **equal distribution** (i.e., they split equity equally, even if individuals have very different levels of contribution)
 - For teams operating under business logic, maximizing business success takes precedence over preserving personal relationships
 - These teams typically follow the rule of **equitable distribution** (i.e., they split equity in proportion to the value of each individual's contribution)
- Equity theory ultimately concludes that the **best split** for one type of team could be the **worst equity split** for another type of team, depending on the dominant logic operating in the specific circumstance.

Linkage Between Prior Relationships, Equity Splits and Team Stability

		Prior Relationship	
		Social Relationship (family, friends)	Prior Coworkers
Basis For Equity Split	Rule of <i>Equal</i> Distribution		
	Rule of <i>Equitable</i> Distribution		

Linkage Between Prior Relationships, Equity Splits and Team Stability

		Prior Relationship	
		Social Relationship (family, friends)	Prior Coworkers
Basis For Equity Split	Rule of <i>Equal</i> Distribution	Stable Team	
	Rule of <i>Equitable</i> Distribution		

Linkage Between Prior Relationships, Equity Splits and Team Stability

		Prior Relationship	
		Social Relationship (family, friends)	Prior Coworkers
Basis For Equity Split	Rule of <i>Equal</i> Distribution	Stable Team	Unstable Team (inconsistent with business logic)
	Rule of <i>Equitable</i> Distribution		

Linkage Between Prior Relationships, Equity Splits and Team Stability

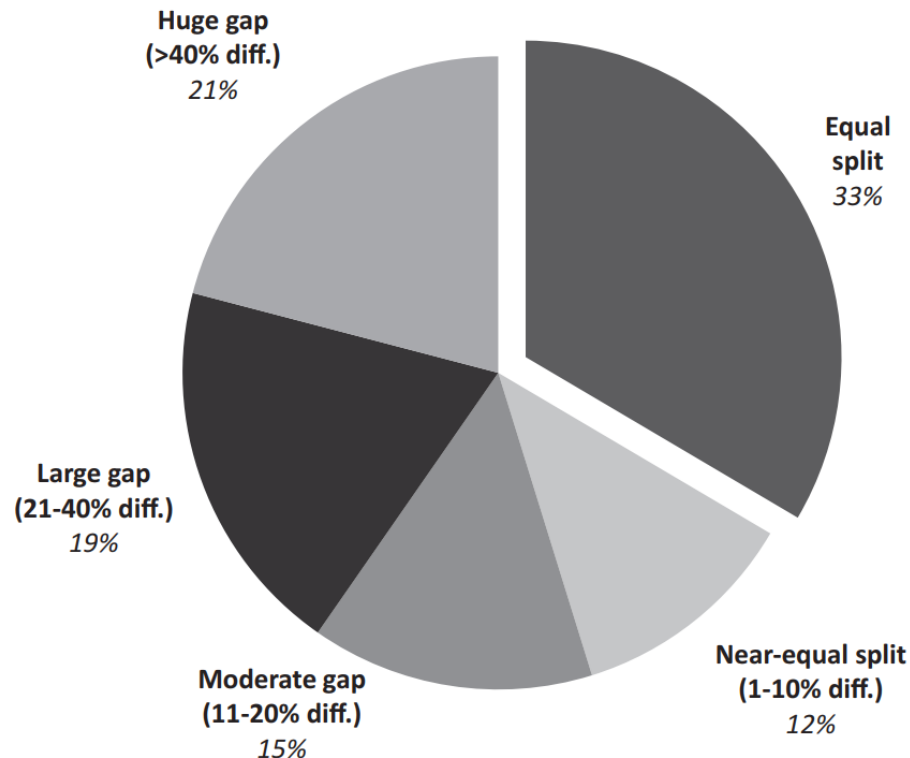
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Linkage Between Prior Relationships, Equity Splits and Team Stability

Basis For Equity Split		Prior Relationship	
		Social Relationship (family, friends)	Prior Coworkers
Basis For Equity Split	Rule of <i>Equal</i> Distribution	Stable Team	Unstable Team (inconsistent with business logic)
	Rule of <i>Equitable</i> Distribution	Unstable Team (inconsistent with social logic)	Most Stable Team

