



RAISING CAPITAL SEMINAR SERIES

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RAISING CAPITAL SEMINAR SERIES

Module 3: The Proforma: Building a Strong Financial Model

April 2021



Today's presenter

Mike Colwell – Greater Des Moines Partnership

As executive director of entrepreneurial initiatives at the Greater Des Moines Partnership, Mike is directly responsible for the Partnership entrepreneurial strategies and execution. In his role Mike spends his days coaching, mentoring, consulting, networking and generally asking very tough questions, the kinds of questions most entrepreneurs would rather he did not ask. Focusing on high-growth-potential companies, he works with businesses ranging from a single person with an idea to \$10 million companies looking to grow to \$25 million. Mike assists with business strategy, business planning, business plan execution and business model development.

Mike is co-manager of Plains Angels, a Des Moines based group of angel investors. With more than 40 members, Plains Angels has been in existence since 2013 and has been active investing in many local and regional startup companies. Mike and his wife Beth are active angel investors with over 35 investments to-date. Mike has had a key role in the formation of the Global Insurance Accelerator and the Iowa AgriTech Accelerator and serves on the board of both organizations.



A joint collaboration



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DSM USA

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WELCOME

- Thank you for joining us!
- Logistics:
 - Mute your microphone
 - Turn on your video!
 - Open the chat window and use this for questions
- A recording of this will be available



AGENDA



- **Module 1:** The Fundraising Journey: Steps to Raising Capital
- **Module 2:** The Pitch: Telling Your Story
- **Module 3:** The Proforma: Building a Strong Financial Model
- **Module 4:** The Cap Table: Who Owns Your Company
- **Module 5:** The Term Sheet: The Details Matter



DES MOINES, IOWA



Financial Models for Startups

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Financial Models for Startups

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Welcome

- Introductions
- Goals:
 - Familiarize you with financial models for startup companies
 - Provide overview of StartupModels financial model
 - Available for download at <https://www.startupmodels.com>
 - Answer your questions



Welcome

➤ Why listen to me?



The Financial Documents



What Financial Documents Do You Need?

- ▶ Profit and loss statement (P&L)
- ▶ Cash flow statement
- ▶ Balance sheet (sometimes)



Why Do You Need These Statements?

- ▶ Does your company or will your company make money?
- ▶ Does your company have enough cash to survive and thrive?
 - ▶ Long product development cycles
 - ▶ Long sell cycles
 - ▶ Large inventory requirements
- ▶ What is the company worth today and in the future?



Investors Want a Return on Investment

- ▶ Banks: bankable loan with low risk of loss
- ▶ Equity investors: seek high growth company with 10x or better returns with acceptable higher risk
 - ▶ A \$500K investment for 10% of company with a 10x return (\$5M) equates to a \$50M sale
 - ▶ SaaS company with annual reoccurring revenue of \$7.2M at 7x valuation = \$50M value
 - ▶ Exit must take place in 5 to 7 years



What is a P&L?

Profit and loss statement (P&L)

| | |
|--------------------|------------------|
| Revenue | \$10,000 |
| Cost of revenue | <u>(\$4,000)</u> |
| Gross margin | \$6,000 |
| Operating expenses | <u>(\$4,500)</u> |
| Profit | \$1,500 |



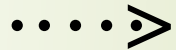
P&L Forecast

- ▶ Invest the time and effort to develop a realistic and detailed forecast
- ▶ Grounded in realistic assumptions
- ▶ First 12 -18 months critical and must be supported
- ▶ 3-year forecast is normally sufficient
- ▶ 5-year projections are often unrealistic
- ▶ Some investors want this to see your aspirations

Example P&L Statement

Report Year 2019

| | ClinicNote P&L Forecast for the year 2019 | | | | | | | |
|---------------------------------|---|--------------------|--------------------|-------------------|-------------------|--------------------|------------------|------------------|
| | Revenue Recognition Based | | | | | | | |
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug |
| Revenue | | | | | | | | |
| Subscription Software Revenue | \$ 1,092 | \$ 2,561 | \$ 4,644 | \$ 8,069 | \$ 12,431 | \$ 19,396 | \$ 24,576 | \$ 29,248 |
| Product Revenue | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Professional Services Revenue | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Total Revenue | \$ 1,092 | \$ 2,561 | \$ 4,644 | \$ 8,069 | \$ 12,431 | \$ 19,396 | \$ 24,576 | \$ 29,248 |
| Cost of Goods | | | | | | | | |
| Third Party / Transaction Fees | \$ 63 | \$ 136 | \$ 271 | \$ 449 | \$ 696 | \$ 1,241 | \$ 1,269 | \$ 1,285 |
| Hosting Expenses | \$ 75 | \$ 75 | \$ 75 | \$ 75 | \$ 75 | \$ 75 | \$ 75 | \$ 75 |
| Customer Support | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 2,603 | \$ 2,603 | \$ 2,603 |
| Internal Engineering Support | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Professional Services | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Cost of Product Sales | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Total Cost of Goods | \$ 138 | \$ 211 | \$ 346 | \$ 524 | \$ 771 | \$ 3,919 | \$ 3,947 | \$ 3,963 |
| Gross Profit | \$ 954 | \$ 2,350 | \$ 4,298 | \$ 7,546 | \$ 11,660 | \$ 15,478 | \$ 20,629 | \$ 25,285 |
| Gross Margin | 87.4% | 91.8% | 92.6% | 93.5% | 93.8% | 79.8% | 83.9% | 86.4% |
| Operating expenses | | | | | | | | |
| Total Sales expense | \$ 4,965 | \$ 4,965 | \$ 4,965 | \$ 4,965 | \$ 4,965 | \$ 6,701 | \$ 6,701 | \$ 6,701 |
| Marketing expense | \$ 200 | \$ 200 | \$ 200 | \$ 200 | \$ 200 | \$ 2,450 | \$ 2,450 | \$ 2,450 |
| Product Development | \$ - | \$ 10,000 | \$ 10,000 | \$ 10,000 | \$ 10,000 | \$ 10,000 | \$ 10,000 | \$ 10,000 |
| General and Administrative | \$ 5,210 | \$ 7,110 | \$ 1,310 | \$ 810 | \$ 810 | \$ 8,100 | \$ 900 | \$ 1,900 |
| Total Operating expenses | \$ 10,375 | \$ 22,275 | \$ 16,475 | \$ 15,975 | \$ 15,975 | \$ 27,251 | \$ 20,051 | \$ 21,051 |
| Operating Income | \$ (9,421) | \$ (19,926) | \$ (12,177) | \$ (8,430) | \$ (4,316) | \$ (11,773) | \$ 578 | \$ 4,234 |
| Interest Expense | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Other Income | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Net Income before Taxes | \$ (9,421) | \$ (19,926) | \$ (12,177) | \$ (8,430) | \$ (4,316) | \$ (11,773) | \$ 578 | \$ 4,234 |
| Full Time Headcount | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 |
| Contract Headcount | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |





What is a Cash Flow Statement?

Cash flow statement

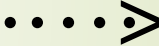
| | |
|------------------|------------------|
| Starting cash | \$31,000 |
| + New investment | \$0 |
| + Revenue | \$10,000 |
| - Expenses | <u>(\$6,000)</u> |
| Ending cash | \$35,000 |

Example Cash Flow Statement

Report Year 2019
Revenue Recognition Based

ClinicNote Cash Flow Forecast for the year 2019

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug |
|---------------------|---------|----------|---------|---------|---------|---------|---------|---------|
| Starting Cash | 10,000 | 201,412 | 182,914 | 180,257 | 182,784 | 191,831 | 206,177 | 228,460 |
| Revenue Received | 1,650 | 3,578 | 13,619 | 18,303 | 24,823 | 39,146 | 39,884 | 40,315 |
| Cost of Goods | 63 | - | - | - | - | - | - | - |
| Operating Expenses | 10,175 | 22,075 | 16,275 | 15,775 | 15,775 | 24,801 | 17,601 | 18,601 |
| Other Income | - | - | - | - | - | - | - | - |
| New Investment | 200,000 | - | - | - | - | - | - | - |
| Ending Cash Balance | 201,412 | 182,914 | 180,257 | 182,784 | 191,831 | 206,177 | 228,460 | 250,174 |
| Change in Cash | 191,412 | (18,498) | (2,657) | 2,527 | 9,047 | 14,345 | 22,283 | 21,714 |





Cash Flow Management

- ▶ Good business operators manage to cash flow
- ▶ Know your cash requirements
- ▶ Spend wisely, be thrifty
- ▶ Delay hiring, be creative
- ▶ Reduce salaries or take no salary
- ▶ Know your burn rate

Always have a detailed cash flow forecast at least 180 days in length. Manage your cash carefully.



