



Business Models & Financial Planning

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Deliverables

1. [Business Model Slide](#)
2. [Unit Economics Slide](#)
3. [Financial Projections Slide](#)
4. [Key Milestones Slide](#)
5. [Financial Plan with a Spend Level that Justifies an Institutional Raise](#)

Please note: the slides DO NOT need to look pretty. We just want to get the content down. You will have time closer to when you formally start pitching to get the design of the slides perfected.

Also, please note that you may not use all of these slides in your core presentation. Many of these will be in your appendix to be brought forward if your investor asks a question that these address. However, preparing these slides will arm you with answers to standard questions VC's may ask.



Recommended Reading

- Watch [Rick Rasmussen's talk on Financial Planning](#) / access his slides [here](#)
- Mamoon Hamid presentation on SaaS metrics: [Software as a Service Secrets to Raising Venture Capital](#)
- [SAAS Metrics 2.0](#)
- [How to Calculate CAC, LTV, and other SAAS Metrics](#)
- [Financial and Operations Metrics](#)
- [Fastest growing SaaS companies: Revenue timeline from 1m to 100m](#) (Hashicorp, Confluent, and Databrix are the Open Source Cos listed)
- [Takeaways from McKinsey's study on SaaS companies growing from 5-20m ARR](#)
- Watch Demo Day videos that presented business models well: [Redbird Health](#) (Alchemist) + [Runa](#) (YC)
- [Fastest growing SaaS companies: Revenue timeline from 1m to 100m](#) (Hashicorp, Confluent, and Databrix are the Open Source Cos listed)
- [Sample Financial Planning spreadsheet templates](#)
- [Insight's Key SaaS Metrics](#)
- [SaaS Metrics 2.0 - A Guide to Measuring and Improving what Matters](#)
- [Gnani's financial planning template](#)
- [Eric Andrews' SaaS Financial Planning Template & Video](#)
- Liveplan: Use it for Projecting Costs and Revenue (Alchemist Alum Dan Edelman of Runic recommends)
- [Founder's Guide to Financial Modeling](#)
- [Cash Conversion Cycles](#) and [Payback Periods](#)

Mentors

Financial Planning:

[Kristian Marquez](#) (Finstrat)
[Leighton Smith](#)
[Sandeep Shroff](#)
[Marc Zablatzky](#)
[Rick Rasmussen](#)
[Search for "Financial Planning"](#)

Investor Feedback

[Practice the Benchmark Pitch with Rachel Steve Lee](#)

[Anoushka](#) : Formerly at Matrix Partners. Now a B School Student who would be safe to pitch and get honest feedback.

[Pravin](#) : Pravin has left VC, but is a former partner from Menlo. He is analytical and would be good at getting the SaaS metrics to look compelling and might show you model slides from others.

[Winter](#) : Winter might have good examples of weighted pipelines and SaaS metrics. He does mainly Series B, but he is a principal and should have data points.

[Sean](#) : Good w/ SaaS pitches, a current VC at Norwest



Homework

Draft a Business Model Slide

A Business Model Slide is a one page snapshot that shows how you make money in a typical transaction. It captures:

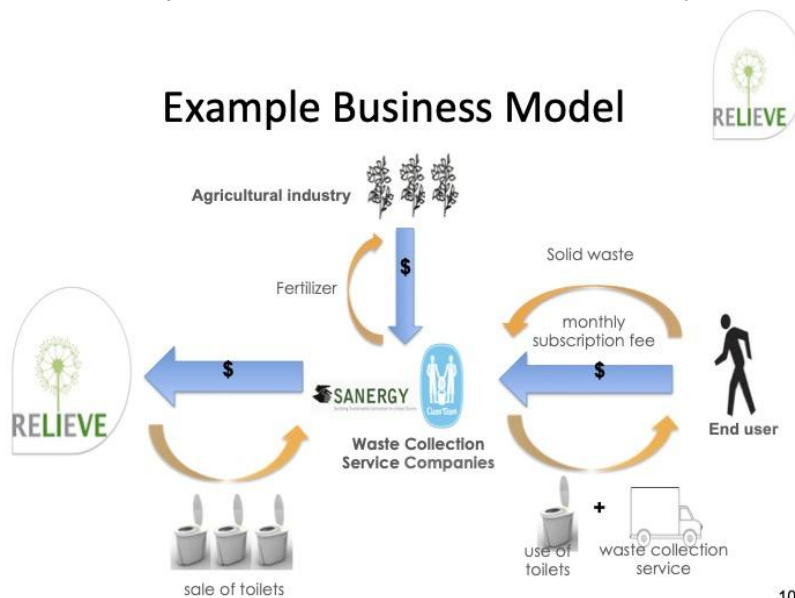
- All the parties involved in your business (Users, Customers (if different), Suppliers, Partners)
- Where and how the cash flows for each party
- Where and how products and services flow for each party

