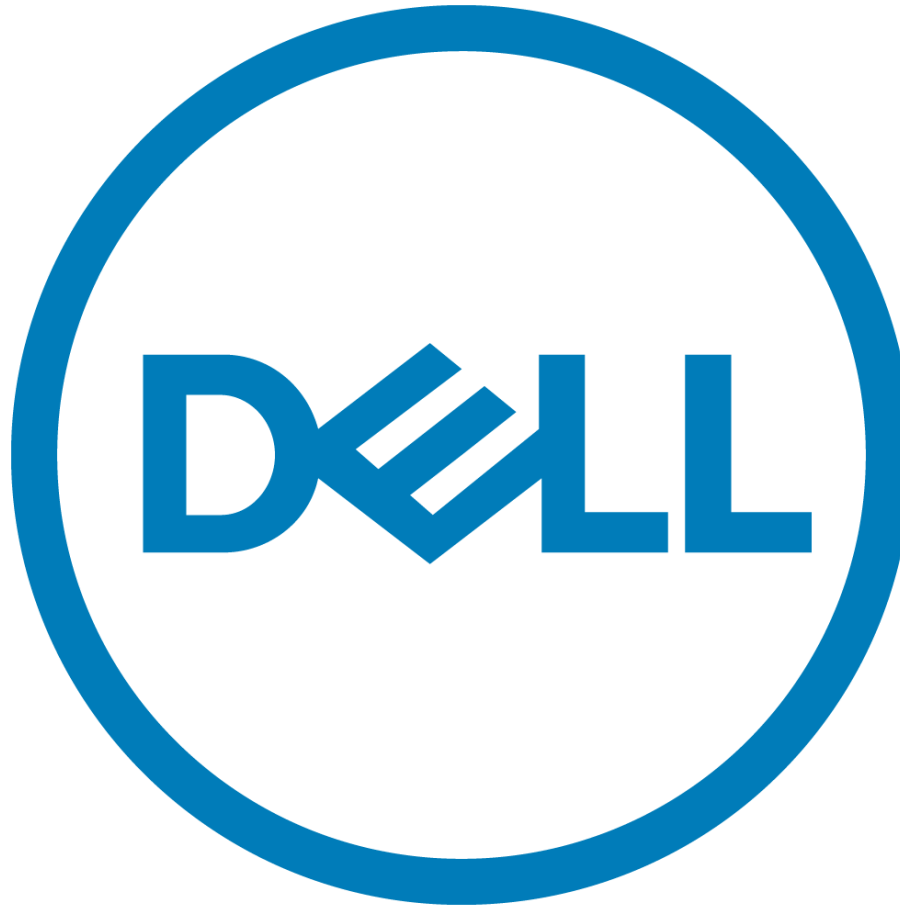


# Strategic use of a cash model

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# SaaS model dynamics

# LTV to CAC ratio

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- SaaS models should focus on LTV to CAC ratio
  - CAC = Customer Acquisition Cost
    - Total sales and marketing expenses / number of new customers acquired = CAC
  - LTV = Life Time 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

See blog post in appendix



# LTV to CAC ratio

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- 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 – a better measurement for early stage

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- MTR – Months To Repay
- ClinicNote has a CAC of \$3,381
- Average contract value = \$6,500
- MTR focuses on payback period
  - 6.2 months for example above
- The cash flow impact is the key

# How revenue is recognized in SaaS sales

- GAAP accounting rules
  - Revenue is earned over time of service
  - Cash is recognized when you receive it
- Example: a 12 month SaaS license sale for \$6,000

Report Year: 2019

P&L Forecast for the year 2019

Revenue Recognition Based

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Revenue	500	500	500	500	500	500	500	500	500	500	500	500	6,000
Revenue	500	500	500	500	500	500	500	500	500	500	500	500	6,000
Cost of Revenue	-	-	-	-	-	-	-	-	-	-	-	-	-
Commissions	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross Profit	500	500	500	500	500	500	500	500	500	500	500	500	6,000