What is a Balance Sheet?

- ▶ Balance sheet: *financial statement that reports a company's assets, liabilities and shareholders' equity at a specific point in time*

assets = liabilities + shareholder equity

- ▶ Assets = cash, inventory, property, equipment
- ▶ Liabilities = rent, wages, utilities, loans, taxes
- ▶ Shareholder equity = net of assets and liabilities
 - ▶ Not the same as valuation

See blog post in appendix: [How to read a balance sheet](#)



Financial Models vs. Accounting Statements

- Accounting statements are factual
 - Deal with past and present
- Financial models are forecasts
 - They are always wrong!
 - They are critical to planning your business
 - They are an ongoing requirement

See blogpost from Fred Wilson of Union Square Ventures:
[The Financial Function](#)



Knowing your numbers

- ▶ Get comfortable with your financials - know your numbers
- ▶ Be able to explain significant changes
 - ▶ Why does revenue go down in Q2?
 - ▶ Why does your cash dip next year in Q3?
- ▶ Don't pretend to know something you do not

To an investor, if you do not know your numbers, you do not know your business.



Summary: Financial Documents

- ▶ These documents matter
- ▶ Investors and bankers read these in detail
- ▶ An experienced investor can tell an amazing amount about your company by only looking at these documents
- ▶ Have an experienced mentor or advisor review these with you before presenting to others
- ▶ Don't pretend to know something you do not



The Financial Model



Building the Financial Model

There are five steps in building a financial model

- 1- Revenue model (most of the work)
- 2 - Product development expenses
- 3 - Sales and marketing expenses
- 4 - People expenses
- 5 - General and operating expenses



Step One: The Revenue Model



The First Step – The Revenue Model

- The revenue model (part of your business model) drives the business and the expense structure
 - People
 - Marketing costs
 - Sales costs
- Where you should focus your attention
 - Physical product – focus on cash cycle
 - Software / service company – focus on sell cycle



A product vs. a Business

- ▶ Having a viable revenue model is the mark of a business, not just a product
 - ▶ Customers by name
 - ▶ Marketing plans with test evidence of effectiveness
- ▶ Products are a small part of a successful company
 - ▶ What makes Apple, Apple?



Sales Cycle

- ▶ The process from potential customer identification to money in hand and product / service delivered successfully
- ▶ Knowing the marketing and sales portion of the cycle is critical to building a financial model
 - ▶ How long from first call or email to a demonstration? What percentage will take the demo?
 - ▶ How long from demo to money in hand? What percentage will buy?
 - ▶ Will they keep buying?



Cash Cycle

- ▶ The amount of time from the point when you start spending money on a customer to when the customer pays you (cash in bank)
- ▶ Important in SaaS and critical in hardware companies
- ▶ Directly affects how much money you raise



Types of Revenue Models

- There are five common types of revenue models:
 - SaaS high volume
 - SaaS high value
 - Physical product / hardware
 - Mixed model (product and either service or SaaS)
 - Service business



SaaS Financial Models



SaaS Company Examples

- ClinicNote, Inc.
 - SaaS model high value, low volume
- Art of Peace
 - SaaS model high volume, low value

All financial information provided is fictional

Welcome to ClinicNote

Simple. Secure. Dependable.

FREE DEMO

CLOUD-BASED SOFTWARE FOR OUTPATIENT THERAPY





ClinicNote Revenue Model

- ▶ Direct sale
 - ▶ Universities - Very specific market timing aligned with start of a semester
 - ▶ Private Practices
- ▶ Indirect / assisted sale
 - ▶ Value added reseller
 - ▶ Referral / recommendation marketing
 - ▶ Not currently pursuing these channels

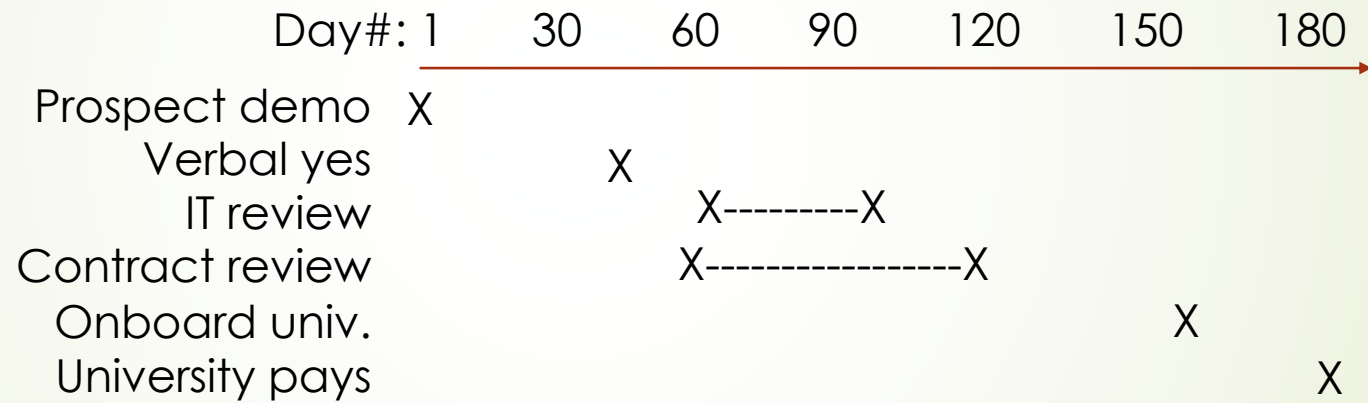


ClinicNote Direct Sale Revenue Model

- Universities
 - ACV (average contract value) = \$6,000
 - Paid up front yearly
 - No direct cost of sale
- Private practices
 - ACV = \$150 / Month or \$1,200 / year
 - Paid monthly and yearly – heavy discount for yearly payment

ClinicNote University Sell Cycle

University sell cycle



► This is a “quick sale”. Some take one year or more

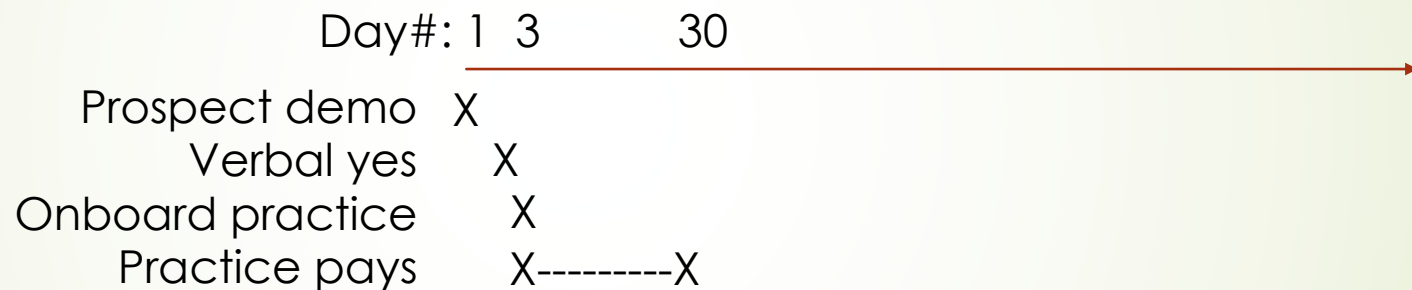
Financial Impact of University Direct Sales

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--------------------|-----|-----|-----|-----|-----|-----|-----|---------|-------|-------|-------|-------|
| Prospect Demo: | X | | | | | | | | | | | |
| Customer commits: | | X | | | | | | | | | | |
| Contract Signed: | | | | | | X | | | | | | |
| Cash received: | | | | | | | | \$6,000 | | | | |
| Rev \$ Recognized: | | | | | | | | | \$500 | \$500 | \$500 | \$500 |

Cash flow increases \$6,000 but only \$2,000 revenue recognized ($\$6,000 / 12 = \500) in fiscal year