Business Model

- How you make money
 - Typical transaction
 - All parties involved
 - Product flow
 - \$ flow



Here is an example of a business model slide. **Please draft your own.**



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Calculate Your Unit Economics & Draft a Unit Economics Slide

A Unit Economics Slide captures the cash economics of the core, relevant unit of your business. This is **the unit which you ultimately will scale as you build the business**. That unit is typically a customer: e.g. for a given customer, what's the lifetime value? That unit, however, can be something else: a sale, a user, a sales rep, a market, an advertiser, etc. Start with the unit in terms of how you think about your business -- what's the foundational unit that you are scaling in terms of how you are delivering value and making money.



A typical unit economics slide captures the cash investment upfront, and the cash earned over time for this unit. We want to capture this in one slide.

Given this you are typically showing these things in this slide (I will be using a Customer Model here. You can modify this to something besides a Customer if another unit is appropriate for you):

- Customer Acquisition Cost : How much does it cost to acquire a customer?
- Billings / Payments / Subscriptions : How do you receive cash from the customer?
- COGS (Cost of Goods Sold) or BOM (Bill of Materials) : These are the direct costs associated with fulfilling the customer's needs. Please note: sales and marketing should not be included in COGS or BOM. It goes in OpEx (Operating Expenses). VC's are wary of businesses where COGS are more than 50% of your Payments -- and the lower the COGS the better.
- Contribution : This is your Payments minus your COGS -- the cash gross margin you receive.
- Churn Rate : The percent of customers lost or contraction month over month
- Average Customer Lifetime = $1 / \text{Churn Rate}$
- Payback Period : This answers the question of how long it takes for your contribution to pay the Customer Acquisition Cost.
- Lifetime Value = $\text{Contribution} / \text{Churn Rate}$ or $\text{Contribution} * \text{Average Customer Lifetime}$

If there are any questions on calculating these, read this: [SaaS Metrics 2.0 - Detailed Definitions - For Entrepreneurs](#)

Here's an example of Hubspot's Unique Economics:

HubSpot	Q1'11	Q2'11	Q3'11	Q4'11	Q1'12	Q2'12
LTV:CAC	1.7	1.9	1.9	2.6	3.5	4.7
CAC	\$6,025	\$7,876	\$8,541	\$7,809	\$6,880	\$6,793
MRR CHURN	3.5%	2.7%	2.8%	2.3%	2.0%	1.5%
AVG MRR	\$429	\$507	\$548	\$560	\$583	\$577
SOFTWARE MARGIN	83%	81%	80%	82%	81%	82%
LTV	\$10,074	\$14,964	\$15,919	\$20,325	\$23,775	\$31,806

Draft your own unit economics table: Make a copy of [Unit Economics Calculations.xlsx](#) and fill it out with your own units.

