Billion dollar startup characteristics

What is the purpose of this article?

1) Generate discussion among founders, investors, boards of directors, and C-suite regarding the characteristics of billion dollar startups.
2) Enable the discussion to be fact based rather than base on myths and anecdotes.
3) This discussion should be held whether you are startup or a long established global company.
4) This article refers to three fact based analytical books and reports and includes only a small amount of the enormous collection of factual analysis.
5) This article doesn't tell you what to do. Just because information is correlated, does not mean there is a cause and effect relationship.

What are the critical learnings in this article?

1) A billion dollar startup requires a large number of customers who believe: they have urgent problems and needs; are willing and able to pay to address those problems and needs; and that they can obtain better value from your company that the competition.
2) Success depends upon understanding customers better than the competition. This understanding must be fact based using interviews supplemented by survey and analysis of customer actions.

Characteristics of unicorns – startups which achieved over $1 billion U.S. valuation.
Ali Tamaseb studied over 200 unicorns founded between 2008 and 2018.[1]

What were the founders' backgrounds?

1) A founder's age doesn't correlate strongly with success. Median age was 34. [2]
2) The #2 person had an even wider age distribution, from 16 to 76 at time of founding. Founders of health and biotech companies skew older. [3]
3) 20% of unicorns had a sole founder. 36% had dual founders, 3 co-founders 28%; 4 co-founders 12% more than 4, 4%. [4]

What was the founders' education?

1) Education: 36% had bachelors; 22% had MBA, 33% had another advanced degree. College dropouts less common than founders with PhDs. [5]
2) Of those that went to university: about 35% each went to global top ten vs not in global top 100. About 30% went to global 11 to 100 universities. [6]

What was the founders' work experience?

1) 30% of unicorn founders had only worked for themselves before.[7]
2) 58% of those who had worked for other companies, (i.e. 70% of all founders), had worked for Tier 1 companies with rigorous hiring processes and reputation for hiring the best. 28% had worked for Tier 2 companies (large and well known). 14% had worked for companies not well known.[8]
3) Over 50% of founding CEOs and founding CxOs had less that 1 year of relevant industry or work experience. [9]
4) 75% of healthcare and biotech founders had directly relevant industry experience; 40% of enterprise technology; and 30% of consumer unicorns. [10]
5) What seems to matter was: quickly learning about a new space with unbiased mind, soft skills like building a network, managing a team, hiring and firing, raising money. [11]

What was the founders experience with previous startups?

1) 59% of unicorn founders had been a previous founder, sometimes successful, sometimes not. [12]
2) Those who had run a company before, experience ranged from a year to 27 years. Most common was 2-3 years (about 25%), about 54% were up to 5 years experience. [13]

How severe and urgent were the customers needs and problems?

1) Two approaches: Pain killer (well defined and deeply annoying pain point) or vitamin (customers get better value, efficiency, entertainment or joy) [14]
2) 68% of unicorns were pain killers. [15]
3) Close to 40% of unicorns address productivity; about 20% address saving time; 11%-15% each are: convenience, entertainment, health. Safety and security are around 2-5% [16]
4) Close to 50% of unicorns were system integration (bringing together existing technology. Value add comes from unique business model or marketing strategy). About 25% were technical i.e. fair amount of engineering. About 25% were deep tech i.e. it's all about being able to create the new technology or drug. [17]

5) Over 2/3 of unicorns were highly differentiated from competition. Less than 1/3 were incrementally differentiated. [18]

What was the market demand?

1) More than 60% of unicorns started in large markets with well established demand. They either took market share or expanded the market. About 25% started in medium sized markets. About 15% started in small markets. Few unicorns created new demand or waited for the market to mature. [19]
2) 68% of unicorns competed for market share. 32% created a new market. [20]

When did the founders enter the market?

1) 30% of the time unicorn was first to the market. 30% of the time 2-5th in market. 40% later than 5th in the market. [21]

What are the characteristics of companies which achieved $1 billion in revenue?[1]