ClinicNote Private Practice Sell Cycle

Private practice sell cycle



- This is the average private practice sale
- Referral sale and value-added reseller will be similar timeframe



Financial Impact of Private Practice Sales (monthly)

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Prospect Demo: | X | | | | | | | | | | | |
| Customer commits: | X | | | | | | | | | | | |
| Cash received: | \$150 | \$150 | \$150 | \$150 | \$150 | \$150 | \$150 | \$150 | \$150 | \$150 | \$150 | \$150 |
| Rev \$ Recognized: | \$150 | \$150 | \$150 | \$150 | \$150 | \$150 | \$150 | \$150 | \$150 | \$150 | \$150 | \$150 |

Monthly payment negates need
for revenue recognition



Financial Impact of Private Practice Sales (yearly)

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--------------------|-----|-----|-----|---------|-------|-------|-------|-------|-------|-------|-------|-------|
| Prospect Demo: | | | X | | | | | | | | | |
| Customer commits: | | | X | | | | | | | | | |
| Cash received: | | | | \$1,200 | | | | | | | | |
| Rev \$ Recognized: | | | | \$100 | \$100 | \$100 | \$100 | \$100 | \$100 | \$100 | \$100 | \$100 |

Payment in April of \$1,200 cash but only \$900
In recognized revenue



Summary: ClinicNote Sell Cycle

- ▶ Everyone underestimates the sell cycle, most by a factor of 2 or 3
 - ▶ Sometimes the earliest deals are the fastest and later deals take longer and are harder to close
- ▶ Different customer types have different sell cycles
 - ▶ University – large organization, process bound, slow!
 - ▶ Private practice – very small organization (average 4 users) , single decisionmaker, fast!

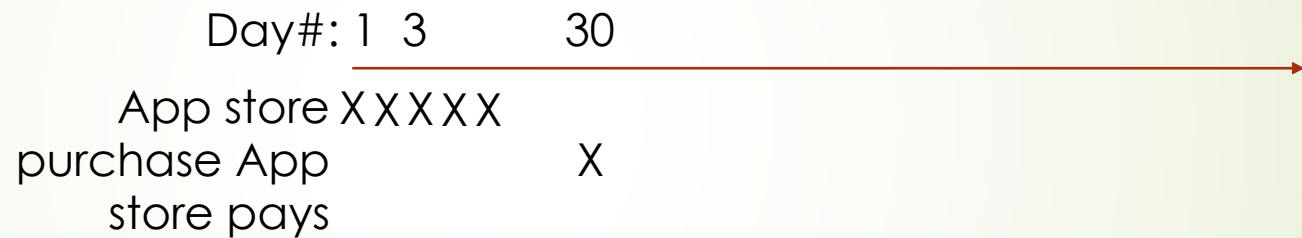


Art of Peace (fictitious company)

- Mobile app developer for those seeking peace in their lives
- Direct sale
 - \$89.95
 - App store on Google and Apple
 - Apple and Google take 30% of sales for app store fees

Art of Peace App Store Sell Cycle

App store sell cycle



Google and Apple vary slightly from each other but in general they pay ever 30 days

Financial Impact of Art of Peace Sales

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|------------------|------|-------|---------|-----|-----|-----|-----|-----|-----|
| Purchase Qty | 1 | 10 | 100 | | | | | | |
| Purchase : | \$90 | \$900 | \$9,000 | | | | | | |
| App Store Fee | \$27 | \$270 | \$2,700 | | | | | | |
| Co marketing Fee | \$11 | \$110 | \$1,100 | | | | | | |
| Cash received: | \$52 | \$520 | \$5,200 | | | | | | |
| Total Cash | \$52 | \$572 | \$5,920 | | | | | | |





Summary: Art of Peace

- ▶ Deceptively simple model
- ▶ Debate on revenue recognition requirement
- ▶ Live and die on renewals
- ▶ Marketing is the challenge
 - ▶ Driving user interest
 - ▶ Keeping high retention of users
 - ▶ Many apps are now one-time fees



Forecasting SaaS Revenue



Data Elements for High Value SaaS

- ▶ Customer Name
- ▶ Contract / Prospect
- ▶ Likelihood of close
- ▶ License Fee
- ▶ Renewal period in months
- ▶ Revenue Share percentage
- ▶ Commission percentage
- ▶ One time fee
- ▶ Cost of one-time fee
- ▶ Payment delay
- ▶ Credit card transaction?
- ▶ Sale month and year
- ▶ End of license month and year



Example – High Value SaaS

- ▶ Customer agrees to pilot then potential rollout of SaaS solution
- ▶ 30 day install, 90 day paid pilot, First site live in 6 months, 5 additional sites to follow over time
 - ▶ No fee for pilot install
 - ▶ \$10K fee - 90 day pilot
 - ▶ First site \$100K per year first year then \$80K / year for additional sites. Install fee of \$10K per site
 - ▶ Follow-on sites \$80K per year plus \$10K install



Example – High Value SaaS

- ▶ Pilot \$10K recognized over 3 months from contract date – 100% confidence in sale
- ▶ First site \$100K recognized over 12 months from contract date plus 10K fee – 60% confidence
 - ▶ Confidence below 100% is discounted proportionately
- ▶ Separate forecast for each additional site, \$80K over 12 months plus \$10K one time – 50% confidence
- ▶ Critical issue: Reoccurring Revenue (MRR, ARR)
 - ▶ Every site has separate timing
 - ▶ One time install revenue is not counted
- ▶ Example in Excel sheet

Using the Model – High Value SaaS

| Customer Name | Contract / Prospect | Likelihood of close | License Fee | Renewal Period in months | Revenue Share percentage | Commission Percentage | One Time Fee | Cost of One Time Fee | Payment delay | Credit Card | Sale Mo. | Sale Yr. | End Mo. | End Yr. |
|---------------------|---------------------|---------------------|-------------|--------------------------|--------------------------|-----------------------|--------------|----------------------|---------------|-------------|----------|----------|---------|---------|
| Acme Inc - Pilot | C | | \$ 10,000 | 3 | 0% | 0% | \$ - | \$ - | 2 | N | 5 | 2021 | 7 | 2021 |
| Acme Inc - 1st Site | P | 70% | \$ 100,000 | 12 | 0% | 0% | \$ 10,000 | \$ 5,000 | 2 | N | 9 | 2021 | 8 | 2022 |
| Acme Inc - 2nd Site | P | 50% | \$ 80,000 | 12 | 0% | 0% | \$ 10,000 | \$ 4,000 | 2 | N | 2 | 2022 | 1 | 2023 |
| Acme Inc - 3rd Site | P | 50% | \$ 80,000 | 12 | 0% | 0% | \$ 10,000 | \$ 4,000 | 2 | N | 5 | 2022 | 4 | 2023 |
| Acme Inc - 4th Site | P | 50% | \$ 80,000 | 12 | 0% | 0% | \$ 10,000 | \$ 4,000 | 2 | N | 8 | 2022 | 7 | 2023 |
| Acme Inc - 5th Site | P | 50% | \$ 80,000 | 12 | 0% | 0% | \$ 10,000 | \$ 4,000 | 2 | N | 11 | 2022 | 10 | 2023 |
| Acme Inc - 6th Site | P | 50% | \$ 80,000 | 12 | 0% | 0% | \$ 10,000 | \$ 4,000 | 2 | N | 2 | 2023 | 1 | 2024 |
| Acme Inc - 1st Site | P | 50% | \$ 80,000 | 12 | 0% | 0% | \$ - | \$ - | 2 | N | 9 | 2022 | 8 | 2023 |