Key things to check:

- LTV : CAC ratio should be > 3
- Your payback period should be definitely be 12 months or less, and ideally less than 9 months
- Gross Churn should be $< 3\%$. Said differently, your customer lifetime value should not be less than 33 months. (ideally forecast 3 year customer lives).
- Bill Upfront if at all possible -- this is key



Optional: You can also create a dashboard to track these items internally using this spreadsheet, which in addition to SaaS, also has a tab for license / annual contract value (ACV) driven companies.

http://dskok.wpengine.netdna-cdn.com/wp-content/uploads/2013/01/SaaS_Metrics_2.zip

Here are other key metrics some VCs will look for w/ SaaS - especially as you raise a Series A:

- Year over Year ARR growth: Great is 3x or greater Y/Y ARR, Good is 2x
- Net Dollar Retention = $[(\text{Starting MRR} + \text{expansion} - \text{downgrades} - \text{churn}) / \text{Starting MRR}] * 100\%$; Great is over 110%
- Burn Multiple = Net Burn / Net New ARR; Great is 2x or Under (e.g. for every dollar of burn, you should generate at least fifty cents of net new ARR)

More on: What are important metrics that investors care about?

- [Insight's Key Metrics](#)
- A16Z on SaaS Metrics: [16 Startup Metrics | Andreessen Horowitz](#) + [16 More Startup Metrics | Andreessen Horowitz](#)
- Insight VC's recommended Benchmark Metrics:
 [Insight_s_Periodic_Table_of_SaaS_Financial___Operating_Metrics.pdf](#)

A note to hardware companies from [Bolt.VC](#):

- Most of our companies have fairly simple business models, either pure hardware sale, hardware sale + consumables, or hardware sale + SaaS. Very few have pure HaaS ([Byte](#) is certainly an exception, and definitely has one of the more complex operating models in our portfolio).
- Because of that, and the stage of most of our companies, we don't spend much time doing detailed financial models. A very basic one, built off of a product's unit economics is typically sufficient. The hard part is figuring out the right inputs to this model (COGS, CAC, LTV, Sales Cycles, etc).
- While we don't spend a lot of time doing detailed financial models or projections, we spend a TON of time working with founders on their 12-18 month operating plans. I think founders tend to do a decent job of understanding what drives their business at scale, but a very poor job at near-term cash management and having a handle on their operating plan.
- People recommend Taylor from Foresite: <https://foresight.is/>
- Also check out [Will Your Hardware Startup Make Money? - The Bolt Blog](#) and [Hardware Startups: You Need to Understand Cash Flow | by Dave Lishego | Startups & Investment | Medium](#), [Cash Conversion Cycles](#)

Draft a Financial Projections Slide

Your financial projections show as the business looks in aggregate across time. Aggregating all of your customers / relevant units together. You will leverage parts of your unit economics to build this

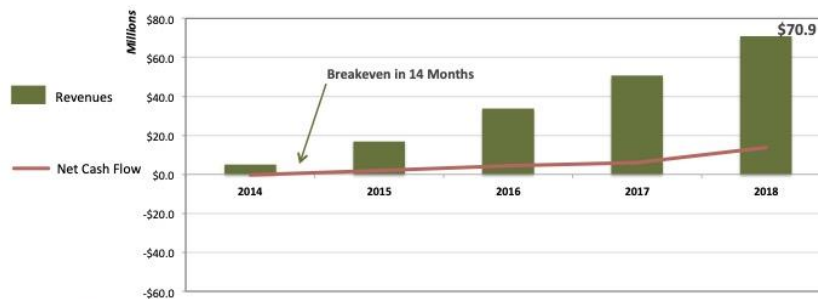
This slide will typically be refreshed annually.



Capture These Elements:

- Revenues
 - You want to see that this builds to a 50-100m revenue business in 5-7 years in the long term. If you are a SAAS business, you want to build to \$1m ARR (\$80K MRR) 12 months from launch ideally, and generally not later than 18 months from launch.
- Net Cash Flow
 - Show when you break even and become cash flow positive. It's better to get to the revenue levels above and sacrifice cash flow, then vice versa.
- Revenue Drivers
 - 2-3 elements of what are the key drivers of revenue. Customers, seats / customer, price, etc. can be elements but use whatever is really critical for your business
- Gross Margins
 - These should be greater than 50%. Most software businesses should be 80-100%.

