Startup terminology and metrics. V3

The purpose of this article

This article has a two-fold purpose:

1) Provide definitions of startup terminology and metrics. My various articles will refer to this article, which means that I don't have to include definitions and metrics in each article.
2) Enable a startup to quickly create its own set of terminology and metrics.

There is no single set of commonly agreed upon definitions. Many startup participants use the same words and acronyms to mean different things. E.g. many founders I've met say that they have an MVP (Minimum Viable Product), when what actually exists is some partially written code.

This article is not intended to be comprehensive in breadth or depth nor to explain how to create and use the terminology and metrics.

How to read this article

Section 1 General concepts
Section 2 Finding a potentially repeatable, scalable, and profitable business model with lots of potential customers who might be willing and able to pay to solve their problems and needs.
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Section 1 General concepts

<u>What is a startup?</u>

A startup is a temporary organization designed to search out a repeatable, scalable, and profitable business model with lots of potential customers who are willing and able to pay to solve their problems and needs.

Startups are not building a solution. They are building a tool to learn what solution to build. (Lean Analytics – Use data to build a better startup faster (2013) by Alistair Croll, Benjamin Yoskovitz, O'Reilly Media, Sebastopol California Page 41)

<u>What is a business model?</u>

A business model describes how a company creates value for itself while delivering products or services to customers. Who are your target C&U (Customers and Users)? What C&U problems are your solving? What C&U needs are you addressing? What benefits and value are you enabling customers to achieve? What are the human and technology resources needed? What are the channels and partnerships?

Customers are those who give the company cash. Users are those who use and interact with the solution. Google is an example. I use Google but don't pay cash to use it. Advertisers pay cash to Google.

<u>Accelerators, Incubators, and Venture Studios</u>

Accelerator

1) An Accelerator is a company or organization that puts a start-up company (which already has a Minimum Viable Product) through a very structured 3–4 month process. This process has the goal of quickly growing the size and value of the start-up to enable future funding.
2) The Accelerator puts companies through a vetting process so that higher likelihood of success companies are made available to investors. This reduces investors' due diligence time and costs.
3) The Accelerator may take a small financial interest in the company in return for its assistance.
4) Mentorship is provided by experienced start-up executives, investors, and others.

Incubator

An Incubator helps take a start-up to the point where there is an MVP (Minimum Viable Product).
The characteristics of an Incubator include:

1) Co-located office space with other start-ups;
2) Links to investors;

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3) Access to lawyers;
4) Provides coaching and mentoring, via successful start-up executives and consultants.
5) Networking, based on all of the above

University affiliated Incubators usually do not take an equity interest. Investors may do so. The process takes 12 to 24 months, with the pace set by the founders. Once there is an MVP, then an Accelerator may work with the start-up.

Venture Studio
A Venture Studio is an organization that creates startups, typically by identifying a market need, assembling the initial team, and providing the capital to launch. The team must still persuade the venture studio to provide capital.

Section 2 Finding a potentially repeatable, scalable, and profitable business model with lots of potential customers who might be willing and able to pay to solve their problems and needs.

Understand the potential customers and users before building a solution.

The business model canvas
A business model canvas is a one-page document which easily defines and communicates the business model. There are 9 components to the business model canvas: customer segments, customer value proposition, customer relationships, channels, key partners, key resources, key activities, cost structure, revenue streams.

Value proposition
This is the customers and users perception of value. What are all the financial and non-financial benefits achieved? e.g. time savings, convenience, status, reducing negative emotions or risks, benefits achieved (financial and non-financial) achieved by the customers? What are all the costs incurred by the customer (purchase costs, costs to switch to your company, other adoption costs, ongoing costs)?

Customer journey map
The customer journey map is a visual representation of the customers' experiences with your company across all touchpoints. Customers interact with via social media, email, live chat or other channels, mapping the customer journey out visually helps ensure no customer slips through cracks. The journey also illustrates the customer interaction with influencers and other who impact the customer. The following are some examples of customer journey maps.
https://blog.uxeria.com/en/10-most-interesting-examples-of-customer-journey-maps/

Customer engagement
Customer engagement is the relationship and interactions between customers (existing and potential) and the company. Engagement may include: useful content on the website, newsletters, interviews, surveys, etc. Engagement continues and improves throughout the life of the company.

Ethnographic research.
Ethnography is the branch of anthropology that involves trying to understand how people live their lives. It outlines the context in which customers would use a new solution and the impact that solution might have on their lives.