Contracted revenue is 100%

Renewal of 1st site is at lower cost

Cost of install Goes down after First account

The Results P&L 2021 – High Value SaaS

| Report Year | 2021 | | | | | | | | | | | | | |
|---|--------|--------|--------|--------|----------|----------|----------|--------|-----------|----------|----------|----------|-----------|--|
| GIA March 2021 Class P&L Forecast for the year 2021 | | | | | | | | | | | | | | |
| Revenue Recognition Based | | | | | | | | | | | | | | |
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total | |
| Revenue | | | | | | | | | | | | | | |
| Subscription Software Revenue | \$ - | \$ - | \$ - | \$ - | \$ 3,333 | \$ 3,333 | \$ 3,333 | \$ - | \$ 5,833 | \$ 5,833 | \$ 5,833 | \$ 5,833 | \$ 33,333 | |
| Product Revenue | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Professional Services Revenue | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 7,000 | \$ - | \$ - | \$ - | \$ 7,000 | |
| Total Revenue | \$ - | \$ - | \$ - | \$ - | \$ 3,333 | \$ 3,333 | \$ 3,333 | \$ - | \$ 12,833 | \$ 5,833 | \$ 5,833 | \$ 5,833 | \$ 40,333 | |
| Cost of Goods | | | | | | | | | | | | | | |
| Third Party / Transaction Fees | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Hosting Expenses | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Customer Support | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Internal Engineering Support | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Professional Services | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 3,500 | \$ - | \$ - | \$ - | \$ 3,500 | |
| Cost of Product Sales | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Total Cost of Goods | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 3,500 | \$ - | \$ - | \$ - | \$ 3,500 | |
| Gross Profit | \$ - | \$ - | \$ - | \$ - | \$ 3,333 | \$ 3,333 | \$ 3,333 | \$ - | \$ 9,333 | \$ 5,833 | \$ 5,833 | \$ 5,833 | \$ 36,833 | |
| Gross Margin | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 72.7% | 100.0% | 100.0% | 100.0% | 91.3% | |

The Results P&L 2022 – High Value SaaS

| Report Year | | GIA March 2021 Class P&L Forecast for the year 2022 | | | | | | | | | | | | | |
|--------------------------------|--|---|-----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--|
| Revenue Recognition Based | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total | |
| Revenue | | | | | | | | | | | | | | | |
| Subscription Software Revenue | | \$ 5,833 | \$ 9,167 | \$ 9,167 | \$ 9,167 | \$ 12,500 | \$ 12,500 | \$ 12,500 | \$ 15,833 | \$ 13,333 | \$ 13,333 | \$ 16,667 | \$ 16,667 | \$ 146,667 | |
| Product Revenue | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Professional Services Revenue | | \$ - | \$ 5,000 | \$ - | \$ - | \$ 5,000 | \$ - | \$ - | \$ 5,000 | \$ - | \$ - | \$ 5,000 | \$ - | \$ 20,000 | |
| Total Revenue | | \$ 5,833 | \$ 14,167 | \$ 9,167 | \$ 9,167 | \$ 17,500 | \$ 12,500 | \$ 12,500 | \$ 20,833 | \$ 13,333 | \$ 13,333 | \$ 21,667 | \$ 16,667 | \$ 166,667 | |
| Cost of Goods | | | | | | | | | | | | | | | |
| Third Party / Transaction Fees | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Hosting Expenses | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Customer Support | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Internal Engineering Support | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Professional Services | | \$ - | \$ 2,000 | \$ - | \$ - | \$ 2,000 | \$ - | \$ - | \$ 2,000 | \$ - | \$ - | \$ 2,000 | \$ - | \$ 8,000 | |
| Cost of Product Sales | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Total Cost of Goods | | \$ - | \$ 2,000 | \$ - | \$ - | \$ 2,000 | \$ - | \$ - | \$ 2,000 | \$ - | \$ - | \$ 2,000 | \$ - | \$ 8,000 | |
| Gross Profit | | \$ 5,833 | \$ 12,167 | \$ 9,167 | \$ 9,167 | \$ 15,500 | \$ 12,500 | \$ 12,500 | \$ 18,833 | \$ 13,333 | \$ 13,333 | \$ 19,667 | \$ 16,667 | \$ 158,667 | |
| Gross Margin | | 100.0% | 85.9% | 100.0% | 100.0% | 88.6% | 100.0% | 100.0% | 90.4% | 100.0% | 100.0% | 90.8% | 100.0% | 95.2% | |



Data Elements for High Volume SaaS

- ▶ Unit price per period
- ▶ Renewal rate
- ▶ Sales Commission
- ▶ Renewal period in months
- ▶ Average payment delay
- ▶ Percentage of revenue received via credit card
- ▶ Percent of sales with commission
- ▶ Monthly unit forecast
- ▶ Dependent revenue by license type
 - ▶ Percent of units sold
 - ▶ Fee value
 - ▶ Fee cost
 - ▶ Fee timing offset



Example – High Volume SaaS

- ▶ Selling B2B software on monthly or annual subscription
 - ▶ \$199/year or \$29/month with expected 80% renewal rate
 - ▶ 90% paid by credit card
 - ▶ Commission of 45% on yearly sales for 70% of transactions
 - ▶ No commission on monthly sales
 - ▶ Training module sold as add-on
 - ▶ \$89 one-time fee on 30% of yearly and 20% of monthly
 - ▶ No direct cost to training module as it is video based
- ▶ Example in Excel sheet

Using the Model – High Volume SaaS

| | | | | | | | | | | | | | | | | |
|------------------|--|--------------------------|---------------------|--------------|----------------------|----------------------------------|------|-------|-------|-------|-------|---------|---------|--|--|-------------|
| License Sales | © 2021 Michael Colwell - all rights reserved | | | | | | | | | | | | | | | |
| | Payment Delay (non credit card) in months: | | | | | | 1 | | | | | | | | | |
| | Percent of revenue via credit card: | | | | | | 90% | | | | | | | | | |
| | | | | | | | | | | | | | | | | 2021 |
| License Name | License Revenue | Renewal Period in months | Unit Price / period | Renewal Rate | Sales Comission rate | Percent of sales with commission | Jan | Feb | Mar | Apr | May | Jun | Jul | | | |
| Monthly licenses | Forecasted New Monthly licenses Unit Sales | 1 | \$29.00 | 80% | 0% | 0% | 5 | 15 | 32 | 46 | 38 | 31 | 75 | | | |
| | Forecasted Renewal Monthly licenses Unit Sales | | | | | | 0 | 4 | 15 | 38 | 67 | 84 | 92 | | | |
| | Actual New Monthly licenses Unit Sales | | | | | | | | | | | | | | | |
| | Actual Renewal Monthly licenses Unit Sales | | | | | | | | | | | | | | | |
| Yearly license | Forecasted New Yearly license Unit Sales | 12 | \$199.00 | 80% | 45% | 70% | 2 | 7 | 15 | 37 | 21 | 52 | 58 | | | |
| | Forecasted Renewal Yearly license Unit Sales | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | Actual New Yearly license Unit Sales | | | | | | | | | | | | | | | |
| | Actual Renewal Yearly license Unit Sales | | | | | | | | | | | | | | | |
| | Dependent Revenue | Percent Units Sold | Fee Triggered by: | Fee Value | Fee Cost | Fee Timing Offset | | | | | | | | | | |
| | Traning Module | 20% | Monthly licenses | \$89 | 0 | 0 | \$89 | \$267 | \$534 | \$801 | \$712 | \$534 | \$1,335 | | | |
| | Traning Module | 30% | Yearly license | \$89 | 0 | 0 | \$89 | \$178 | \$445 | \$979 | \$534 | \$1,424 | \$1,513 | | | |

The Results P&L – High Volume SaaS

| Report Year | 2021 | | | | | | | | | | | | |
|---|--------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| GIA March 2021 Class P&L Forecast for the year 2021 | | | | | | | | | | | | | |
| Revenue Recognition Based | | | | | | | | | | | | | |
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
| Revenue | | | | | | | | | | | | | |
| Subscription Software Revenue | \$ 178 | \$ 700 | \$ 1,767 | \$ 3,441 | \$ 4,405 | \$ 5,557 | \$ 8,027 | \$ 10,821 | \$ 12,838 | \$ 14,845 | \$ 16,112 | \$ 15,951 | \$ 94,643 |
| Product Revenue | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Professional Services Revenue | \$ 178 | \$ 445 | \$ 979 | \$ 1,780 | \$ 1,246 | \$ 1,958 | \$ 2,848 | \$ 3,560 | \$ 3,026 | \$ 3,293 | \$ 2,581 | \$ 1,691 | \$ 23,585 |
| Total Revenue | \$ 356 | \$ 1,145 | \$ 2,746 | \$ 5,221 | \$ 5,651 | \$ 7,515 | \$ 10,875 | \$ 14,381 | \$ 15,864 | \$ 18,138 | \$ 18,693 | \$ 17,642 | \$ 118,228 |
| Cost of Goods | | | | | | | | | | | | | |
| Third Party / Transaction Fees | \$ 19 | \$ 64 | \$ 145 | \$ 315 | \$ 253 | \$ 430 | \$ 544 | \$ 691 | \$ 656 | \$ 721 | \$ 610 | \$ 526 | \$ 4,973 |
| Hosting Expenses | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Customer Support | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Internal Engineering Support | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Professional Services | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Cost of Product Sales | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Total Cost of Goods | \$ 19 | \$ 64 | \$ 145 | \$ 315 | \$ 253 | \$ 430 | \$ 544 | \$ 691 | \$ 656 | \$ 721 | \$ 610 | \$ 526 | \$ 4,973 |
| Gross Profit | \$ 337 | \$ 1,081 | \$ 2,601 | \$ 4,905 | \$ 5,398 | \$ 7,086 | \$ 10,332 | \$ 13,690 | \$ 15,208 | \$ 17,417 | \$ 18,083 | \$ 17,116 | \$ 113,254 |
| Gross Margin | 94.8% | 94.4% | 94.7% | 94.0% | 95.5% | 94.3% | 95.0% | 95.2% | 95.9% | 96.0% | 96.7% | 97.0% | 95.8% |



