Equity Compensation*

Rules of thumb, guidelines, conventional wisdom & other considerations

Frank Demmler

**Due to time constraints of the presentation, several slides are "hidden". You are advised to review them also.*

Frank Demmler

- **Professional**
  - Managing Director, Riverfront Ventures (2013-2018)
  - Vice President, Entrepreneurial Services, Innovation Works (2005-2018)
  - President & CEO, Future Fund Inc. (1999-2003)
  - Co-founder & Investment Advisor, Western PA Adventure Capital Fund, (1996-1998)
  - General Partner, Pittsburgh Seed Fund (1985-1998)
  - Start up consultant, The Enterprise Corporation of Pittsburgh (1984-1998)
  - Fortune 200 job, right-sized out of job (pre-1984)
- **Academic**
  - Adjunct Professor of Entrepreneurship, CMU (1987 - present) (full-time 2003-2005)
- **Education**
  - Princeton, UCLA & Harvard Business School
- **Awards & Recognition**
  - Lifetime Achievement Award from the Pittsburgh Venture Capital Association
  - Finalist, Ernst & Young Entrepreneur of the Year, Supporter of Entrepreneurship
  - Gerald E. McGinnis Adjunct Professor of Entrepreneurship at CMU

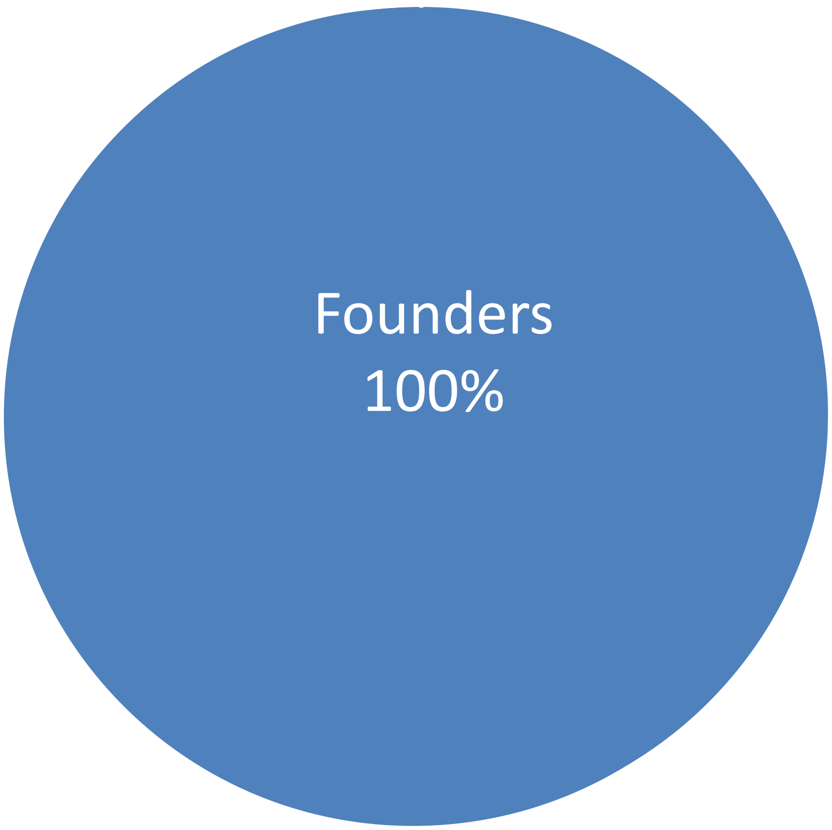
Why do I care about equity compensation?

- If you are a founder, you have to decide how to share the “Founders’ Pie”
- If you are a recruiting someone, you have to decide how many stock options to offer a prospective hire
- If you are a prospective hire, you have to evaluate the number of stock options you’ve been offered
- If you are an employee, stock options are usually tied to incentive compensation

Founders’ Pie

Getting started correctly is critical!