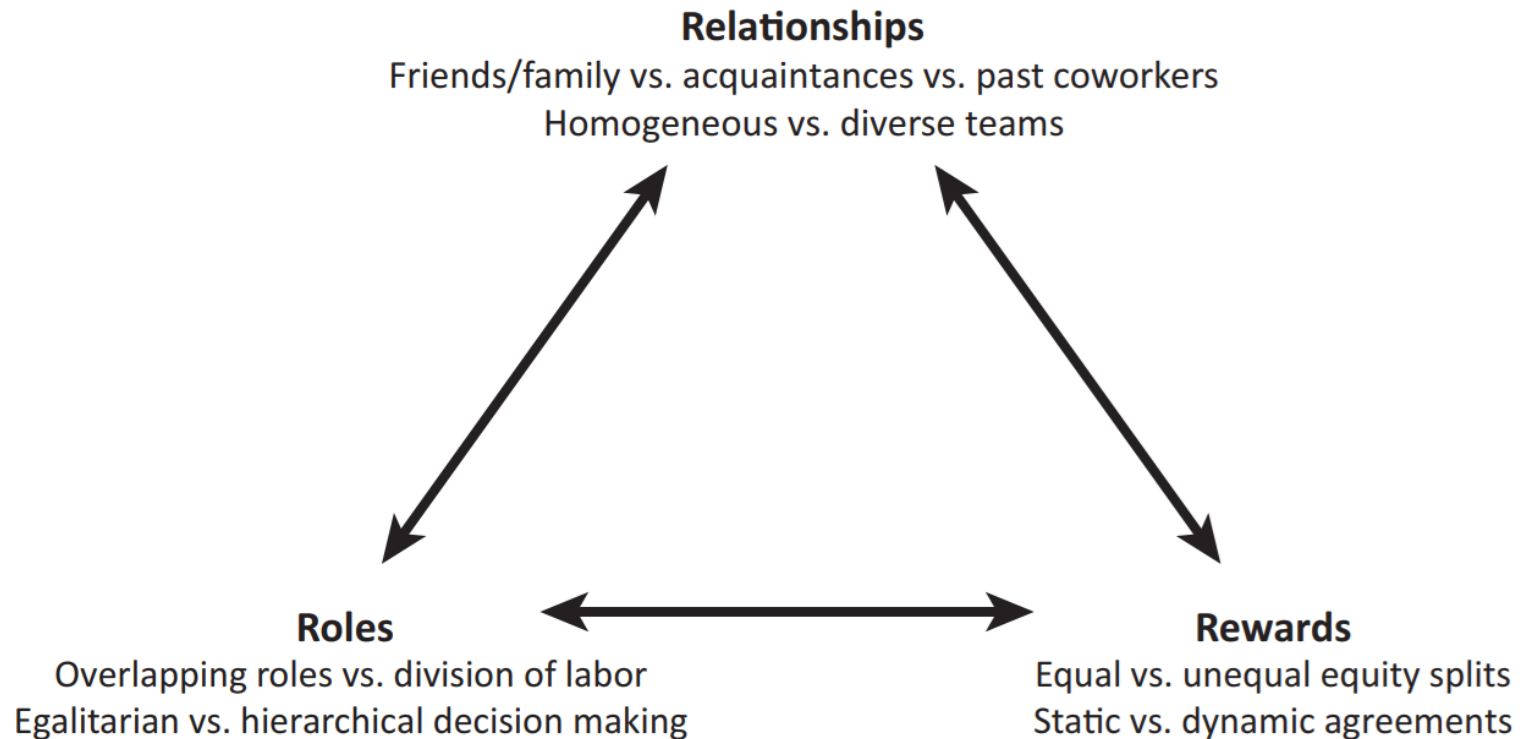
Equal versus Unequal Splits

- Difference in Equity Stakes between Founder with Largest Stake and Founder with Smallest Stake