Summary – SaaS Forecast Data Elements

- ▶ Investors will ask for a customer list and forecast for high value SaaS businesses
- ▶ Investors expect accurate, thoughtful forecasts
- ▶ No forecast is accurate, but the assumptions are critical
- ▶ Keep this updated over time. Your forecast is essential to business planning



SaaS Model Dynamics



LTV to CAC Ratio

- ▶ SaaS models often focus on LTV to CAC ratio (I think this is outdated)
 - ▶ CAC = Customer Acquisition Cost
 - ▶ Total sales and marketing expenses / number of new customers acquired = CAC
 - ▶ LTV = Lifetime Value
 - ▶ Average monthly revenue per customer X customer lifetime in months = LTV (Yearly is same formula using yearly numbers)
 - ▶ LTV / CAC Ratio = Divide the LTV by the CAC
 - ▶ E Commerce LTV is a different equation and up for debate

LTV to CAC Ratio

- ▶ ClinicNote university example
 - ▶ Yearly sales and marketing costs = \$71,000
 - ▶ Yearly average revenue per customer = \$6,500
 - ▶ 21 new customers in last year
 - ▶ Average life of customer 4 years (est.)
 - ▶ $CAC = \$71,000 / 21 = \$3,381$
 - ▶ $LTV = \$6,500 * 4 = \$26,000$
 - ▶ $LTV / CAC \text{ ratio} = 26,000 / \$3,381 = 7.7$



MTR – Better Measurement for Early Stage

- ▶ MTR – Months To Repay
- ▶ ClinicNote has a CAC of \$3,381
- ▶ Average contract value = \$6,000
- ▶ MTR focuses on payback period
 - ▶ 6.7 months for example above
- ▶ The cash flow impact is the key

$$\text{MTR} = \text{CAC} / (\text{ACV}/12)$$

$$\text{MTR} = \$3,381 / (\$6,000/12) = 6.762$$



SaaS Cost of Revenue

- ▶ Elements include:
 - ▶ Hosting
 - ▶ 3rd Party web fees such as content delivery, embedded software, embedded services
 - ▶ Support personnel costs
 - ▶ Customer onboarding costs
 - ▶ Credit card fees (debate on this point)



Seasonality in All Revenue Models

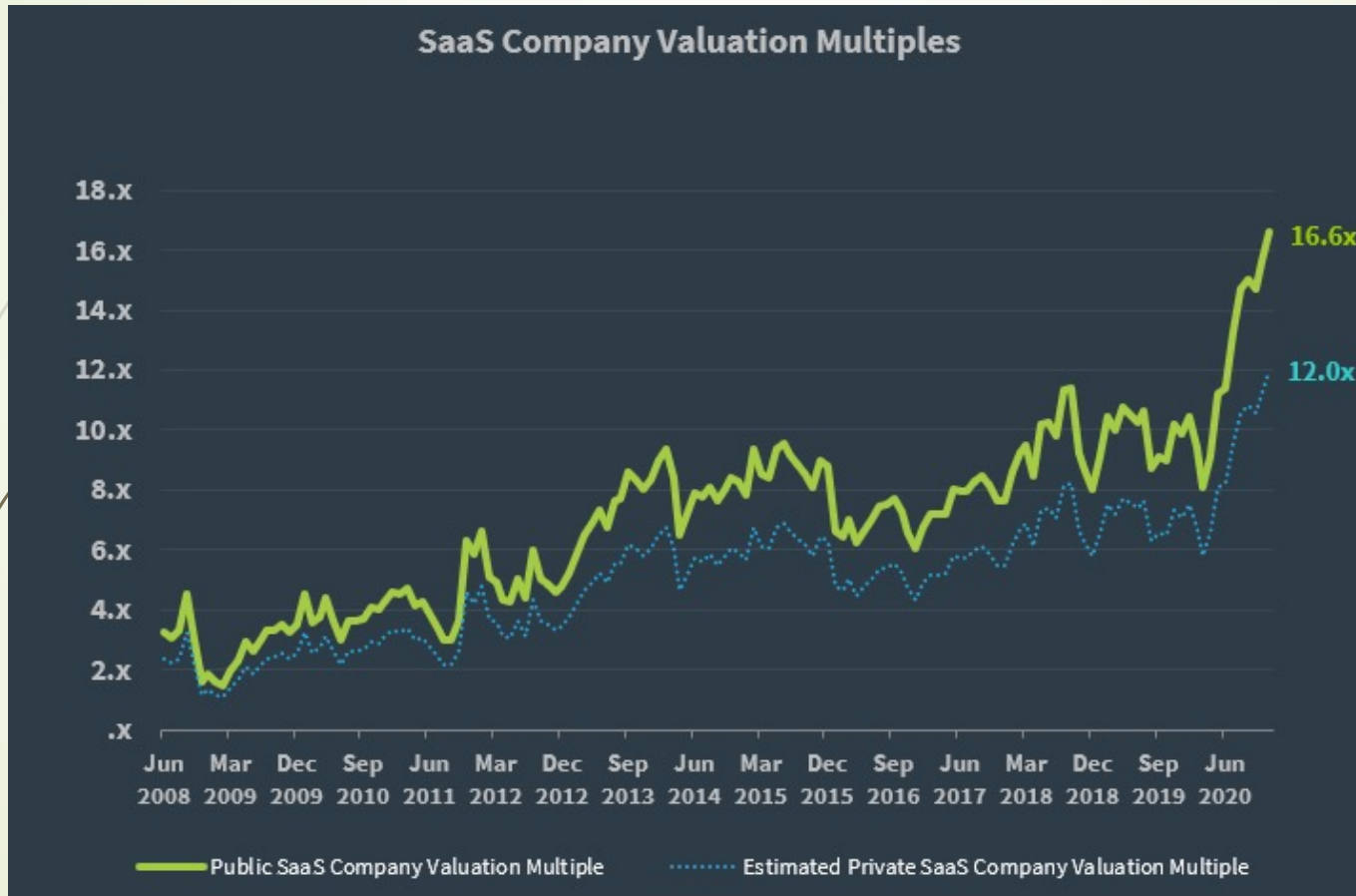
- ▶ Key failure in many models is not addressing the seasonality of the business
- ▶ Consumer products
 - ▶ Holidays, weather, sporting seasons
 - ▶ Procurement seasons and windows for major retailers
- ▶ Vertical market products
 - ▶ Tradeshow seasons
 - ▶ Budget cycles
 - ▶ End-of-year issues
 - ▶ Busy seasons



SaaS Model Valuations

- ▶ SaaS businesses are valued on a multiple of annual recurring revenue
 - ▶ Influenced by many factors including growth rate, margin, recurrence rates, barriers to entry, market share, etc.
- ▶ Typical valuations currently are 5 to 10 times annual recurring revenue (ARR)
 - \$3.5M ARR = \$17.5M to \$35M in valuation

SaaS Model Valuations



See Appendix:
[Private SaaS Company Valuations: 2021](#)



What is My SaaS Company Worth?