When you start a company, you have to decide who owns what



Founders’ Pie

Conventional Wisdom

- Count the number of founders
- Divide the number of founders into 100
- That’s the “fair” percentage for each founder

Founders	Percent
2	50.0%
3	33.3%
4	25.0%

Founders' Pie

Conventional wisdom is wrong, and could be fatal

Think about 2 founders, what if?

- One jumps into the company & the other keeps his job, “helping” at night & on weekends
- Company is doing well. One founder happy with current income, the other wants to change the world.
- Company needs money. One founder puts it in, the other doesn’t.

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Just imagine 3 or more founders!

Slicing the Founders’ Pie

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Slicing the Founders' Pie

- How much stock ownership should go to whom?
- Contributions to date
- Contributions in the future
- Incentive alignment so that the <u>company prospers and grows</u> thus creating a huge, shared pie

Considerations of Value

Contributions in certain areas are of particular value to a venture.

- Idea
- Commitment and Risk
- Skills, experience, track record, contacts
- Business model preparation
- Responsibility

Suppose: University Spinout – 4 founders

- **Founder #1**: Inventor – senior faculty, won't leave the university, created university-patented IP
- **Founder #2**: Business guy (MBA?) – jumps in and responsible for getting things done
- **Founder #3**: Post-doc – knows how to make the technology work, joins the company when funded
- **Founder #4**: Lab tech – happened to be in the right place at the right time

Founder Relative Contribution

Absolute Scores (1-10)

Idea					
Business Model					
Domain Expertise					
Commitment & Risk					
Responsibilities					

Founder Relative Contribution
Importance of Each Component

Absolute Scores (1-10)

	Weight				
Idea	7				
Business Model	2				
Domain Expertise	5				
Commitment & Risk	7				
Responsibilities	6				

Founder Relative Contribution Founder Contribution to Each

Absolute Scores (1-10)

		Founder 1	Founder 2	Founder 3	Founder 4
Idea		10	3	3	0
Business Model		3	8	1	0
Domain Expertise		6	4	6	4
Commitment & Risk		0	7	0	0
Responsibilities		0	6	0	0

Founder Relative Contribution Compiled Assessments

Absolute Scores (1-10)

	Weight	Founder 1	Founder 2	Founder 3	Founder 4
Idea	7	10	3	3	0
Business Model	2	3	8	1	0
Domain Expertise	5	6	4	6	4
Commitment & Risk	7	0	7	0	0
Responsibilities	6	0	6	0	0

Founder Relative Contribution
Founder Score per Component

Weighted Scores (1-10)

		Founder 1	Founder 2	Founder 3	Founder 4
Idea		70	21	21	0
Business Model		21	56	7	0
Domain Expertise		42	28	42	28
Commitment & Risk		0	49	0	0
Responsibilities		0	42	0	0

Founder Relative Contribution
Founders' Weighted Contributions

Weighted Scores (1-10)

	Founder 1	Founder 2	Founder 3	Founder 4	
Idea	70	21	21	0	
Business Model	6	16	2	0	
Domain Expertise	30	20	30	20	
Commitment & Risk	0	49	0	0	
Responsibilities	0	36	0	0	
Total Points	106	142	53	20	321
% of Total	33.0%	44.2%	16.5%	6.2%	100.0%

Only use for guidance. Do not use the calculated values.

What if you got it wrong?

- Vesting of founders’ shares can be a partial solution
- Can you get founders to consider a “do-over”?
  - Use the Founders’ Shares Calculator
- If not, can you barter a trade of equity for something else, i.e., accelerated vesting; consulting agreement; …?
- Facilitate a new round of investment and let the new investors ”fix” things
- Threaten to leave
- Leave

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Rules of Thumb

Frameworks for thinking about equity compensation

From 30,000 feet

- At the end of the day, founders and management will own 20% - 33% of the company (at the time of an exit)
- During the early stages of the company, stock option pools are likely to be in the 10% - 25% range. Pools are often replenished with each round.

Stock Options

What’s the big deal?

What a Stock Option Isn’t

A Stock Option is not Stock

A Stock Option Is

- The right to buy a share of stock sometime in the future
- At a price established at the time of grant, i.e. the exercise price
- For a specific length of time (2 years, 5 years, 10 years?)

