

Model Drivers & Forecasting

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Agenda

- ▣ Outcomes for the day:
 - ▣ Telling a financial story
 - ▣ Key metrics
 - ▣ Required Inputs
 - ▣ Templates with Key Inputs
 - ▣ Common mistakes
 - ▣ Rolling up your sleeves

About Dave

- 5X founder, Board Member, former SVP Programs at UP Global (Startup Weekend + Startup America)
 - Startup Next creator and Startup Week
- Senior Partner, Fearless.fund
- Author – "[Trajectory: Startup – Ideation to Product Market/Fit](#)"
- >15 transactions – 8 sell side, 2 buy side now with [NextPath Advisors](#)
- WTIA Startup Programs Board Chair



Telling a Financial Story

- Finance is the language of business
- The story comes down to numbers, in cells on a spreadsheet, the model validates the story.
- Investors want to stress test the models and assumptions
- Models serve multiple purposes
 - Fundraising – pitch deck
 - Budgeting and forecasting – scalable revenue
 - Cashflow forecasting – runway

The Model Supports the Deck

- ▣ The pitch deck provides a 3-5 year summary
 - ▣ You need to know the numbers
- ▣ The summary at a high level
 - ▣ Revenue, cost of revenue and gross margin (\$/%)
 - ▣ Operating expenses
 - ▣ Profitability and cashflow breakdown
 - ▣ Headcount
 - ▣ Key drivers (unit economics/customers)

Financial Model Best Practices

- The success drivers (metrics, KPI's) are simple and easy to understand. Avoid complicated formulas
- The revenue categories map to one or more of the 14 models
- The five-year ramp is realistic (not \$100M)
- Cost of revenue is complete, so gross margin is correct:
 - Hosting, fulfillment, shipping
 - Labor (customer service)
 - Production costs

Financial Model Best Practices

- Operating expenses are complete:
 - Expenses grouped by department (fixed vs. variable, cost of sales, etc)
 - Headcount – roles, compensation, benefits
 - Contractors – HR, Accounting, Engineering
 - Travel expense
 - Marketing – reflects go-to-market strategy
 - G&A – facilities, insurance, other operating expenses
- Investments are reasonable to estimate:
 - Intellectual property, equipment

Financial Model Best Practices

- GAAP/Accrual based accounting
- Revenue recognition
- A great model answer the burning questions:
 - What are the business drivers?
 - When does cash flow breakeven occur?
 - How much investor capital is needed?
 - Will more than one round of funding be necessary?

Forecast vs Actual

- ▣ Four dimensions of financial reporting:
 - ▣ Actuals – QuickBooks (accrual)
 - ▣ Operating Plan – Budget (roadmap for the quarter & year)
 - ▣ Forecasting
 - ▣ Variance analysis
 - ▣ Actual to plan
 - ▣ Actual to forecast

Required Inputs

Inputs

- ▣ Product Roadmap – what and when
- ▣ Staffing
- ▣ Go-to-Market – Marketing, Sales, and BD
- ▣ Pricing
- ▣ Revenue Model – it's not a surprise

Big Rocks/Big Levers

- What are the “Big Rocks” milestones you’re going to hit in each of the upcoming quarters?
- What are the big levers?
- Move the big items first

Quarterly Roadmap – 18 Months

Quarterly Milestones	Q1 2021		Q2 2021		Q3 2021		Q4 2021	
		Priority (ABC) Impact (H/M/L)		Priority (ABC) Impact (H/M/L)		Priority (ABC) Impact (H/M/L)		Priority (ABC) Impact (H/M/L)
Marketing Customer Acquisition (Owner)								
Marketing Budget	\$4,500							
Marketing Channels	Trade Show				Trade Show			
New Marketing Qualified Leads	22		30		38		45	
Leads passed to sales								
Return on Adversiting Spend (ROAS)								
LTV:CAC Ratio	4.7		5.1		5.5		5.7	
Sales								
Reps headcount								
SDR/Customer Success headcount								
New Sales Qualified Leads	8		10		12		15	
New Closed Customer	2		3		4		5	
Time to Close								
Average Contract Value (ACV)								
Repeat Customers	4		6		8		10	
Revenue (Owner)								
Billings	Revenue Splits							
Major Accounts								

Marketing/Sales

- ▣ Marketing Funnel is linked to but not in the model
- ▣ What channels
- ▣ When
- ▣ What outcomes
- ▣ Sales conversion metrics
 - ▣ Data comes from CRM
 - ▣ Forecast to actual

Pricing/Product Roadmap

- ▣ What's the product pricing
- ▣ When do you release new features
- ▣ When are new products scheduled
- ▣ Are services included