Cash Flow Forecast for the year 2019

Cash Flow Forecast for the year 2019

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Starting Cash	10,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	
Revenue Received	6,000	-	-	-	-	-	-	-	-	-	-	-	
Commissions	-	-	-	-	-	-	-	-	-	-	-	-	
Credit Card Fees	-	-	-	-	-	-	-	-	-	-	-	-	
Inventory	-	-	-	-	-	-	-	-	-	-	-	-	
Operating Expenses	-	-	-	-	-	-	-	-	-	-	-	-	
New Investment	-	-	-	-	-	-	-	-	-	-	-	-	
Ending Cash Balance	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	
Change in Cash	6,000	-	-	-	-	-	-	-	-	-	-	-	

# SaaS cost of revenue

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- Elements include:
  - Hosting
  - 3<sup>rd</sup> 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

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- 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





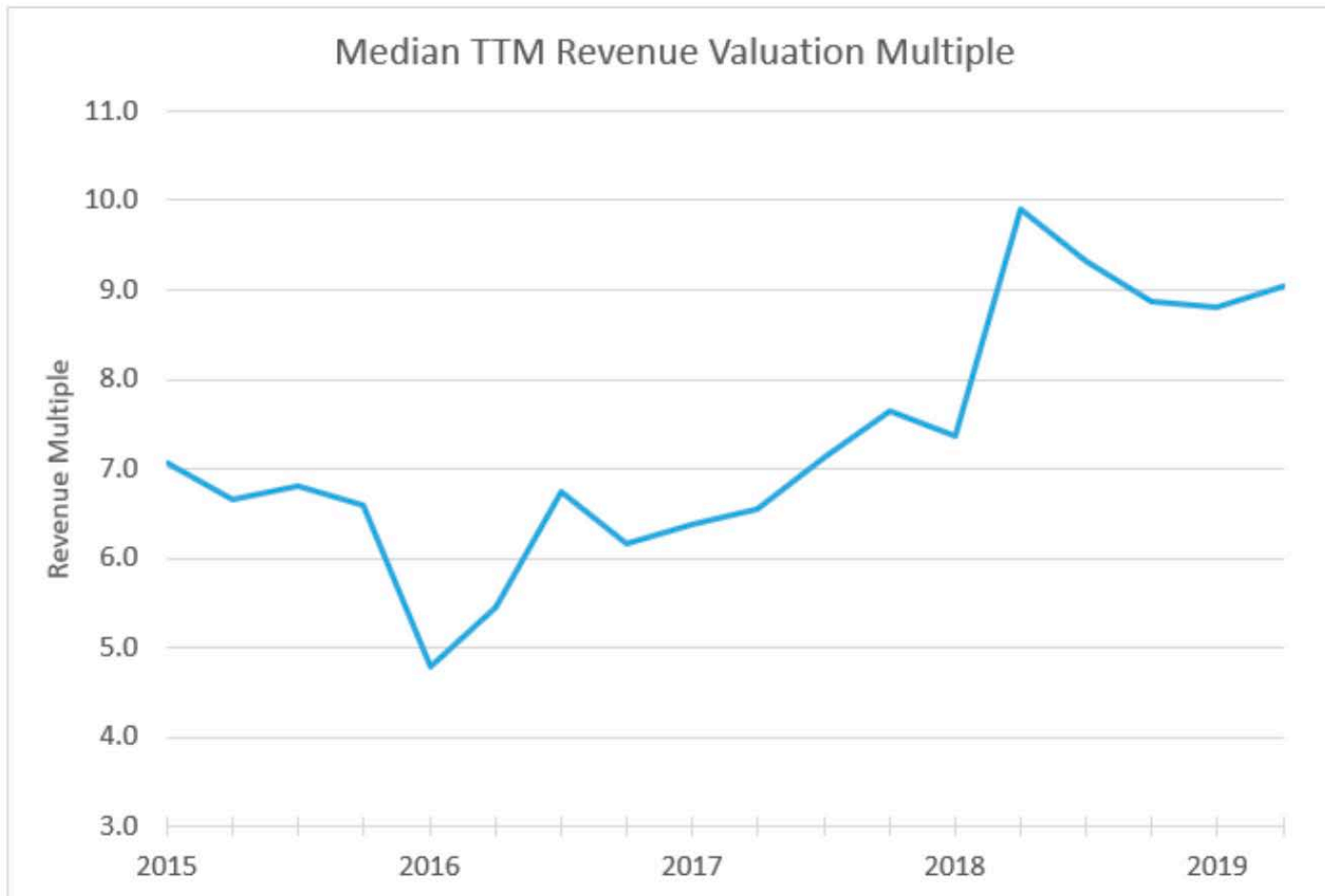
# SaaS model valuations

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- 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