Financial Projections and Drivers



Main Drivers	Year 1	Year 2	Year 3	Year 4	Year 5
# of Units Sold / Year	2,000	4,200	6,800	10,200	14,280
Enterprise Customers	1	6	18	48	122
Gross Margin	-	41%	63%	72%	74%

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One approach is to show historical revenues plus revenues just one quarter out so the projections look believable. And then extrapolate that growth further on another chart and show projections 2-3 years out.

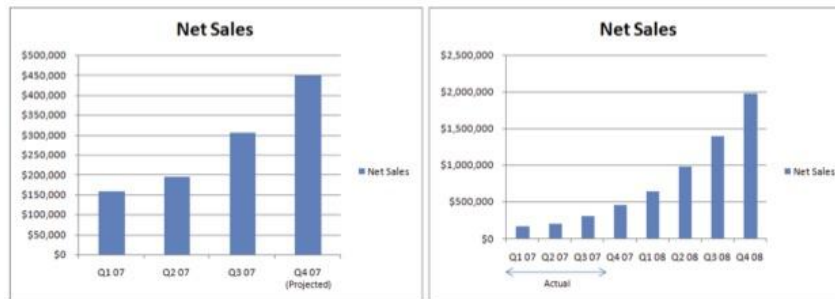
Below is an example slide from Box's Series B:

Please draft your own.



Financials

Financial Projections



Sums:

2007: 1m, 2008: 4.9m, 2009: 14+m



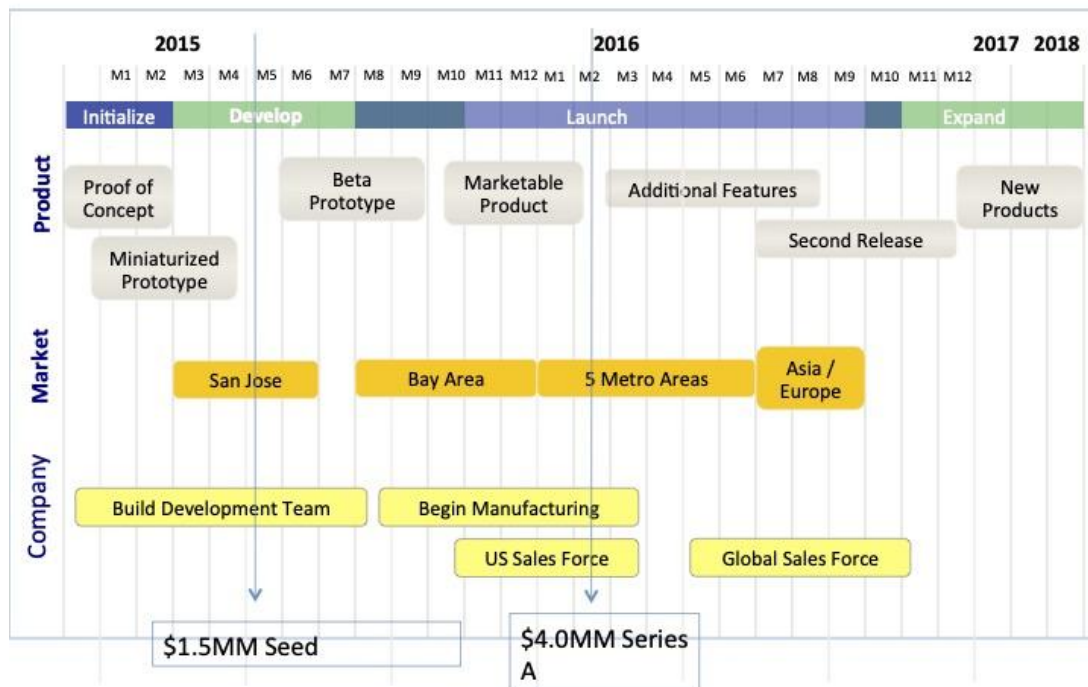
Box.net - 1895 El Camino Real - Palo Alto, CA 94306

Draft a Key Milestones Slide

Most startups have discontinuous jumps in valuation that are tied to achieving key milestones / derisking key elements. On this slide, you want to tie what milestones you will achieve with key funding rounds. The goal is to show what a funding round will buy the company, and for the investor to see that the company's valuation will go up nonlinearly based on key risks being addressed / milestones achieved.