Thematic Analysis
Thematic analysis is a method of analyzing qualitative data such as interview transcripts. The researcher closely examines the data to identify common themes – topics, ideas and patterns of meaning that come up repeatedly. There are two approaches:
1) Inductive – the data validates or invalidates assumptions
2) Deductive – the data identities the finding

Wireframe
Provide a visualization of the potential user/customer interface of what will the customers/users will perceive in the MVP (Minimum Viable Product). Note that customer/user interfaces are evolving to include voice interaction, hand gestures, augmented reality, neural monitoring, etc.
The wire frame has no functionality. It may even be a PowerPoint slide.

Proof of Concept
The purpose of the proof of concept is to gain customer/user and domain expert feedback to validate specific critical assumptions of the MVP.

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The very limited functionality is intended to validate customer problems and needs.

Functional Prototype
The hardware or software prototype is only the hardware or software components of the MVP. The prototype's purpose is to enable learning from customers/users and support demonstrations to customers/users.
This functionality is intended to validate customer problems, needs and potential benefits.

Pilot Solution
This is the MVP, including onboarding, customer support, and exiting. The customer is not paying for the pilot. The two-fold purpose of the pilot is to identify any issues which prevent customer/user problems and needs being solved and to identify any issues which prevent the customer/user from being delighted. The pilot is providing specific feedback on the value the customers/users are achieving. The pilot helps determine what price should be charged. This begins the validation of the actual benefits a customer is achieving in addition to further validation of customer problems and needs.

MVP
This should really be called Minimum Viable Solution. A product or service with just enough features to have delighted early cash paying customers by enabling them to solve some urgent problems or needs, and to provide customer/user feedback for future development. The MVP includes the full solution, including onboarding, customer support, and exiting. What the customer does not see or interact with (i.e. all the behind the curtain resources and activities) will likely be inefficient, have manual components, technology that is temporary, etc.

Customers/users determine whether or not there is an MVP, NOT the startup team. If the MVP does not solve some core customer/user problems, needs, and meet expectations, there isn't an MVP. The startup needs to learn from customers and users what needs to change to enable an MVP. It may take several attempts before there is an MVP.

The MVP validates the overall customer journey with the solution, starting from onboard to exiting and including customer service. What the customer perceives as fatal flaws at any point in the journey may result in the customer neither using nor recommending the solution.

Product market fit
You get to product/market fit by adding more features to the initial MVP until there are a large number of potential customers and users.

The facts and analysis show that:
1) There is a repeatable, scalable, and profitable business model.
2) There are a large number of potential customers who believe their problems are urgent enough to buy your solution, and they can also afford your solution.
3) The customers and users believe you have a better value proposition than the competitors.

You know you have product/market fit if:
1) Your customers are so delighted that they are recommending it to others.
2) Your customers would be extremely disappointed if your solution disappeared.
3) Your customers can describe the big problem they had and the big benefit they achieved from your solution.
4) There is clear demand in the market place for your solution.
5) You are clearly and obviously differentiated from competitors in terms of the value customers achieve.
6) There are a large number of potential customers who believe their problems are urgent enough to buy your solution, and they can also afford your solution.

You do not have product/market fit if:
1) Your customers are not recommending you to others.
2) Your customers would not be extremely disappointed if your solution disappeared.
3) You customers cannot describe the big problem they had and the big benefit they achieved from your solution.
4) The marketplace is not demanding your solution. You have to persuade/educate your customers that they have a big problem with a big opportunity.
5) You are not clearly and obviously differentiated from competitors in terms of the value customers achieve. Your only differentiation is price.
6) There are a not large number of potential customers who believe their problems are urgent enough to buy your solution, and they can also afford your solution.

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Your metrics, facts and analysis show that:
1) There are a large number of potential customers who believe their problems and needs are urgent enough to buy your solution, and they can also afford your solution.
2) The customers and users believe you have a better value proposition than the competitors.
3) The Net Promoter Score is excellent.
4) Churn is low and retention is high.
5) There is a metric for new customer value achievement (e.g. for Slack it was 2,000 team messages sent within 60 days).
6) Measuring and analyzing new customer value achievement metric (e.g. % of new customers achieving new customer value achievement indicator within 60-90 days).

Marc Andreessen's definition of product/market fit:
"The customers are buying the product just as fast as you can make it — or usage is growing just as fast as you can add more servers. Money from customers is piling up in your company checking account. You're hiring sales and customer support staff as fast as you can." From: On product/market fit for startups

Section 3 Customer and market metrics

NPS (Net Promoter Score) The single most important question is asking "Would you recommend our solution to others?" (Follow on questions could be "If so, why? If not, why not?") This metric is known as NPS. What is your NPS? Above 0 is good. Above 50 is excellent. Above 70 is world class. How do you compare to your industry and competitors? What has been your NPS trend?