1) More than 60% of new public companies between 1980 and 2010, no longer existed in 2010. 4% of new public companies achieved $1 billion in revenue. 34 public companies a year achieved $1 billion in revenue, regardless of economic cycle. Only 4% of $1 billion revenue companies make it to $10 billion in revenue. [2]
2) 11,000 companies did IPO since 1980 and to end of 2007. Only 4% (410) grew to $1 billion in revenue, but 72% of all IPO taxes, 63% of IPO employees (i.e. 9 million), 64% of market value (i.e. $2.6 trillion), and 69% of all IPO revenue (i.e. $3 trillion).[3]
3) Failing companies had blind passion, did not self correct, did not adjust to changing customer needs, ran out of cash.[4]
4) Exponential growth companies continue to grow through tough economic times and recessions.[5]
5) Exponential growth companies created and sustained break through value propositions - High order benefits or exceptional value as perceived by customers [6]
6) Exponential growth companies exploited high growth market segments: created new markets, redefined markets, or created category killers (i.e. killed incumbents). Imported ideas from other industries. Kept redefining market segments. [7]
7) Growing to $50 million revenue requires brute force speed. Create and grow customer advocacy community and market momentum as quickly as possible. After $50 million in revenue, have thoughtful speed.[8]
8) The key to growing a startup to $10 million revenue was based on analyzing 2,000 business plans.[9] Create a powerful value proposition. It must address a deep, frequent or changing unmet need. The company has a unique ability to deliver on that need. Contrast the company benefits to the competition. Talk with customers to understand the “frustration” or “What’s not working well”.[10]

What are the characteristics of SaaS unicorns which became public?[1]

This researched examined 1,000 SaaS companies in Canada and the U.S.s 400 of which became Unicorn by going public. Many of these went public after 2013.

1) On average, companies needed $125 million in revenue to become a unicorn when they went public. This required $212 million of invested capital. [2]
2) The TAM (Total Addressable Market) size when going public needs to be at least $25 billion.[3] The % of TAM at IPO time can range up to 2.2%[4]. Facebook’s yearly revenue at the time of its 2012 IPO was $4.2 billion. The prospectus stated the addressable market was $588 billion, thus % revenue was about 0.7% of addressable market.
3) Most startups do not reach the IPO point but are acquired. The TAM required for acquisition is much smaller than $25 billion.
4) You need a 50% differential in how customers measure competitive differentiation. Customers perceive quality, speed and cost. The customer’s costs may be far higher than what they pay your company. [5]
5) You have product market fit when your net promotor score is at least 30 and the % of customers that would be very dissatisfied if they did not have your solution is at least 40%.[6]
6) Current year marketing and sales as % of current year revenue. [7] About 63% when revenues are $10-50 million. About 52% when revenues are $40-$250 million. About 38% when revenues are over $250 million. The implication is that unicorns usually lost money for many years. Investors provided the capital because lifetime customer profitability exceeded the one time customer acquisition costs.
7) Current year marketing and sales as a % of next year’s revenue should be less than 33% at IPO time. [8]
8) The higher the growth rate, the higher the valuation, in terms of revenue multiple. [9]

What are your next steps?

1) Assess your understanding of your customers e.g. how they perceive you, the value they obtain from you, their profitability, etc. Improve your understanding of your customers.
2) Review the facts in your plans. Identify the source of each fact.
3) Review the assumptions in your plans. Determine if there are facts and analysis which would change your assumption. Be clear on which assumptions are opinions and guesses.
4) Be clear on the urgent problems and needs of potential customers and determine how many are actually willing and able to pay for a solution.
5) Recognize facts, assumptions, and analysis are only input to the judgements and decisions you make. E.g the amount of revenue you need to be a unicorn when you IPO may be very different from the average.

Footnotes

[1] Ali Tamaseb, *Super Founders* (New York: Hatchette Book Group, 2021)
[2] Ibid., 15
[3] Ibid., 16
[4] Ibid., 17
[5] Ibid., 32
[6] Ibid., 34
[7] Ibid., 44
[8] Ibid., 45
[9] Ibid., 49
[10] Ibid., 51
[11] Ibid., 52
[12] Ibid., 60
[13] Ibid., 67
[14] Ibid., 114
[15] Ibid., 114
[16] Ibid., 117
[17] Ibid., 118
[18] Ibid., 122
[19] Ibid., 131
[20] Ibid., 133
[21] Ibid., 145

[1] David G. Thomson, *Mastering the 7 essentials of high growth companies* (Hoboken, New Jersey: John Wiley & Sons, 2010)
[2] Ibid., 3
[3] Ibid., 9
[4] Ibid., 21
[5] Ibid., 22
[6] Ibid., 32
[7] Ibid., 33
[8] Ibid., 75
[9] Ibid., 163
[10] Ibid., 164

[1] Charles Plant, “Unicorn Math an Algorithm for Rapid Growth”, *Narwhalproject.org*, Charles Plant, https://narwhalproject.org/wp-content/uploads/2020/06/Unicorn-Math.pdf
[2] Ibid., 3-4
[3] Ibid., 5
[4] Ibid., 6
[5] Ibid., 7
[6] Ibid., 10
[7] Ibid., 11
[8] Ibid., 11
[9] Ibid., 15

What further reading should you do?

1) Read the two books and website article referenced by the footnotes.
2) Do you understand your customers? V2

https://koorandassociates.org/understanding-customers/do-you-understand-your-customers/