



# Constructing an Operating Plan and Financial Forecast

UW CSE Entrepreneurship Class  
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# Goals of an Operating Plan

- > Quantitatively model your business
- > Think through the key levers for how your business will scale
  - Demonstrate to others you understand these levers
- > Near term view:
  - Understand cash needs and when you will run out
  - Ensure you can hit key milestones
- > Long term view: demonstrate conviction and a rationale path for how your business can become big, quickly

## Key Components:

- > Revenue forecast
- > Detailed hiring plan
- > Customer acquisition costs
- > Other expenses

# Financial Forecast Template

	Year 1	Year 2	Year 3
<b>Revenue Summary</b>			
Product or Subscription Revenue			
Professional Services			
Total			
<b>COGS</b>			
Software COGS			
Professional Services COGS			
Total COGS			
<b>Gross Profit</b>			
<b>Operating Expenses</b>			
Personnel			
Salaries			
Benefits and Payroll Taxes			
Sales & Marketing			
Sales commissions			
PR			
Other non-headcount marketing			
Professional services			
Recruiting			
Technology contractors			
Legal			
Accounting			
G&A			
Rent			
Insurance			
Travel & Entertainment			
Miscellaneous			
<b>Total</b>			
<b>EBITDA</b>			
<b>Capital Expenditures</b>			
<b>Net Change in Working Capital</b>			
<b>Cash Flow</b>			
<b>Cumulative Cash Flow</b>			

Break out revenue streams and professional services

COGS and GM very important to understand: gross v. net revenue, pro services, cloud expenses, hardware

Model salaries, benefits and payroll taxes.  
Build up using a month-by-month hiring budget.

Include online advertising, SEO, trade shows, contact lists, software, and other lead generation

Pro services can be significant: per hire recruiting fees, engineering augmentation, keep legal/accounting minimum

Remember to include B&O taxes, telecom, office supplies, subscriptions, parking, morale, etc.

Equipment, computers for each employee, etc.

Make sure to consider timing of cash flows (A/R, A/P, and inventory if applicable)

Good approximation for CF for formation stage company but note does not include interest expense or taxes.