The Net Promoter Score concept was initially developed by Bain. The following is a link to the Bain website homepage for Net Promoter Score, which contains several short articles:
http://www.netpromotersystem.com/about/why-net-promoter.aspx

The following is a quick overview of using Net Promoter Scores:
https://www.forbes.com/sites/shephyken/2016/12/03/how-effective-is-net-promoter-score-nps/#1b1391b423e4

Customer metrics
New customer value achievement leading indicator. This measures the customer actions which are assumed to indicate that the customer is achieving value. (e.g. for Slack it was 2,000 team messages sent within 60 days).

New customer success metric . This is the % of new customers that are assumed to be achieving value, based on their actions. E.g. The metric could be: % of new customers achieving new customer value achievement leading indicator within 60 days).

Market Size Metrics
Market size = (The number people (or organizations) with an urgent problem or need that they are willing to spend money) times (the amount they are both willing and able to spend).

What is TAM (Total Addressable Market)?
1) What would be the startup's revenues with their future solution if 100% of the customers demanding a solution to their problem bought startup's solution? This assumes all potential geographies, distribution channels, and partners. The number of customers demanding a solution will be fewer than the number of customers that have a problem or need.
2) Is the startup's TAM large enough to launch and grow the startup? For example, the global smart phone TAM is huge, but the global TAM for smart phones that have a keyboard is tiny.
3) The best way to calculate TAM is with a bottom-up calculation, starting with a clear description of the target customer segments, their problems and needs. Then quantify the subset of customers believe they have an urgent problem for which they are demanding a solution. What will be the revenue per customer? Recognize not everyone in every country will be able to afford the solution.

What is SAM (Serviceable Addressable Market)?
1) This is the portion of the TAM that is within the reach the startup's current geographies, distribution channels, and partners, and the startup's ability to deliver and support their solution. This still assumes 100% market share of those customers demanding a solution. SAM will change over time, as growth occurs in geographies, the number of distribution channels and partners, and the volumes from each distribution channel and partner.

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What is SOM (Serviceable Obtainable Market or Share of Market)?

1) SOM will be lower than SAM for three reasons: there will be competitors, customers who are demanding a solution may not actually buy a solution, and there will be an adoption rate ranging from early innovators to laggards.

TAM, SAM, and SOM will vary at different points of the 5-year forecast. TAM, SAM, and SOM will also change as the startup validates assumptions by progressing through: initial assumptions, customers interviews, feedback from prototype in customers hands, feedback from initial revenue producing customers, feedback from MVP, customer feedback as solution capabilities are enhanced to provide value to a greater set of customers, etc.

Section 4 Some startup financial metrics

Free Cash Flow
Free cash flow = EBITDA, subtracting all cash commitment, subtracting non-cash items, subtracting increases in working capital

EBITDA (Earnings before Interest, Taxes, Depreciation, and Amortization)
EBITDA = (Capital expenses + Net Interest Expenses + taxes + non-cash items + increase in working capital)

Burn Rate and Runway
The monthly burn rate is the amount of cash the startup is losing each month. Burn rate = revenue – expenses. Runway is the amount of time before you run out of cash. There are multiple runway scenarios e.g. revenue and expenses remain constant; forecast revenue vs forecast expenses, etc.. There may be multiple forecasts.

CAC (Customer Acquisition Cost) includes all the costs to acquire a new customer:

1) Sales.
2) Marketing.
3) Onboarding.
4) Related compensation of the people.
5) Overhead associated with the people.
6) Technology to support CAC.
7) Legal expenses associated with sales and marketing.

LTV (Life Time customer Value)
What is the lifetime customer profit, after customer acquisition? This will take into account churn.
A scalable business model is one in which LTV exceeds CAC.

Churn is the % of paying customers who leave each month. Your target should be at most 2% per month churn. 5% per month means you are in trouble. You must figure out and fix the churn problem if you hope to grow your company.

COGS (Cost of Goods Sold) What comprises cost of COGS? Everything required to meet the direct needs of current customers. E.g.

1) Customer support people, and software.
2) Technology e.g. software, cloud services, communications costs.
3) Bug fix and minor enhancement to the software – after all you do need to retain current existing customers.

CAC is not part of COGS.

G&A (General and Administration) What comprises G&A?

1) Payroll administration.
2) Recruiting administration.
3) Finance.
4) IT security.
5) Corporate development e.g. M&A.
6) CEO salary/benefits.
7) Legal expenses (both in house and external), other than those associated with sales contracts.

R&D/Engineering/new Development?
All of the costs associated with discovering major changes to the business model and enhancing the solution.

Gross Profit Margin
(Revenue minus COGS) divided by revenue.

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Let's use QuickBooks to illustrate the concept of the financial metrics.
There is a GL line item for salaries.
Then then there is a class i.e. where do parts of the salary belong? (i.e. QuickBooks class)
1) CAC?
2) Cost of goods sold?
3) R&D/Engineering/New Development?
4) G&A?