Staffing

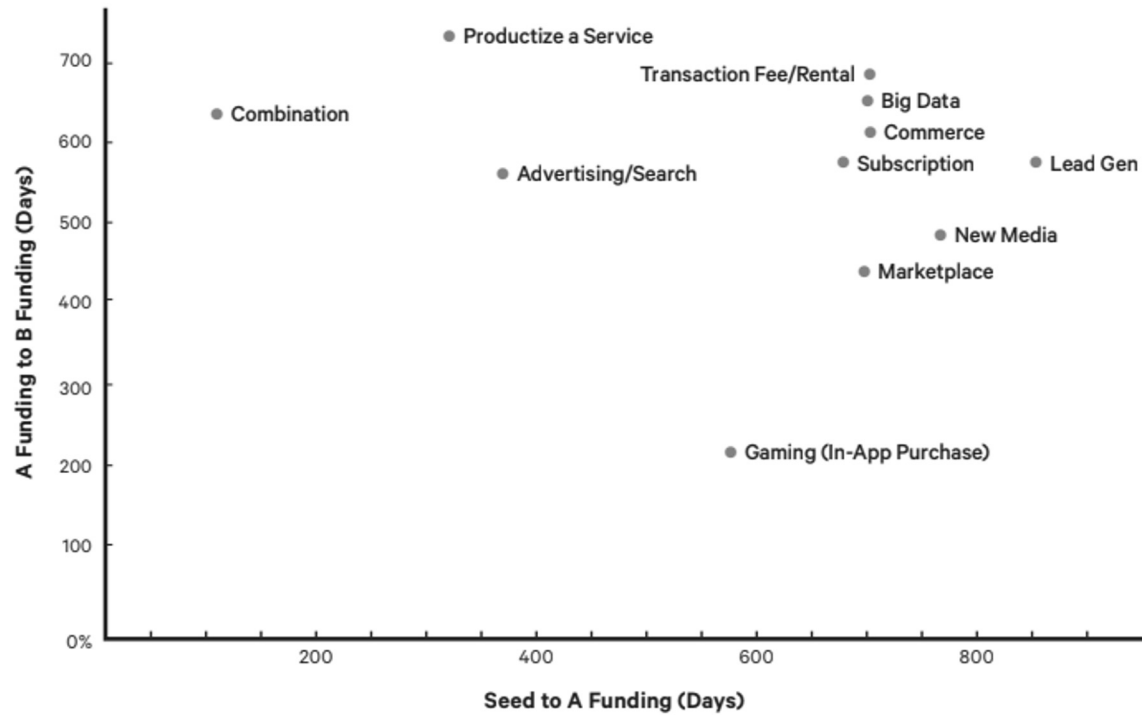
- Key hires
 - Budget
 - When
- Time to recruit
- Cost to recruit

Templates

How to Monetize: Revenue Models

The Data

- Background – revenue templates
 - 2654 companies from Crunchbase
 - 5+ year tracking
 - Surprises
 - Seed 1-10
 - Combinations models
 - * on short time from Seed to A
 - Failures
 - Wayback Machine
 - >80% lacked clear CTA and Value Prop



1. Fee for Service

- Example: Accenture, Stride (Education)
- Use: B2B & B2C
- Key Metrics
 - Project Revenue
 - Cost of delivering (usually time)
 - Gross Margin
- Services are hard to scale because they require people to deliver including Restaurant, Contractors, etc.
- Services include markup on cost of goods sold

2. Productize a Service

- Example: SW Airlines, Guidant Financial, IBM
- Your offerings is generally complex and requires services to deploy
 - Gross margin on Services >35%
 - Product development comes with services
- Use: B2C & B2B
- Examples: Moz, service company convert to tools.
- Challenges – difficult to make the transition away from services

3. Commerce

- Example: Wayfair, Lululemon
- Use: B2C & B2B
- Key Metrics:
 - Wholesale or cost of goods sold
 - Average Margin %
 - Average Basket
- Commerce – Physical Goods- Wholesale, cost of goods, retail, average margin, physical good
- Notes: Can mature into marketplace

4. Subscription

- Example: Salesforce, Spotify
- Use: B2C & B2B
- Key Metrics
 - Average Revenue Per User (ARPU)
 - Conversion ratio – e.g. trial to purchase
 - Churn
- Tiered pricing to optimize customer profiles/revenues
- Notes: High multiple, forecastable revenue

5. Metered Service

- Example: Twilio, AWS, UIPath, Plaid Tech
- Use: Favors B2B
- Key Metrics
 - Average Revenue Per User (ARPU)
 - Usage growth over time
 - Churn
- Challenges: infrastructure required at launch
- Notes: Highest multiple, forecastable revenue



The API Economy

6. Transaction Fees/Rental

- Example: Stripe, Chegg
- Use: B2C & B2B
- Key Metrics
 - Average transaction revenue
 - Fee % per transaction
 - Number of transactions
- Challenges: Margins are small (15%), need efficiency
- Notes: Don't start too low

7. Marketplaces

- Example: eBay, Alibaba, Uber
- Use: B2C & B2B
- Key Metrics
 - Average Transaction Amount
 - Number of Monthly Transactions
 - Commission %
- Challenges: two sided marketplaces require you start with one side, value to seller & Product market fit (x2)
- Notes: critical mass or marketplace required