- Private SaaS Company Valuations 2019

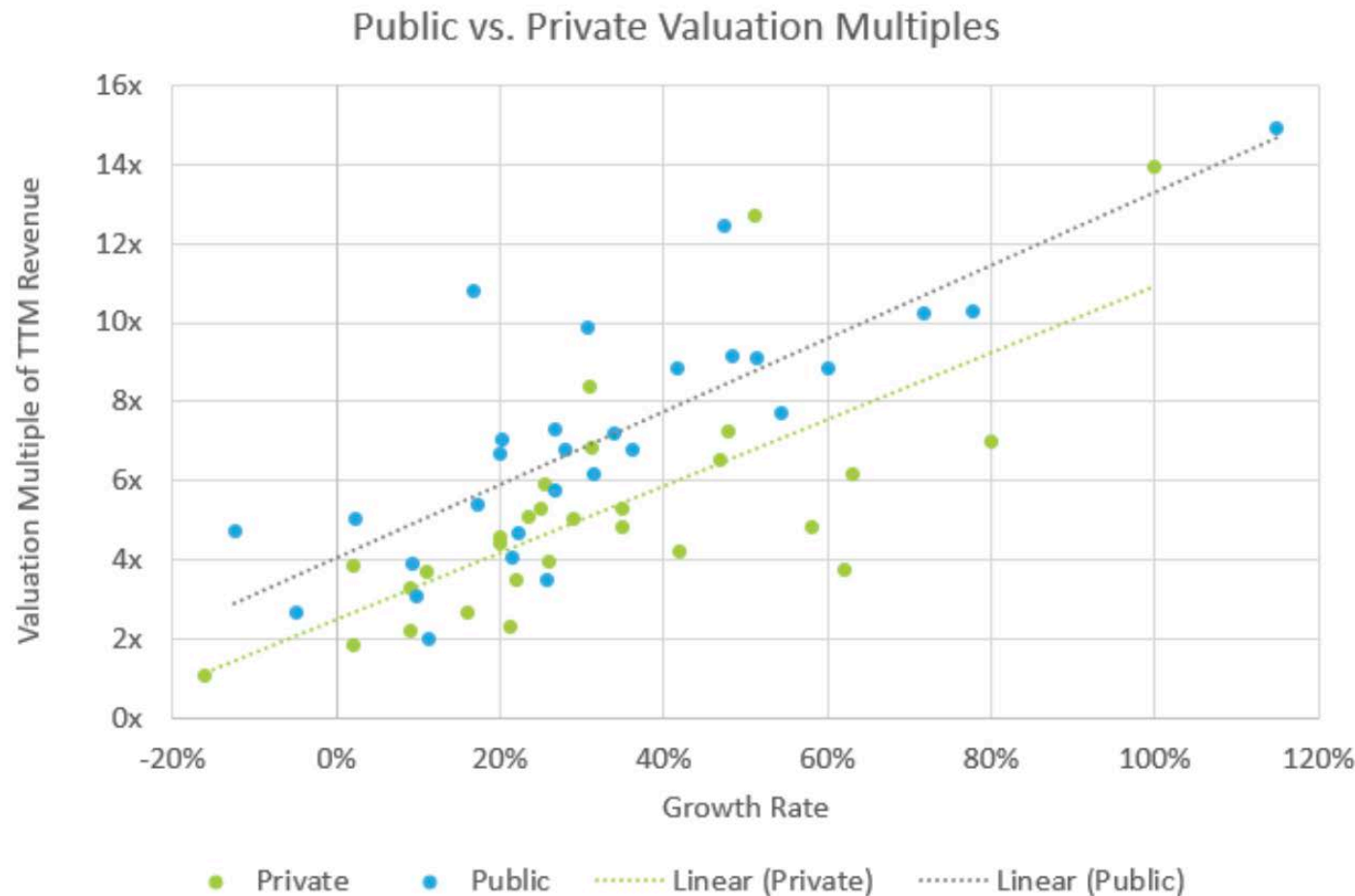


See Appendix:  
Private SaaS  
Company  
Valuations: 2019



# SaaS model valuations

- Public vs. Private Company Valuations 2019



See Appendix:  
Private SaaS  
Company  
Valuations: 2019



# What is my SaaS company worth?

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- 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

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- The key to a software or service business is reoccurring revenue
- Common for a large SaaS company to be valued at 5 to 10 times revenue
  - \$1M / year revenue = company value of \$5M to \$10M
- Estimating the reoccurrence rate is very hard