# Expense Side - Headcount

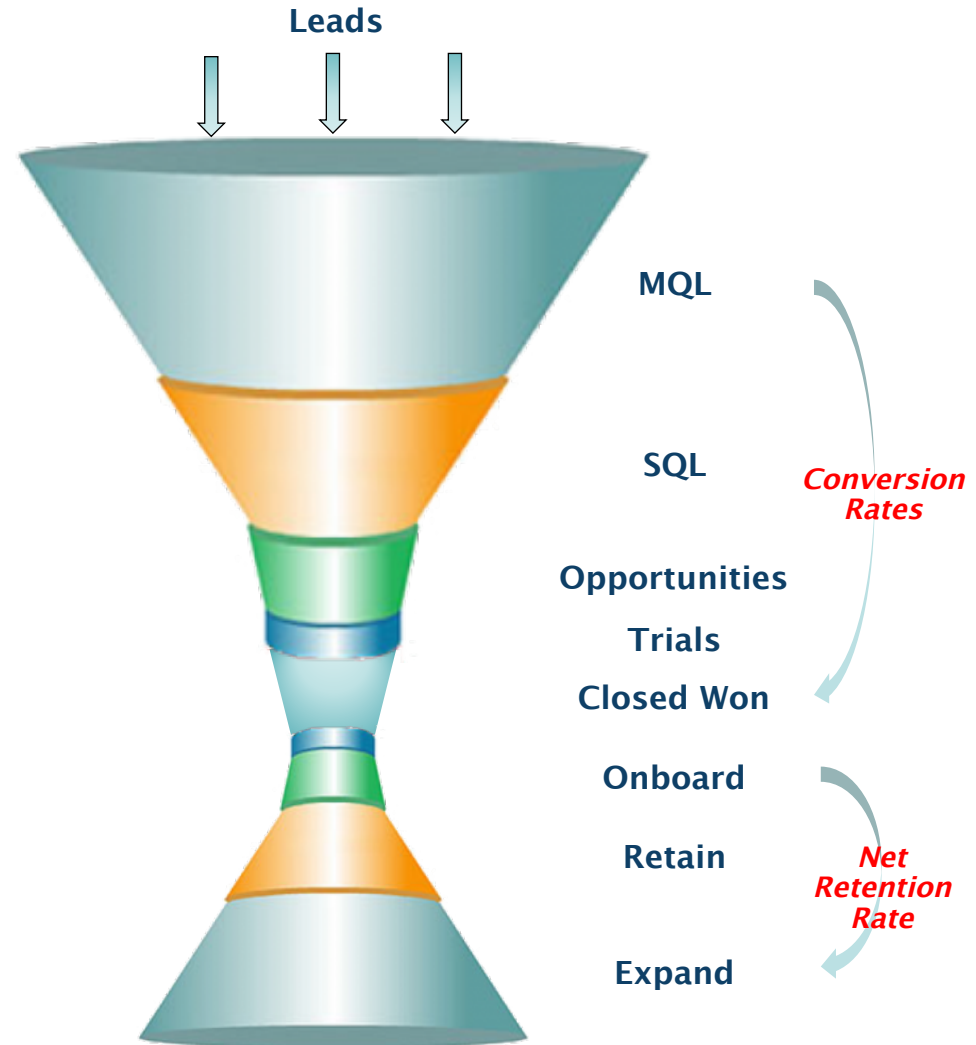
- > Most important cost driver
- > Be realistic about hiring ramp (forecast out by month)
- > Plan on the conservative side for salaries
- > Include potential recruiting costs
- > Include ancillary costs like benefits, insurance, and computer/software for each hire
- > Model out hiring by month for at least 18 months
- > Recruiting costs can be ~25% of first year salary

<b>Salary Benchmarks</b>		Month # -->	1
R&D			<b>Feb-17</b>
	Engineer 1		\$100,000
	Engineer 2		\$125,000
	Engineer 3		\$150,000
	VP Engineering		\$225,000
Marketing			
	MarComm/Evangelism		\$120,000
	Product Marketing		\$140,000
	Demand Generation		\$120,000
	VP of Marketing		\$200,000
Sales			
	Account Executive		\$150,000
	Sales Engineer		\$150,000
	VP Sales		\$250,000
	Business Development Director		\$150,000
	CFO		\$225,000
	HR		\$110,000
	Customer Service		\$85,000
	Admin		\$65,000
	Founder/CEO		\$135,000

<b>Other Key Assumptions</b>	
Benefits cost / employee / month	\$1,500
Payroll taxes (using WA state)	8.0%
Computer per new hire	\$2,500
Furniture per new hire	\$500
Year 2 Salary Increase	3.0%
Sq ft per person	\$150
Rent per sq foot per year	\$30
Min # of people for space planning	25
Baseline rent (25 people) per month	\$9,375

# Customer Acquisition and Revenue Engine

- > Every business is a funnel
  - B2C or B2B
- > Very simple math
  - $\text{Leads} \times \text{Conversion Rate(s)} \times \text{Average Deal Size} = \text{ARR}$
  - $\text{Net Retention Rate} = \text{Upsell} + \text{Expansion} - \text{Churn}$
- > Understand your funnel math!
  - Cost / Lead
  - Conversion rate of each funnel stage



# Business Model and GTM Strategy

- > Who is the economic buyer? How will you acquire leads?
- > What is your pricing model?
  - Model: Subscription, license, freemium, ad-supported, combination
  - Tiers, price points, and scaling dimensions: users, data/consumption, features
- > Sales model
  - Touchless: website only
  - Sales people needed: ADR? ISR? AE? Sales management?
- > Partner strategy: be careful assuming any partner leverage too soon
- > Unit economics
  - Fundamental equation: LTV versus CAC
  - Fully loaded CAC: all sales and marketing costs
  - Magic Number =  $(\text{Increase in Gross Margin in Quarter}) * 4 / (\text{CAC in Quarter})$