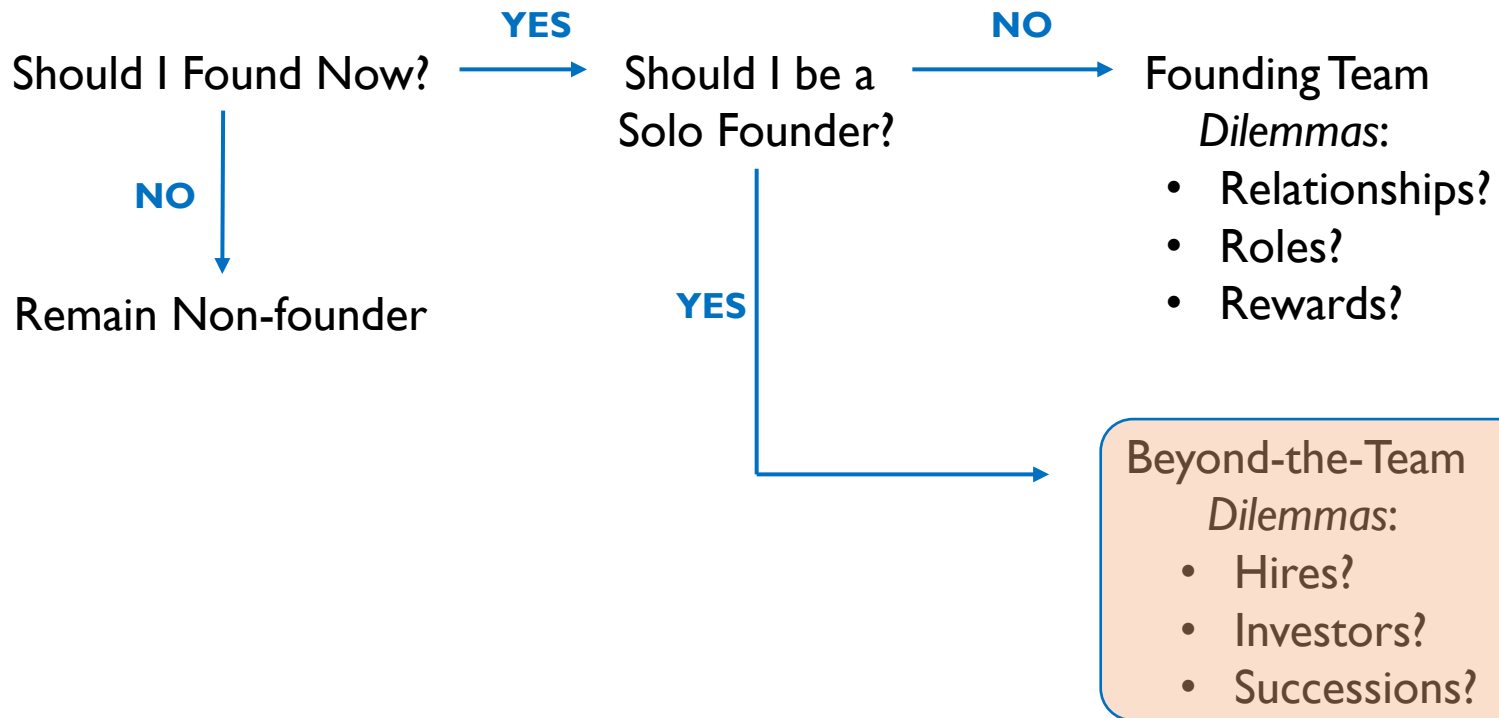


Recap: The Three *R*s System

- The three *R*s are linked



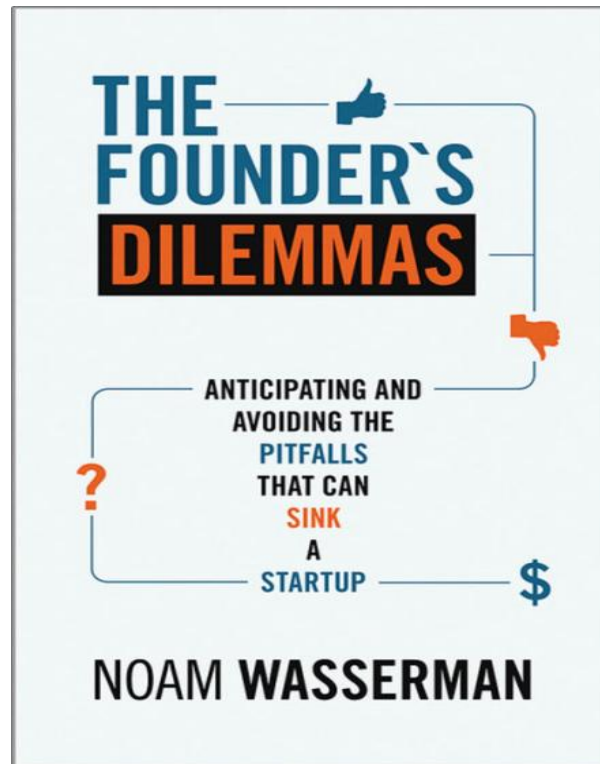
Sequence of Founding Dilemmas



More on this later in the class...

Reading assignment

- Read “**Part II: Founding Team Dilemmas**” of the “**The Founder’s Dilemmas**” book
 - 2012 by Noam Wasserman



Next Lecture

- Market Segmentation