Capitalization Tables and Operating Agreements

What is a capitalization table?

A capitalization table (cap table) identifies shareholders and their percentage equity ownership in the company. A cap table will also reflect change in ownership and value over time, and may include shares for future employees. For example, as investors or key partners join the team, the percentage of ownership will change – but typically, company valuation increases, so the value of that percentage is much greater. There is no one right way to create a cap table; each is unique and reflects the nature of the company. The wrong way – NOT creating a founders agreement and cap table or waiting until later. If you're going to argue about it, better do it now when you don't have investors or, worse, employees ("Mom and dad are fighting again").

The cap table and associated founder's ownership is an area many startups don't think about, especially if the founders are first time entrepreneurs. Founders typically divide the company with shares of ownership (or stock) and then return to developing the technology. What if a founder decides to leave the company or becomes a problem? Life happens, so be ready.

- have a great honest relationship with your team
- completely discuss everything as clearly and honestly as you can
- put your agreements in plain terms
- at some point you can and should make things legal and official
- bottom line - you need partners you can trust - no amount of legalese will make things work.

Three stages in a company's life:

- **Founding**. The company has cash from the founders and you get no money out of the company. The company will probably fail, you will lose all the money you put in, you have lost salary, and you have to find a new job.
- **Startup**. The company has money, from investors or from sales, and you regularly get some of that money, though your salary is lower than the market. There is still a 50% chance the company will fail and you have to find a new job. In addition, you've lost the difference between your startup salary and BigCo salary.
- **Real company**. You get a market rate salary and it's unlikely the company will fail. If it does fail, your downside is limited to unemployment.

If you are working for a new company that cannot pay you, you're a founder. If you have a salary on your first day, you're an employee.

Different company structures handle equity shares differently and therefore cap tables vary. TLA looks to the business lead to determine the best company structure and can provide general guidance and attorney referrals.

University warrants

UA is unable to hold equity in a startup company. Therefore the UA takes warrants, which provide the university with the ability to purchase stock in the company in the future at a fixed price. The warrant percentage will vary, and reflects the research value invested by the UA into the IP prior to license. This is a common practice among universities and reflects the value of the IP; if you have questions about UA warrants or licensing, please contact TLA.

Equity distribution for a university spinout

Should inventors retain 100% of the startup equity? Keep in mind that while the research leading up to this invention may have required years of hard work, this is only the beginning for a company. Building a successful and financially-viable company requires:

- company formation with appropriate corporate governance,
- advisors and/or Board of Directors;
- team formation;
- customer validation;
- competition analysis and market opportunity;
- a plan to transform the invention into a sellable product;
- ongoing product development;
- support;
- IP protection;
- plan for regulatory requirements;
- operations and/or manufacturing plan;
- financial forecasts, valuation, capital need, use of funds and relevant strategy;
- ongoing sales and marketing strategies.

And so on, depending on the nature of the company, product, and industry.

The best successes come when someone from the inventing team is able to serve as the technology champion for the startup, partnered with a business cofounder who has relevant industry and startup experience. UA inventors have the unique opportunity to continue their research on campus while taking a secondary role in the startup company, so finding and engaging a strong business cofounder is critical to the success of the startup company. TLA works with inventors to determine the best approach and engage appropriate mentors, advisors and business partners.

In many cases, the cofounders will split ownership equally; this is a quick and simple method for creating a cap table but may not necessarily reflect the future contributions each cofounder makes to the success of the company, nor does it include possible ownership for new employees. Here's an example of a straightforward equal distribution. For the sake of this example, UA is assigned 8% warrants:

Outstanding Shares		Per Share	Valuation
5,000,000		$0.50	$2,500,000
Cofounders	**% Shares**	**# Shares**	**$ Value**
Inventor 1	23%	1,150,000	575,000
Inventor 2	23%	1,150,000	575,000
Inventor 3	23%	1,150,000	575,000
Business lead	23%	1,150,000	575,000
University of Arizona	8%	400,000	200,000
	100%	5,000,000	2,500,000

Another common practice is the contribution or scorecard method; this allows the team to value both current and future contributions each cofounder may bring to the company in key areas, like: ability to

successfully execute the business and financial plans; industry and startup expertise; initial invention; and ongoing product development. This is a good opportunity to begin the discussion and understand each cofounder's interests and expectations. Also, consider who is working full time versus part time. If you are working more, you're also risking more if the company fails
Part-time cofounders may be a minus to someone considering an investment.