- ▶ To determine what your private SaaS company is worth:
 - 1 - Find the current revenue multiple of public SaaS companies growing at a similar rate
 - 2 - Subtract 2 to get the discounted private SaaS company multiple
 - 3 - Multiply your company's trailing 12-month revenue by the discounted private SaaS company multiple
- ▶ This is a very simplistic estimate



Summary: SaaS company valuations

- ▶ The key to a software or service business is reoccurring revenue
- ▶ Common for a large SaaS company to be valued at 6 to 12 times revenue
 - ▶ \$1M / year revenue = company value of \$6M to \$12M
- ▶ Estimating the reoccurrence rate is very hard
 - ▶ What percent of current customers will renew?
 - ▶ Few achieve 90% per year



Physical product company examples

- Lil' Sidekick
 - Physical product – mass market
- FarrPro
 - Physical product – vertical market

All financial information provided is fictional



Physical Products Revenue Models

Time to sellable product = 3 years

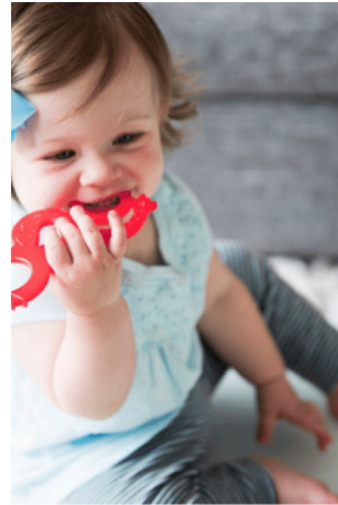


Teether/Sippy Cup & More Holder

\$9.99

Stop the Drop Game with our multi-functional tether!

- Adjust to secure any item (Teethers, Spoons, Sippy



Yummeez Flavored Teether

\$7.99

Yummeez is a breakthrough in the teething industry. It is the world's first and only truly flavored teether, that brings much needed relief for lil' ones.



Lil' Sidekick Revenue Models

- Sell to big box store (Walmart is largest customer)
- Sell on Amazon
- Sell through distribution
- Sell international
- Sell direct from website

Each of these models have different prices, costs, timing, and payment terms

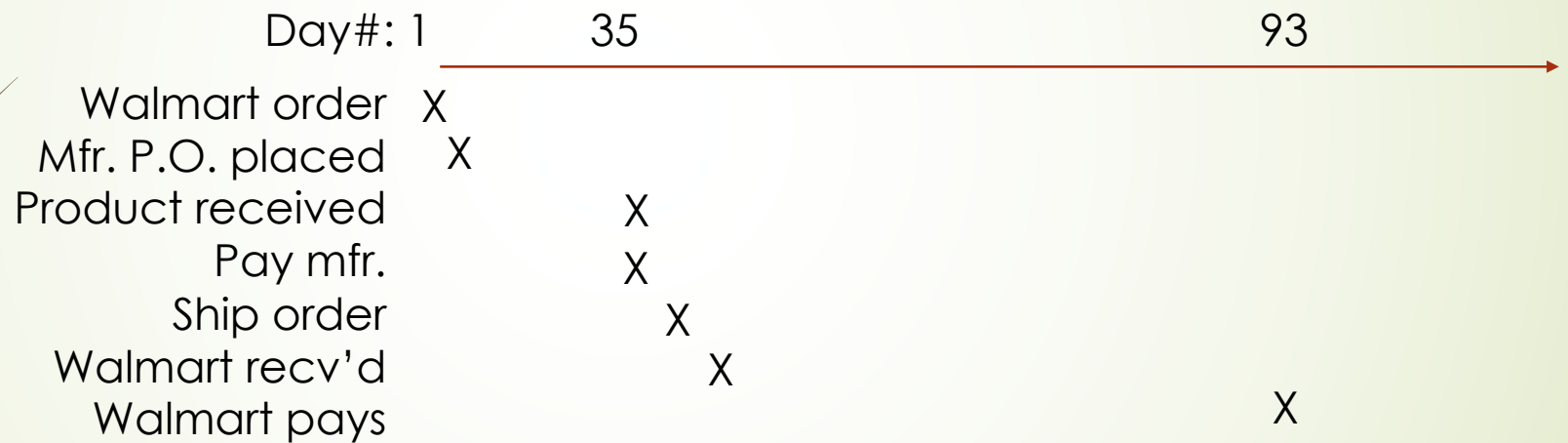


Lil' Sidekick Walmart Cash Cycle

- ▶ 25% margin to Lil' Sidekick
- ▶ Monthly 10,000 unit at \$4 per unit purchase order
- ▶ Cost of unit = \$3
- ▶ \$40K revenue, \$30K cost, \$10K gross margin
- ▶ Impact of monthly \$40K orders is significant
- ▶ Every week starting 30 days later they owe \$30K to the manufacturer

Lil' Sidekick Walmart Cash Cycle

Walmart cash cycle



Financial Impact of Walmart

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Revenue | | \$40K | \$40K | \$40K | \$40K | \$40K | \$40K | \$40K | \$40K | \$40K | \$40K | \$40K |
| Mfr Payment: | | -\$30K | -\$30K | -\$30K | -\$30K | -\$30K | -\$30K | -\$30K | -\$30K | -\$30K | -\$30K | -\$30K |
| Cash received: | | | | \$40K | \$40K | \$40K | \$40K | \$40K | \$40K | \$40K | \$40K | \$40K |
| Net Cash | | -\$30K | -\$60K | -\$50K | -\$40K | -\$30K | -\$20K | -\$10K | \$0K | \$10K | \$20K | \$30K |

Revenue of \$440,000, ending cash \$30K
Time to cash positive: 7 months




Lil' Sidekick International Cash Cycle

- ▶ 40% margin to Lil' Sidekick
- ▶ Minimum order is 1000 units at \$7.50 per unit price
- ▶ Unit cost is \$4.50
- ▶ Distributor pays at time of shipment

Lil' Sidekick International Cash Cycle

Sell via international cash cycle

| | Day#: 1 | 33 |
|---------------------|---------|----|
| Distributor orders | X | |
| Mfr. P.O. placed | X | |
| Product received | | X |
| Pay mfr. | | X |
| Ship to distributor | | X |
| Distributor pays | | |



Financial Impact of International

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------|-----|-----|---------|----------|-----|----------|----------|-----|----------|----------|-----|----------|
| Revenue | | | | \$7,500 | | | \$7,500 | | | \$7,500 | | |
| Mfr Payment: | | | | -\$4,500 | | | -\$4,500 | | | -\$4,500 | | |
| Cash received: | | | \$7,500 | | | \$7,500 | | | \$7,500 | | | \$7,500 |
| Net Cash | | | \$7,500 | \$3,000 | | \$10,500 | \$6,000 | | \$13,500 | \$9,000 | | \$16,500 |

Revenue \$22,500, ending cash \$16,500

HAVEN™

The perfect microclimate for
newborn pigs!
**FIELD TESTED. SCIENTIFICALLY
PROVEN.**





FarrPro Revenue Models

- ▶ Direct sale
 - ▶ Large producers
 - ▶ Sales process – pilot first, then rollout
- ▶ Indirect / assisted sale
 - ▶ Value added reseller

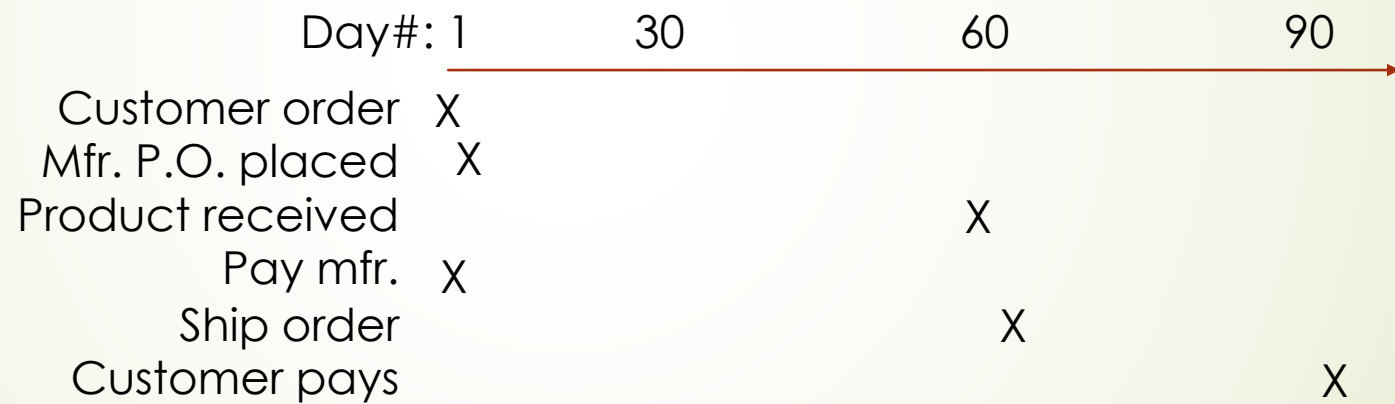


FarrPro Direct Sale Cash Cycle

- ▶ List price \$995, average sale price \$742
 - ▶ Use average sale price to deal with discounting
- ▶ Margins 39% to 54% depending on volume ordered
- ▶ Customer pays 30 days after order received
- ▶ 60 days from order to delivery by manufacturer. Must pay mfr at time of order
- ▶ Offers discounts for cash in advance or cash on delivery