Section 5 Financing Rounds

General concepts

1) The startup may bootstrap (i.e. no equity or debt financing other than friends and family) or go through one or more stages of raising external financing.
2) Cap table. The cap table tracks the equity ownership of all the company's shareholders and security holders and the value assigned to this equity. Cap tables need to be comprehensive. They should include all elements of company ownership such as convertible debt, stock options and warrants in addition to common and preferred stock. The cap table also forecasts the future equity ownership, through various fundraising rounds leading up to exit. The cap table is more comprehensive than the balance sheet. Anything that may results in equity ownership is included e.g. SAFEs are a contract but may result in equity ownership.
3) Term sheet. The term sheet is a largely non-binding document. It enables the startup leadership and investors to focus on the important issues and helps to minimize misunderstanding or problems when the complex and legally binding closing documents are drafted. The term sheet may outline the due diligence process, the timetable for the transaction, the due diligence process, any conditions to be met before beginning to draft binding legal documents, key legal principles, and any binding terms e.g. confidentiality. Elements of the term sheet may include: company details (including current shareholders and current directors), company valuation, how much money the company seeks to raise (number of shares and at what price), investor information rights, any rights for certain founders or investors to remain as directors or have certain decision rights, any rights investors will have regarding specific company decisions, what the funds will be used for, any restrictions on what the founders or company may do, what rights to sell or transfer shares, co-sale terms (e.g. If one of the shareholders sold their shares, other investors could be included and dragged along able to sell their shares), what happens when the company is sold or wound up, what the pre-money valuation of the company is, size of the option pool, any anti-dilution privileges, board size and how directors are appointed or elected, founder vesting of shares, who pays for the legal expenses, any rights to future investment
4) Pooling Agreement (sometimes known as voting trust) The Canada Business Corporations Act defines pooling agreement as "written agreement between two or more shareholders may provide that in exercising voting rights the shares held by them shall be voted as provided in the agreement."
5) Subscription Agreement. The subscription agreement is the agreement between the company and the investor in a private placement of debt or equity. The agreement sets out the terms and conditions of the investment, the purchase price, the representations and warranties of the parties and certain covenants. The company obtains relevant information from the investors to ensure they meet the criteria of the applicable exemptions from the prospectus requirements of Applicable Securities Laws.
6) USA (Unanimous Shareholders Agreement) The Canada Business Corporations Act defines a USA as "…written agreement among all the shareholders of a corporation, or among all the shareholders and one or more persons who are not shareholders, that restricts, in whole or in part, the powers of the directors to manage, or supervise the management of, the business and affairs of the corporation." All shareholders must sign and be part of the USA. The areas covered by a USA include: what decisions are made by shareholders, how do the shareholders make decisions, how are disputes resolved, what is the process and constraints regarding share transfers, how the shareholders extract value from their investment.

Five potential financial rounds

#1 Friends and family
Most early startups depend upon founders, friends and family for funding.

#2 Angel investors, pre-seed investors.
These are the first investors outside of friends and family

#3 Seed investors
These are the second round of investors, after pre-seed investors

#4 Series A, B etc. investors

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These investors are funding the rapid growth of the company

#5 Longer term
1) Company is bought and merged into an existing company;
2) Long-term private equity investors; or
3) Public markets

Section 6 Types of financing
There are many types of financing:
1) Equity e.g. common stock, preferred stock.
2) Debt.
3) Convertible debt.
4) SAFEs (Simple Agreement for Future Equity). The SAFE is a contract which gives the investor the right to purchase stock in a future equity round (should there be one) subject to the terms and conditions in the SAFE contract.
5) Government grants, loans, tax credits.
6) Funding for research.
7) Paid pilots.
8) Profits and revenue sharing.
9) Etc.

Section 7 Investment fund reporting metrics to their investors or limited partners
Investors should understand the funds reporting and forecasts, especially whether or not unrealized gains are included.

DPI (Distribution to Paid in capital): Cumulative distribution to investors /capital contributed by investors. Including management fees and expenses.

MOIC (Multiple On Invested Capital) Cumulative realized and unrealized value (an estimate) of the investment / capital invested by the fund.

TVPI (Total Value Paid In capital): Cumulative distribution to investors + unrealized value (an estimate) / capital contributed by investors. Including management fees and expenses.

Next steps
Create definitions and metrics for your startup. This will help everyone (founders, employees, advisors, investors, etc.) have a common understanding about you actually mean when you use certain words.

Further Reading
What does the startup journey look like?
http://koorandassociates.org/the-startup-journey/what-does-the-startup-journey-look-like/

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