What's the Big Deal about Stock Options?

- An example:
  - 50,000 stock options with a $1 exercise price
  - Company is acquired in 5 years for $10 per share
    - Buy 50,000 shares of stock at $1 per share

      = $50,000 is paid out
    - Immediately sell 50,000 shares at $10 per share

      = $500,000 is received
    - Gain: $450,000
      - Caution: it's ordinary income

How many options is enough?

From another perspective:
You've been offered 5,000 options

Fully-diluted shares	% ownership
10,000	50.00%
100,000	5.00%
1,000,000	0.50%
10,000,000	0.05%

- You **MUST** know how many fully-diluted shares exist to evaluate an offer of options

Vesting

Now you see it, now you don’t!

Vesting Schedule

- A grant of options **<u>does not mean you own those options</u>**
- You earn those options over time - vesting
- Purpose: to keep the employee motivated to stay with the company
- Typical schedule: 4-year vesting period
  - 25% of shares cliff vest on the first anniversary
  - 1/36th of the balance per month over the next 3 years

Vesting Schedule Considerations

- Cliff vest means lump sum vests (a year's worth)
- One year cliff vest means, in essence, that you're on probation for the first year
- Monthly vesting thereafter tethers you to the company for an additional 3 years
- Similarly, if the company is acquired, unvested options tether you to the acquiring company

Small Piece of a Large Pie

What does that mean?

The Way It's Supposed to Work

	Start		Seed Round		Round 2		Round 3		IPO	
	Shares	%	Shares	%	Shares	%	Shares	%	Shares	%
Founders	100,000	100.00%	100,000	30.00%	100,000	11.25%	100,000	7.27%	100,000	5.81%
Option Pool 1			66,667	20.00%	66,667	7.50%	66,667	4.84%	66,667	3.88%
Option Pool 2					111,111	12.50%	111,111	8.07%	111,111	6.46%
Option Pool 3							28,674	2.08%	28,674	1.67%
Total Option Pool	-	0.00%	66,667	20.00%	177,778	20.00%	206,452	15.00%	206,452	12.00%
Investor 1			166,667	50.00%	166,667	18.75%	166,667	12.11%	166,667	9.69%
Investor 2					444,444	50.00%	444,444	32.29%	444,444	25.83%
Investor 3							458,781	33.33%	458,781	26.67%
IPO									344,086	20.00%
Total Investor	0	0.00%	166,667	50.00%	611,111	68.75%	1,069,892	77.73%	1,413,978	82.19%
Total	100,000	100.00%	333,333	100.00%	888,889	100.00%	1,376,344	100.00%	1,720,430	100.00%
Pre-financing value			$1,000,000		$5,000,000		$20,000,000		$150,000,002	
Post-financing value			$2,000,000		$10,000,000		$30,000,000		$187,500,002	
Investment			$1,000,000		$5,000,000		$10,000,000		$37,500,000	
Price per share			$6.000		$11.250		$21.797		$108.984	
Value of Founders' Shares	???		$600,000		$1,125,000		$2,179,688		$10,898,438	

5.81% → $10,898,436

Frank’s Rules of Thumb

when considering a single employment offer

CEO	“rainmaker”	8.0%-12.0%
COO	“the business guy”	4.0%-8.0%
VPs	1-2 “key” players	2.0%-3.5%
VPs	Other	1.0%-2.5%
CFO	“supply & demand”	0.5%-1.0%

Other Rules of Thumb

- Directors 0.50% – 1.00%
- Advisors 0.25% – 0.50%
- Founder vesting
  - 25% at closing + $^{1}/_{36}$ per month for 3 years
- Vesting acceleration at change of control
  - Management-friendly: double trigger
  - Investor-friendly: no acceleration (remember the earlier tethering comment?)

Final thoughts

- Budget your equity distribution over a reasonable time frame
- Don’t do anything without strong professional assistance
- Develop a network of mentors and advisors who can help you design something appropriate for you and your company
- ***Don’t do anything without strong professional assistance***