8. Combinations

- Example: SmartSheet, conglomerates at scale
- Combination business models happen for two reasons
 - You don't know which model is right
 - At scale you can expand revenue sources
- Examples: Hardware sensors + software services to create data analytics. At Scale, Amazon, Microsoft
- Challenges – most require scale or at least traction
- Mature faster

9. Gaming


- Example: King.com/Candy Crush, Blizzard
- Use: B2C Only
- Key Metrics:
 - Downloads
 - % play
 - Average in app purchase
- Challenges – tends to be “hit driven business”
- Notes: use in first 21 days is a predictor of success

10. Advertising/Search

- Example: Google, Facebook
- Use: B2B – advertisers pay, users are free
- Key Metrics
 - Traffic
 - Click
 - Avg. revenue/click
- Challenges – Scale, need >1M uniques/month to consider the option

11. New Media

- Example: SnapChat, Clubhouse
- Use: B2C only
- Key Metrics:
 - K-Factor (Viral Co-efficient)
 - Network effect of inviting others to join
- Challenges – K-Factor is hard. Little revenue until scale
- Notes: Everyone wants to! Not happening in B2B
- No revenue actually required – GREAT multiple



This is the
Non-
Revenue
Model

12. Big Data

- Examples: PatientsLikeMe, Splunk
- Use: B2B
- Key Metrics:
 - Per API Call
 - Per record pricing
 - Frequency/recency
- To monetize data, you need to have the data in advance or massive cash

13. Lead Generation

- Example: Mint.com, Chime.com, AllStarDirectories,
- Use: B2C (selling consumers data), B2B
- Key Metrics
 - Cost to generate traffic
 - % conversion of form data
 - Price per lead
- Challenges: Highly competitive, barrier of entry is low
- Notes: Conversion rates average 0.06%

14. Licensing

- Example: Think Microsoft office license or server license – before subscription. Content Licensing
- Use: B2B
- Key Metrics:
 - Duration of license
 - Upgrades & maintenance (20-25% annually)
- Use can be based on vertical market or geography

Revenue Models– Primary/Secondary

1. Fee for Service
2. Commerce
3. Subscription
4. Metered Service
5. Transaction Fee/Rental
6. Productize a Service
7. Combinations
8. Marketplace
9. Lead Generation
10. Gaming
11. Advertising/Search
12. New Media
13. Big Data
14. Licensing

Top Templates

- Subscription
 - Recurring revenue, churn, ARR/MRR, LTV:CAC Ratio
- Transaction Fee/Rental (not booking topline revenue)
 - Avg transaction amount, % commission, # transactions/mo, LTV:CAC
- Productize a Service – people are required for some portion – most robust model, includes subscription
 - Split of revenue between product/services
- Marketplace –
 - Two funnels, buy/sell side, % fee, 2X LTV:CAC

3. Subscription

- ▣ Example: [Salesforce](#), [Box](#), [Spotify](#)
- ▣ Use: B2C & B2B
- ▣ Key Metrics
 - ▣ Average Revenue Per User (ARPU)
 - ▣ Conversion ratio – e.g. trial to purchase
 - ▣ Churn
- ▣ Challenges: MVP won't be enough to be Kick Ass Product
- ▣ Notes: Highest multiple, forecastable revenue

5. Transaction Fees/Rental

- ▣ Example: [99Designs](#), [KickStarter](#), [Elance](#), [Chugg](#)
- ▣ Use: B2C & B2B
- ▣ Key Metrics
 - ▣ Average transaction revenue
 - ▣ Fee % per transaction
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8. Marketplaces

- Example: [eBay](#), [Alibaba](#)
- Use: B2C & B2B
- Key Metrics
 - ▣ Average Transaction Amount
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Inc 500 Data – Quiz: How much revenue to you need in three year to end up on the Inc 500 List?

Inc 500 List

- ▣ Data from Top 10 over eight years
 - ▣ Avg \$50.64M
 - ▣ High Average \$147.78M
 - ▣ Low Average \$20.44
 - ▣ All from a baseline revenue of \$1M in first of three years

Common Mistakes

- ❑ Complex and confusing assumptions - not on one tab
- ❑ Confusing model design
- ❑ Metrics and success factors not defined
- ❑ Overly aggressive revenue ramp
- ❑ Understanding expenses and cash needs (optimism)
- ❑ Key milestones not clearly outlined

Corp Hygiene Note

- Museum Quality
 - Fully executed contracts
 - In OneHub, Drive, etc.
 - Offer letters, W-4, I-9, options, PIIA
 - Termination procedures
 - Contractor files – NDA, Inventions Agreements
 - Closed monthly books
 - Payroll and tax payments

Templates

1. Choose a [template](#)
2. Familiarize yourself
3. Startup with Assumptions
4. Move to Compensation and people
5. Revenue next
6. Forecast