# Revenue Multiple Demystified

Tech Valuation Workshop

# Welcome

---

Supporting Docs: www.github.com/nongaap/revenue-multiple

Meetup: www.meetup.com/fullstack-tech-business-strategy-la

Meetup Goal: Help devs become “full-stack” tech professionals

Future: Open to workshop ideas & talks. Always looking for new venues to host future meetups.

# About Mike

---

About: Fullstack JS Developer. Prior public tech investor

Investment Experience: Deployed Over $2B in capital

Selected Investments: Grubhub, Xoom, Intuit, Time Warner, HP

Email: Mike at Nongaap dot Com

Twitter: @nongaap

**I’m still learning about valuation. There’s no silver bullet.**

# Introductions

---

1) Name and background

2) “Feel free to ask me about [area of interest, expertise]”

3) “I would love to learn more about / get help on [topic]”

# Survey

---

Knowledge Level (Thumbs Up, Down, Sideways):

- Enterprise Value
- Revenue Multiple
- Discounted Cash Flow (DCF)
- Software Business Models (Transactional, Recurring, Perpetual, SaaS, On-Premise, etc.)
- Software Margins

# Revenue Multiple Workshop Goals

---

1) Provide literal and conceptual explanation of revenue multiple
2) Understand why revenue multiple is used in tech
3) Understand how to tie revenue back to expenses and growth
4) Understand how business model impacts revenue multiple
5) Learn industry valuation “rule of thumbs”

**Ask questions if anything is confusing**

# What is Revenue Multiple?

# What is Revenue Multiple?

---

Literal Definition: Enterprise Value (Market Value + Debt - Cash) divided by Revenue.

Conceptual Definition: Revenue multiple represents a market “rating” for a company’s long-term growth & cash flow potential as well as its general popularity/optionality.

# Race Car Analogy

---

Cars with different performance characteristics have different starting points with the goal of having all cars finishing at the same time.

An investor’s job is to figure out which cars were improperly evaluated by the crowd and race organizers, and is actually faster than expected

# Why not use DCF, EBITDA, or other methodologies?

# Why not use DCF, EBITDA, or other methodologies?

---

1) Revenue multiple is easy and there are well supported industry valuation “rule of thumbs”
2) Best way to run industry comparisons without dealing with company specific spending decisions
3) That said using other valuations methodologies is a good way to test core assumptions

# How Do You Tie Revenue Multiple to Expenses and Growth?

# How Do You Tie Revenue Multiple to Expenses and Growth?

---

1) If you believe valuation is ultimately a function of profitability and cash-flow long term, revenue multiple can be estimated using the Gordon Growth Model

# Gordon Growth Model (Steady State DCF)

---

$$P = \frac{D_1}{r - g}$$

1) Also known as the dividend discount model, Gordon Growth Model is a way to value a company based on the theory a business is worth the sum of all of its future dividend payments discounted back to present value.
2) Formula can be repurposed using estimated cash flow to calculate value of companies that don’t pay dividends

# Core Assumptions (Pitfalls) of Gordon Growth Model

---

1) Assumes the company being valued has stable growth, payout rate, and profitability in perpetuity.
2) For companies undergoing strong growth, a DCF or multi-stage model may be used to bridge the gap between growth period and “stable” period.
3) While imperfect Gordon Growth Model provides a framework to gauge and understand market expectations for company’s growth and returns. We can use it to “connect the dots”

# How to Calculate Revenue Multiple Using Gordon Growth

---

Revenue Multiple = After-Tax Profit Margin * Profit Payout Ratio * (1 + Growth Rate)/(Discount Rate - Growth Rate)

1) Tech is primarily focused on growth rate when evaluating revenue multiple ranges but profitability, management decisions (impacting margin, payout, discount rate), and general market sentiment (discount rate) are also important drivers

# Revenue Multiple Sensitivity

| | | Revenue Multiple Sensitivity | | | | | |
|---|---|---|---|---|---|---|---|
| | | Margin | | | | | |
| | | 60% | 65% | 70% | 75% | 80% | 85% |
| Growth | -10% | 1.8x | 1.9x | 2.0x | 2.2x | 2.3x | 2.5x |
| | -5% | 2.5x | 2.7x | 2.9x | **3.1x** | **3.3x** | **3.5x** |
| | 0% | 3.9x | 4.2x | 4.6x | **4.9x** | **5.2x** | **5.5x** |
| | 5% | 8.2x | 8.9x | 9.6x | 10.2x | 10.9x | 11.6x |

1) High margin, high growth companies will tend to have a higher multiple compared to lower margin, lower growth companies (all else being equal)

# How Does Business Model Impacts Valuation?

# How Does Business Model Impacts Valuation?

| | Business Model | | | |
|---|---|---|---|---|
| | **Transactional** | **Maintenance** | **Enterprise SaaS** | **SMB SaaS** |
| Revenue | $1.00 | $1.00 | $1.00 | $1.00 |
| Operating Income | $0.40 | $0.85 | $0.70 | $0.70 |
| Operating Margin | 40.0% | 85.0% | 70.0% | 70.0% |
| Tax Rate | 35.0% | 35.0% | 35.0% | 35.0% |
| Growth rate | | -5.0% | 0.0% | -10.0% |
| Risk rate | | 10.0% | 10.0% | 10.0% |
| **Revenue Multiple** | **0.26x** | **3.50x** | **4.55x** | **2.05x** |
| Value | $0.26 | $3.50 | $4.55 | $2.05 |

# Valuation Rule of Thumbs

---

1X: Predominantly Hardware or Transaction Revenue companies with little to no growth prospects. Typically lower margin.

<3X: Typically attracts cash flow investors assuming the revenue includes significant recurring revenues.

3X to 5X: Typically considered “fair” value

>10X: Companies are getting credit for excellent revenue quality and growth prospects (big addressable market, monopoloy, etc.)

# Pair Session: Pick Some Companies & Value Them

---

Try to value without looking at current revenue multiple: Etsy (ETSY), Grubhub (GRUB), Zillow (Z), Twitter (TWTR), Shopify (SHOP), Care (CRCM), Box (BOX), Yelp (YELP), TrueCar (TRUE)

Resources:

- Finance.yahoo.com (Analysts tab for revenue growth est.)
- Github.com/nongaap/revenue-multiple
- Investor relations page (Check out margins, presentations)

# Revenue Multiple Summary

---

1) A popular valuation shortcut to quickly evaluate companies
2) Can also be viewed as a “rating” that scores a company’s long-term business prospects and popularity
3) Can be useful when comparing companies that have different levels of discretionary spend but similar underlying business characteristics
4) All revenue is not created equal (Recurring > One-Time)
5) Sustainable cash flow still matters long term