Tie Financing Events to Milestones



Tip: Have ready a slide that can justify a bigger raise (e.g. \$4m+) for when you pitch institutional investors.

Draft a Financial Plan with a Spend Level that Justifies an Institutional Raise

Most funds have a preferred check size they like to write. Larger funds need to write a larger investment check since they are constrained by the number of investments they can make per year, and are managing more money. Smaller funds need to write a smaller check for the same reason. The best way to know what size check an investor likes to write is to ask them. Barring that, if you know the size of their fund, a ROUGH rule of thumb (although this is very crude and may be off) is to divide the fund size by 100. That is, a \$500m fund will typically like to write a \$5m check, for example. A \$300m fund a \$3m check.

Which creates a dilemma when you are asked by an investor: “How much are you raising?”.

Your answer should be catered to the size fund you are pitching. If you don’t know, a default can be “We need \$1.5m to take us out 9 months, and \$4m to take us out 24 months.” This approach makes it clear what you want to spend the money on but also creates flexibility for the investor to choose what



size check they want to give. If you know it's a larger fund, you can err on the side of focusing just on the larger investment amount.

When you pitch a large fund (e.g. a fund > \$100m), you will need to justify an institutional raise.

The slides above should capture at a minimum the slides you need to show a plan to spend an institutional level raise (e.g. \$3-\$8m).

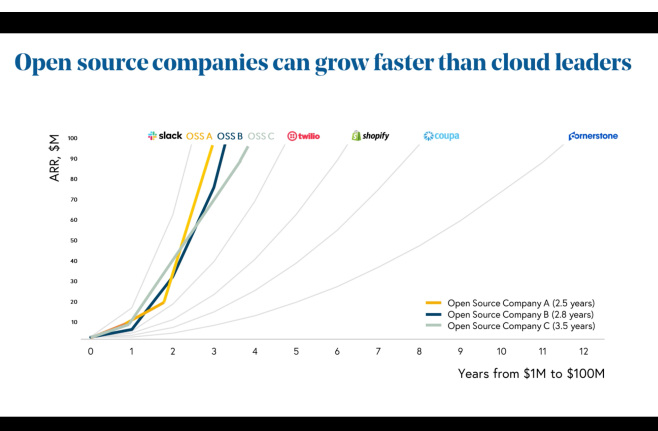
Time permitting, you can also start to build a financial model to bring up if an investor wants more info.

If you don't have time to build a model, the above slides could work with this hack. Put a Line Item above with "Average Full Time Equivalents" under your Milestones slide or Financial Projections Slide. In general, there's a rule of thumb that you will spend -- fully loaded -- \$15k / month / full time equivalent (inclusive of salary and all other expenses of the business). So, 1 person over 10 months in \$150k. 5 FTEs justifies \$750k of spend over 10 months; 10 FTEs justifies \$1.5m spend over 10 months. And it's fine to have a bit of a buffer -- e.g. 10-20% of the raise can be greater than expected spend as a buffer.

You can also try to build an excel model.

The top businesses grow 4-6x between their first and second years of real revenue, then 3x, then peter down to 1.5 - 2x for 1-2 years, then grow between 50-100%.

Chart Below: [Fastest growing SaaS companies: Revenue timeline from 1m to 100m](#)
(Hashicorp, Confluent, and Databrix are the Open Source Cos listed)



Other resources:

- [Revenue Growth of Successful High Tech Companies.xlsx](#)
- See the SaaS simple model and other models in the [Financial Planning](#) folder. Please draft your own.
- Check out [Insight's Periodic Table of SaaS Financial & Operating Metrics](#)
- Check out [Gnani's financial planning template](#)



- Check out [SaaS Metrics 2.0 - A Guide to Measuring and Improving what Matters - For Entrepreneurs](#)