Here is an example based on your market salary, and direct contribution, and includes pre- and post-investment ownership (aka pre-/post- money):

Yrs	Partner	2 yr wage	Market wage	Sweat investment	Direct investment	Intangible	Total Investment	Pre Angel	Post Angel
2	1	$10k	$93k	$166k	$10k		$176k	12%	11%
2	2	$30k	$98k	$136k	0		$136k	9%	8%
2	3	0	$83k	$166k	$5k		$171k	12%	10%
2	4	$22k	$77k	$110k	$5k		$115k	8%	7%
1	CEO tbh	0	$250k	$250k	0		$250k	17%	15%
1	Sales tbh	0	$180k	$180k	0		$180k	12%	11%
5	New tbh employees		$90k	$450k	0		$450k	30%	27%
	Total				$20k		$1478k	100%	90%
Investor Shares									
	Angel 1				$10k				5%
	Angel 2				$10k				5%
	New total								100%

TLA can facilitate a discussion as needed. Following the example below, the cofounders rated their own contributions to the startup success in four areas outlined to the right of the chart: initial invention, ongoing product development, business plan execution and startup expertise. Their equity position in the company was adjusted based on that contribution:

Outstanding Shares		Per Share	Valuation							
5,000,000		$0.50	$2,500,000			Contribution (each area worth up to 25 points)				
Cofounders	**% Shares**	**# Shares**	**$ Value**	Role in company	Adj %	Score	Initial invention	Ongoing prod dev	Plan execution	Startup expertise
Inventor 1	20%	1,000,000	500,000	PT chief science officer	20%	40	25	10	5	-
Inventor 2	28%	1,400,000	700,000	FT product development	28%	55	25	20	10	-
Inventor 3	16%	800,000	400,000	Advisor only	16%	32	25	2	5	-
Business lead	28%	1,400,000	700,000	Interim CEO	28%	55	-	5	25	25
University of Arizona	8%	400,000	200,000	University of Arizona	8%	15	15	-	-	-
	100%	5,000,000	2,500,000		100%	197				

Looking at other startup companies in the same industry may offer guidelines on how to distribute equity, and is helpful when thinking about compensation for specific roles like software engineers or future executive hires. In a C-Corp, the cap table may include an equity option pool – equity side aside

for future hires. Following below is a common table used currently in the Bay Area for software/IT companies for future hires:
(TABLE NEEDS UPDATING)

Role	Founder positions (undiluted)		Non-founder hired positions (diluted)	
	Low	High	Low	High
CEO	20%	51%	5.0%	10.0%
COO	10%	25%	2.0%	5.0%
VP	5%	15%	1.0%	2.0%
Board Member/advisor	0.5%	3%	0.5%	1.0%
Director	2%	10%	0.4%	1.25%
Manager	1%	5%	0.2%	0.3%
Lead engineer	0.5%	3%	0.5%	1.0%
Experienced engineer (5+ years)	0.25%	2%	0.3%	0.7%
Junior Engineer	0.1%	1%	0.2%	0.3%

Other cap table questions

Cap tables will vary from LLC to C-Corp as will language, and number of shares will be determined based on different factors. A big consideration is valuation, and there are many methods to consider. The Angel Capital Association provides exceptional examples and insights, including the most common current method called Scorecard – this method compares the company to typical angel-funded startups and adjusts the valuation based on regional activity, and then on key success factors for the company including management team (30%); size of opportunity (25%); product/technology (15%); competitive environment (10%); and marketing/sales partnerships (10%).

Often startup companies will begin with one or a combination of the methods outlined above, and then readjust the cap table with the first outside equity investment activity.

Some additional thoughts about founder's agreements and shares of the company for founders.

- These shares are made subject to a "right of repurchase in favor of the company"
- Restrictions "lift" over time, meaning that as time goes on, fewer shares are subject to this repurchase agreement. (example get 1000 shares - 250 per year lift)
- The advantages favor the founders.
    - Allow the owner to vote their shares without restriction if the founder is still with the company.
    - Holding period for tax purposes begins at the company's founding, not at option exercise.
- Include accelerators in the event of a liquidation or sale of the company to protect founders in the case of change in role or leadership. You can include accelerators so immediately prior to an

acquisition or liquidation, or upon termination immediately preceding such an event, all (or some) of the restrictions disappear.

ABOUT Tech Launch Arizona

The UA created Tech Launch Arizona (TLA) to move inventions, technologies and intellectual property from the laboratory out into the marketplace. The TLA Venture Development team is committed to the development, preparation and success of new ventures that license and commercialize these assets.

If you have any questions about the startup process, please contact your MIR or license manager.

Other resources:
Valuation and how to calculate with examples:
https://en.wikipedia.org/wiki/Pre-money_valuation