  - What percent of current customers will renew?
  - Few achieve 90% per year

# Summary of first step! (60+ slides later...)

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

# The second step: product development cost

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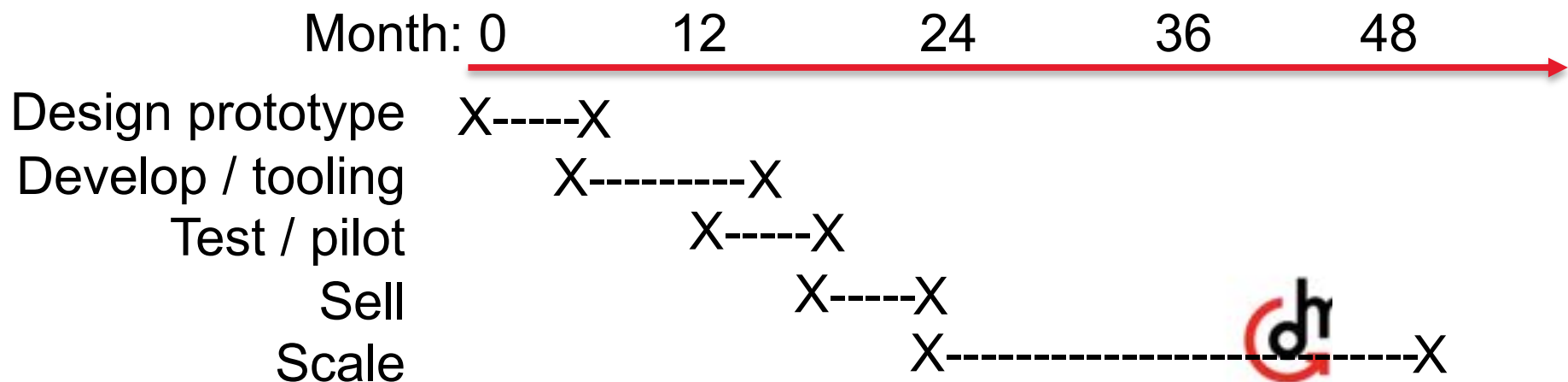
- Product development costs are all of the costs of bringing your product to market and maintaining the product in the market
  - Software development
    - 3<sup>rd</sup> party APIs, libraries, contract development, user testing
    - Support, ongoing updates, certifications
  - Product development
    - Design, develop, package, produce, test, certify
    - Packaging (unit and case)
    - Packaging test and certification