FarrPro Direct Sale Cash Cycle

Direct sale cash cycle



Financial Impact of Direct Sales

Example: 10 units / mo. 50% margin

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Order quantity | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Revenue | | | 7,420 | 7,420 | 7,420 | 7,420 | 7,420 | 7,420 | 7,420 | 7,420 | 7,420 | 7,420 |
| <hr/> | | | | | | | | | | | | |
| Mfr Payment: | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 |
| Cash received: | | | | 7,420 | 7,420 | 7,420 | 7,420 | 7,420 | 7,420 | 7,420 | 7,420 | 7,420 |
| Net Cash | -3,710 | -7,420 | -3,710 | 0 | 3,710 | 7,420 | 11,130 | 14,840 | 18,550 | 22,260 | 25,970 | 29,680 |

Revenue of \$74,200, ending cash \$29,680 – could be much worse



FarrPro Indirect Cash Cycle

- ▶ List price \$995, average sale price \$625
- ▶ Margins 31% to 40% depending on volume ordered
- ▶ Distributor pays on order received
- ▶ 60 days from order to delivery by manufacturer. Must pay mfr at time of order

FarrPro Indirect Cash Cycle

Indirect cash cycle

| | Day#: | 1 | 30 | 60 | 90 |
|-------------------|-------|---|----|----|----|
| Distributor order | X | | | | |
| Mfr. P.O. placed | X | | | | |
| Product received | | | | X | |
| Pay mfr. | X | | | | |
| Ship order | | | | X | |
| Distributor Pays | | | | X | |

Financial Impact of Indirect Sales

Example: 10 units / mo. 40% margin

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Order quantity | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Revenue | | | 6,678 | 6,678 | 6,678 | 6,678 | 6,678 | 6,678 | 6,678 | 6,678 | 6,678 | 6,678 |
| <hr/> | | | | | | | | | | | | |
| Mfr Payment: | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 | -3,710 |
| Cash received: | | | | | | | | | | | | |
| Net Cash | -3,710 | -7,400 | -2,968 | 0 | 2,968 | 5,936 | 8,904 | 11,872 | 14,840 | 17,808 | 20,776 | 23,744 |

Revenue of \$74,200, ending cash \$23,744



Physical Product Costs Change Over Time

- ▶ Costs are very different depending on the stage of the product

Prototyping / Testing / Certification /
Selling / Scaling

- ▶ Optimize for the “selling” phase



Cash Flow Modeling for Complex Products

- ▶ FarrPro product is made up of many components from many suppliers
- ▶ You will not buy exact quantities of each part for each order
 - ▶ 10 screws = \$10.00 1,000 screws = \$25.00
 - ▶ Minimum order quantities for certain parts
- ▶ As you grow, the operational aspects of this issue grow along with the opportunities for cost reduction
 - ▶ More cash allows lower costs



Summary - Different Selling Approaches

- ▶ Each approach likely reaches different customers
- ▶ Examine profitability, cash flow and resource requirements of each approach
 - ▶ International can be very cash friendly
- ▶ Focus on biggest long-term opportunity
- ▶ Keep in mind who owns the customer relationship
 - ▶ You want to own this relationship if possible



Summary: Physical Product Cash Cycle

- ▶ Selling physical product with extended terms and low margins is a brutal business
- ▶ Compare the amount of gross margin per sale to the frequency of sale and the length of the cash cycle
 - ▶ 10% gross margin on a product you sell 50 times per year may be good if the cash cycle is 10 days and you pay net 30
 - ▶ 50% gross margin on a product you sell once a year is probably bad if the cash cycle is 9 months



Summary: Physical Product

Once you get past the beginning cash crunch, these can be very lucrative if the margins are good

- ▶ Focus on improving margins over time
 - ▶ Increase purchase volume
 - ▶ Buy raw materials in larger volume
 - ▶ Get competitive bids to your current suppliers
- ▶ Focus on gaining better payment terms from your manufacturer
- ▶ Beware of commissioned sales long term



Summary of first step! (50+ slides later...)

- ▶ The revenue model defines much of your expense structure and amounts
- ▶ What remains to document include:
 - ▶ Product development
 - ▶ Sales and marketing expenses
 - ▶ People
 - ▶ General and operating expenses



Step Two: Product Development



The Second Step: Software Product Dev. Cost

- ▶ Product development costs are all the costs of bringing your product to market and maintaining the product in the market
 - ▶ Software development
 - ▶ 3rd party APIs, libraries, contract development, user testing
 - ▶ Support, ongoing updates, certifications

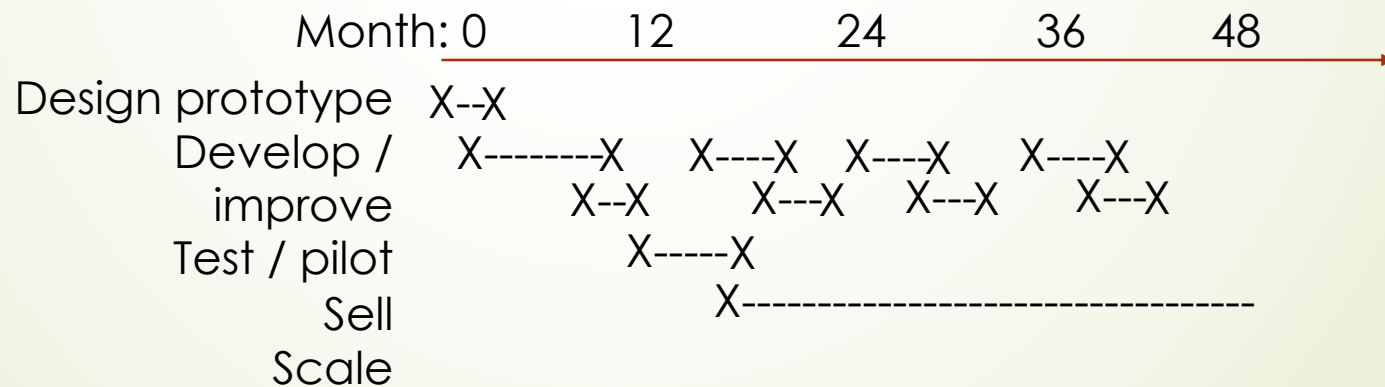


The Second Step: Software Product Dev. Cost

- ▶ Software = \$200,000 to \$5 million up front
- ▶ Ongoing maintenance and upgrades
 - ▶ New features, upgrades
 - ▶ Browsers change constantly
 - ▶ Standards such as HIPPA change
 - ▶ APIs change
 - ▶ Partner companies go away or change business models
 - ▶ ClinicNote has a billing partner for insurance billings
 - ▶ Unexpected items such as ADA compliance for government funded entities

The Second Step: Software Product Dev. Cost

- Software development
 - Design, prototypes
 - Development
 - Pilot, testing
- Development is never done