# Context and Market Opportunity

- > Start with the micro and then show why the macro is compelling
- > Bottoms Up: Why would the first customers pay you for the product today?
- > Top Down: Demonstrate there are a lot of these customers and/or why  $P*Q$  equals a large number
- > Top Down is irrelevant if the Bottoms Up story isn't compelling
- > Context:
  - What are the large trends driving this market?
  - New market growing quickly or “take share” in existing market?

## Tips for Constructing Top Down

- > Don't cast too wide a net, focus on the actual TAM (Total Addressable Market)
- > If you are going to attempt to be precise, have market size numbers from credible source
- > Often more important to use analogs from other companies, industries or markets
- > Don't justify the market by saying “we only need a small % of this huge market”
- > Step back and consider whether market size is a key risk

# Sales and Marketing Expenses

## > Cost to acquire leads

- Fully load non-headcount marketing: online advertising (SEM, LinkedIn, Facebook), SEO, content creation, software/tools, trade shows, contact lists, consultants/agencies, PR
- Ensure adequate headcount on marketing/demand gen team

## > Modeling sales costs

- What type of salespeople do you need?
- What is reasonable quota?
  - Typically \$800K - \$1.6M depending on price point and category
  - Does it include services, just subscription, and/or renewals?
  - Do not assume more than 80% quota attainment
- Assume adequate time for salesperson to ramp – typically 2 quarters or 0%/25%/75%/100% ramp
- Rep productivity: how many deals can they close per month? What is close rate? Did you model enough leads (and related expense)?
- Sales engineers needed?
- Customer success
- What is “all in” commission on a \$1 of new sales?



# Stress Test the Revenue Forecast

- > What do you need to believe?
- > Balance (a) conviction around market size and ability to grow aggressively with (b) reality
- > How does your GTM model scale?
  - Number of reps you can hire? Number of leads you can acquire? How many customers you can onboard?
  - How quickly can you grow?
  - Do all of your funnel assumptions and related expenses enable you to meet your forecasted growth rate?
- > Did you remember churn?
- > Know the benchmarks and industry comps
  - Growth rate: What is interesting? What is impossible?
  - Where are you in growth cycle?
    - Product market fit
    - Get to \$1-2M ARR
    - Triple / Triple / Double / Double / Double

# Stress Test the Expense Forecast

- > What is your max gross cash burn per month?
  - You control expenses, not necessarily revenue
- > What is your max net burn per month and when are you out of cash?
- > Will you be able to achieve necessary milestones within this runway?
- > Margin analysis: gross margin, operating margin
- > Look at expenses as a % of revenue and compare to other companies at similar stage
  - R&D as a % of revenue
  - S&M as a % of revenue
  - G&A as a % of revenue
- > Is your hiring plan reasonable? Most people assume they can hire way faster than reality
- > Total uses of cash by category
- > CAC and Magic Number

# Describing Your Business

## Gottesman's Characteristics of Great Businesses

1. Team
2. Great Product
3. Large Market
4. Business Model
5. Timing

## VC Investment Memo Sections

- > Summary
- > Investment Thesis
- > Risks and Concerns
- > Team
- > The Solution: Product and Technology
- > Context and Market Opportunity
- > Business Model and Go-To-Market Strategy
- > Competition
- > Schedule and Key Milestones
- > Future Roadmap
- > Financial Forecast and Use of Funds
- > Exit Strategy

# Summary (Paragraph)

- > Elevator pitch ... you truly do need to be able to explain your business idea to someone in 2 minutes
- > Problem Statement
- > Value Proposition
- > Key Differentiator
- > Why this is an interesting problem to solve
  - Large market, rapid growth, elegant business model, etc.
- > Is there a compelling analog?

# Questions?



## Thank You!