# The second step: product development cost

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

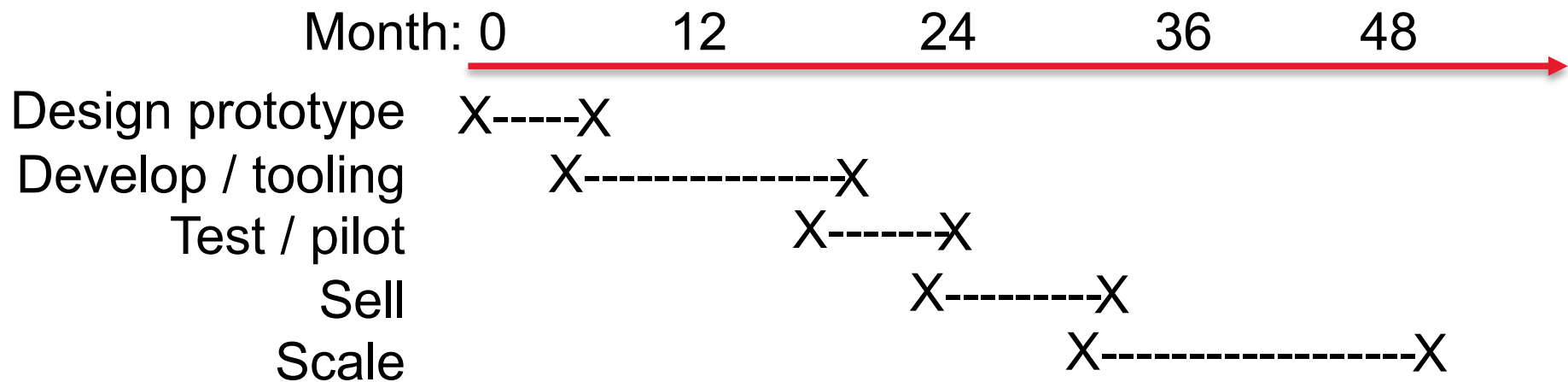




# The second step: product development cost

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



# The second step: product development cost

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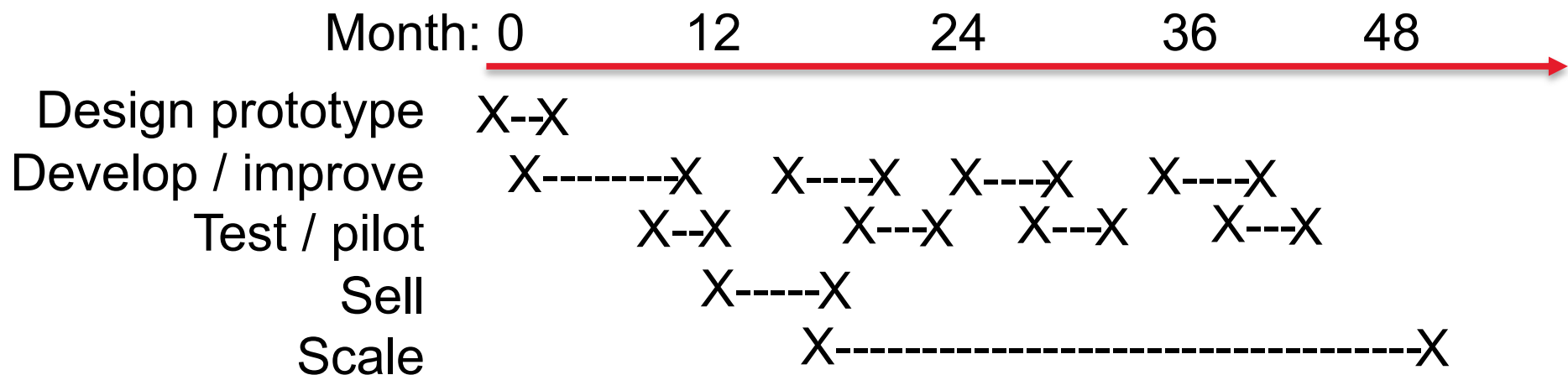
- Software = \$200,000 to \$5 million up front
- Ongoing maintenance and upgrades
  - New features, upgrades
  - Browsers change constantly
  - Standards such as HIPPA change
  - APIs change
  - Partner companies go away or change business models
    - ClinicNote has a billing partner for insurance billings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



# The second step: product development cost

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



# Summary: product development cost

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- 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

# The third step

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- 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
    - Tradeshows and conference speaking

# The fourth step

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- 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

# The fifth step

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

# How much should I raise?

- Determine negative cash flow “bottom”
  - Start with product development and inventory needs
  - Add any other startup expenses
  - Add average burn rate x sell cycle in months x 1.5

	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

\$1,235,000 (inventory) + \$800,000 (development) +  
 (\$55,000 (burn rate) x 9 (sell cycle) x 1.5) = \$2,777,500