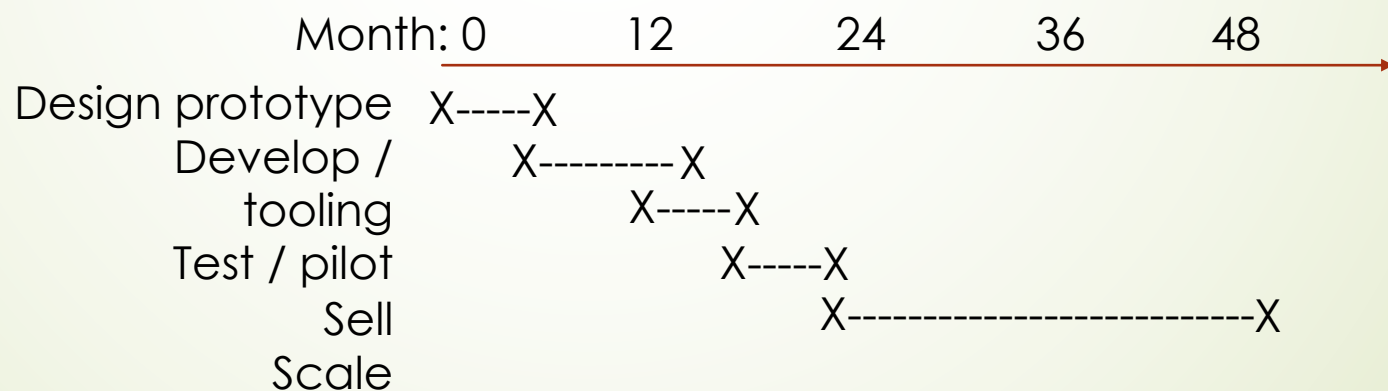


The Second Step: Hardware Product Dev. Cost

- ▶ Product development costs are all of the costs of bringing your product to market and maintaining the product in the market
 - ▶ Product development
 - ▶ Design, develop, package, produce, test, certify
 - ▶ Packaging (unit and case)
 - ▶ Packaging test and certification

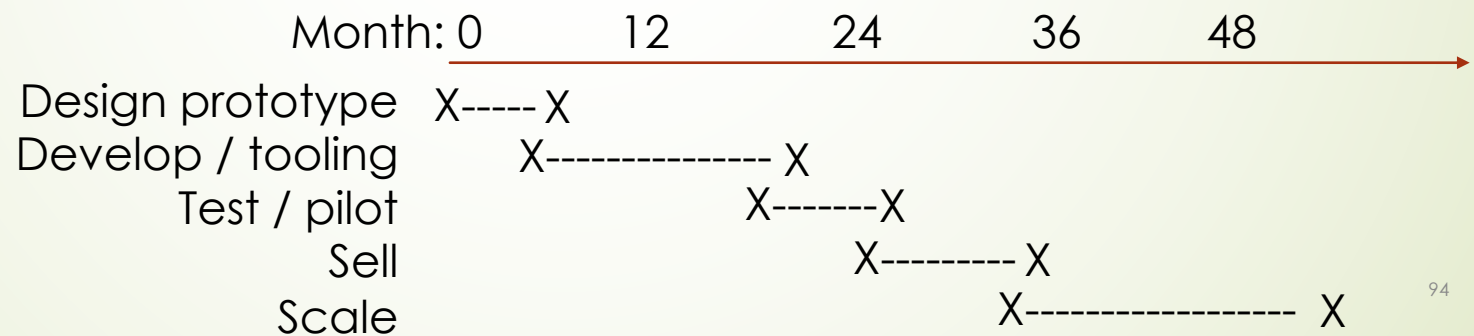
The Second Step: Hardware Product Dev. Cost

- Simple plastic part = \$50,000 to \$150,000
 - Design engineering, tooling, prototypes
 - Pilot, testing, and certification
 - Packaging - anticipate updates
- Expect tool and packaging changes over time



The Second Step: Hardware Product Dev. Cost

- ▶ Electronic devices = \$2 to \$50 million
 - ▶ Large team of people
 - ▶ Significant outside development contracts
 - ▶ 3rd party manufacturing
 - ▶ Everything changes over time





Summary: Product Development Cost

- ▶ Get help on this step from others
 - ▶ Make sure they have built something similar to what you are building
- ▶ Get multiple bids
- ▶ Check references
- ▶ Plan for delays, failures, and problems



Step Three: Sales and Marketing



The Third Step

- ▶ Sales and marketing expenses
 - ▶ Specific marketing software
 - ▶ Trade shows
 - ▶ Advertising
 - ▶ Web development for company site
 - ▶ Travel
 - ▶ Direct sale regional sales force = large travel budget
 - ▶ Phone / video conference sell = minimal travel
 - ▶ Tradeshow and conference speaking



Step Four: People



The Fourth Step

► People

- For each area, what people do you need to hire and when?
- Are they contract or full time?
- Will you provide benefits?



Step Five: G&A Expenses



The Fifth Step

- General / operating expenses
 - Rent
 - Software licenses
 - Legal
 - Financial
 - Equipment (computers, test equipment, servers)
 - Banking
 - Insurance (E&O, D&O, liability, life insurance for key persons, cyber)
 - Phones



How Much Should You Raise?



How Much Should You Raise - Analytical

- ▶ Determine negative cash flow “bottom”
 - ▶ Build your forecast with no investment
 - ▶ Make sure you have product development, support and other costs included
 - ▶ For hardware companies, inventory is critical
 - ▶ Add any other startup expenses
 - ▶ Determine average burn rate
 - ▶ Determine average sell cycle



How Much Should You Raise - Analytical

- ▶ Negative cash flow bottom = \$1,300,000
- ▶ Average burn rate is \$75K per month
- ▶ Average sell cycle is 6 months
- ▶ Mike's formula:

Neg cash flow + (burn rate * 1.5 * sell cycle in months)

$$\$1,300,000 + (\$75,000 * 6 * 1.5) = \$1,975,000$$

There is no perfect answer. The key is your assumptions

How Much Should You Raise - Analytical

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------------------|--------|--------|----------|-----------|-----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|
| Starting Cash | 10,000 | 10,000 | 10,000 | (35,000) | (129,500) | (247,955) | (689,609) | (1,234,547) | (605,753) | (122,312) | 319,350 | 1,650,622 |
| Revenue Received | - | - | - | - | 41,552 | 155,820 | 280,476 | 1,157,520 | 1,595,300 | 964,600 | 2,077,600 | 964,600 |
| Commissions | - | - | - | - | 1,247 | 4,675 | 8,414 | 34,726 | 47,859 | 28,938 | 62,328 | 28,938 |
| Credit Card Fees | - | - | - | - | - | - | - | - | - | - | - | - |
| Inventory | - | - | 45,000 | 94,500 | 158,760 | 592,800 | 817,000 | 494,000 | 1,064,000 | 494,000 | 684,000 | 798,000 |
| Operating Expenses | - | - | - | - | - | - | - | - | - | - | - | - |
| New Investment | - | - | - | - | - | - | - | - | - | - | - | - |
| Ending Cash Balance | 10,000 | 10,000 | (35,000) | (129,500) | (247,955) | (689,609) | (1,234,547) | (605,753) | (122,312) | 319,350 | 1,650,622 | 1,788,284 |
| Change in Cash | - | - | (45,000) | (94,500) | (118,455) | (441,655) | (544,938) | 628,794 | 483,441 | 441,662 | 1,331,272 | 137,662 |



How Much Should You Raise – Common Path

- ▶ Raise enough money to achieve a set of milestones that will attract a subsequent round of investment
- ▶ Although raising for 15-18 months is ideal, sometimes it isn't a reality
- ▶ Early on you may raise a smaller amount for a shorter runway simply to demonstrate initial traction (initial working product, pilot customers, etc.)
- ▶ Focus on getting done fast and back to work



Final Thoughts



Financial Model Spreadsheet

- ▶ Startupmodels.com
- ▶ Requires Excel



Further Reading

- ▶ [Preparing a SaaS Company for a Capital Raise – SaaS Capital](#)
- ▶ [How to Read a Balance Sheet \(The Not-Boring Version\) - Andrew Youderian](#)
- ▶ [The Finance Function: Looking Back And Looking Forward](#)
- ▶ [What is LTV:CAC Ratio? – geckoboard.com](#)
- ▶ [The False Confidence of the LTV/CAC Ratio for Early Stage SaaS Startups – Tomasz Tunguz](#)
- ▶ [Unpacking the Deep Diagnostic Value of LTV/CAC for SaaS Startups](#)
- ▶ [The Math Behind SaaS Startup Customer Lifetime Value](#)
- ▶ [SaaS Cost of Goods Sold for Startups](#)
- ▶ [2021 Private SaaS company valuations](#)