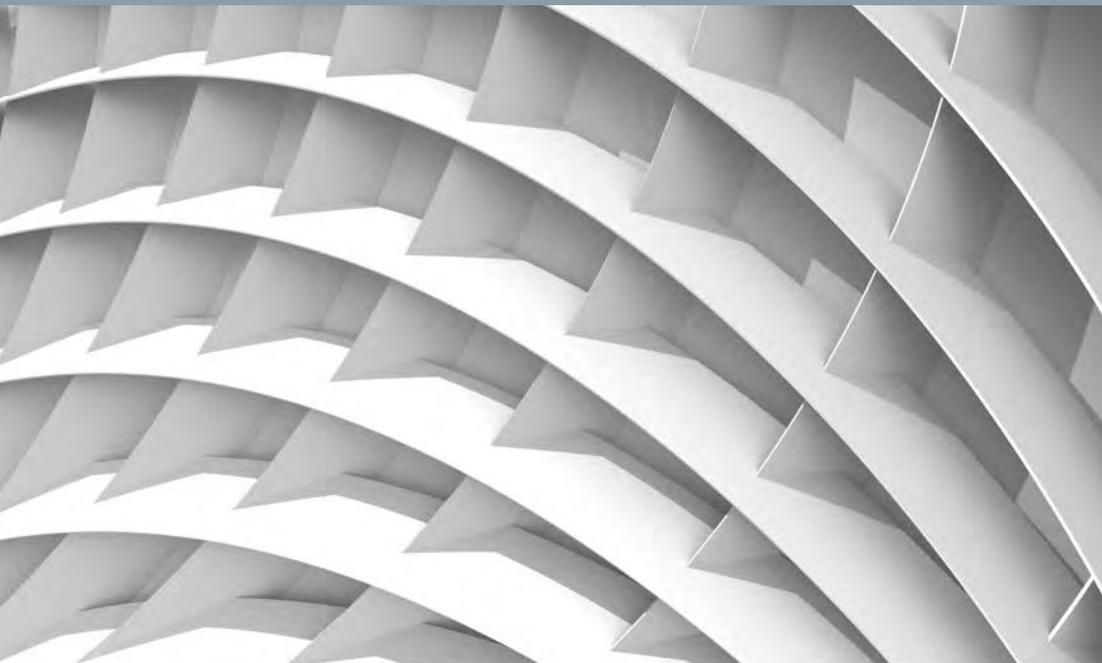


AlbionVC | TRUE INVESTING



Evaluating SaaS companies



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Albion Capital has been investing in software companies for almost 20 years. We usually invest in the Series A round, focusing on recurring revenue cloud businesses, typically at the application layer.

This primer sets out the basic framework we use to evaluate SaaS businesses. It is an attempt to simplify and explain a topic which has already generated a considerable amount of literature, leading to a sometimes bewildering array of metrics (see sources listed on pages 18–20).

We use this framework to help answer five key questions:

1. Does the company provide a valuable service to its customers ?
2. Is the business model sustainable ?
3. Is there product/market fit in an attractive market ?
4. Can the company scale profitably ?
5. What is the company worth ?

In the Appendix on pages 14–15, we have also summarised our view of best practice approach to monitoring these metrics on an ongoing basis, together with an indication as to what ‘good’ metrics look like based on industry literature, surveys, public company information as well as analysis of our own portfolio companies.



1. Does the company provide a valuable service to its customers?

Renewals

Analysis of customer renewals helps answer this question.

As customers rent a service, at each renewal date they make a decision on whether the value they are getting from the service is worth what they are paying for it, also taking into account the competitive environment and the costs of switching to a new service.

Churn

Digging into the churn of a SaaS business gives insight into the value proposition and competitive positioning – high churn could indicate any one of a range of concerns, such as poor user experience, product breadth, competitive dynamics, account management, or overselling, amongst many others. There are various measures of churn, all of which tell a different story.

Measures of Churn

Gross churn shows if a business is able to retain its most valuable customers.

Net churn shows the ability of the company to grow the ASP over time, as well as the annuity value of the customer base.

Logo churn (the number of customers lost as a proportion of total customers) can give information on the strength of the value proposition in different market segments, which informs the TAM, and the efficiency of the marketing and sales functions.

Non-financial metrics

Non-financial metrics also provide valuable insight, such as end user usage statistics and NPS scores.



1. Does the company provide a valuable service to its customers? continued

Useful metrics/analysis

Gross churn	Measures the proportion of total revenue lost	<i>MRR lost in a given period/MRR at the beginning of a given period</i>
Net churn	Measures change in value across all existing customers in a given period, i.e. lost customers offset by upsell to those remaining. Negative net churn means you are increasing total revenue from all your existing accounts	<i>(MRR lost – MRR from upsells) in a given period MRR at the beginning of a given period</i>
Logo or Account churn	Measures your ability to satisfy and retain your customers	<i>Customers lost in a given period/Customers at the beginning of a given period</i>
Renewal rate	Measures what % of your customers renew their contracts when their contract is up for renewal	<i>Customers that renewed their contract at the end of a given period/Customers that could have renewed their contract at the end of a given period. Note: if you include customers that are bound by a contract, it will make it look like you are doing better than are</i>
NPS	Measures customer satisfaction, which is a good predictor of future churn	<i>Index ranging from -100 to 100 that measures willingness of customers to recommend a company's products or services</i>
CX index	Measures how well a brand's customer experience strengthens the loyalty of its customers	<i>Index ranging from 0-100 that measures how effectively customers felt needs were met and the ease and enjoyably of their experience</i>
Cohort analysis	Measures how churn and upsells trend out over time	<i>Used to compare groups of customers by the month joined and follow how they behave over time</i>
Engagement	Measures cohort retention on metrics that matter	<i>e.g. DAU, MAU, photos shared, photos viewed etc.</i>
Usage	Specific to the company/application	<i>e.g. do 90% of your users log on every day?</i>



2. Is the business model sustainable?

Traditional GAAP accounting is not as useful for SaaS businesses as for many other industries.

In part this is because of the annuity nature of the revenues, where sales costs are expensed up front but revenues are recognised evenly over the lifetime of the customer. The effect is compounded further in high growth businesses

However, in the end it all comes down to profitability and cash generation, and so we assess the long term viability of a business by reviewing the 'underlying profit' and unit economics.

We typically focus on:

1. Gross profit margin (%)
2. EBITDA pre sales & marketing costs (EBITDASM)
3. The Rule of 40 (%)

The "Rule of 40"

The Rule of 40 is a high level benchmark that adds growth rate and EBITDA margin together.

Intuitively the rule follows that it is acceptable to be loss-making if you are growing fast, and you must make money and increasing amounts of it as your growth slows.

At scale, growth rate + EBITDA margin should be > 40%.



2. Is the business model sustainable? continued

Useful metrics/analysis

Gross Profit %	This is a traditional GAAP measure. Low GP % can indicate a heavy services layer, which will typically be less scalable	<i>Revenue/Gross profit</i>
EBITDASM (but incl. account management)	Measures underlying profitability i.e. if you stopped investing in growth, is the business profitable?	<i>Operating profit (including all R&D spend) with depreciation & amortisation and sales & marketing costs added back. But account management and customer success costs still included</i>
Rule of 40%	A rule of thumb measure for a 'healthy' SaaS company at scale	<i>Growth rate + EBITDA margin > 40%. Growth rate is defined as yoy growth rate of monthly MRR</i>



3. Is there product/market fit in an attractive market?

To help answer this question we review the three key metrics below. Reviewing bookings, recurring revenue and ASP gives insight into the growth potential and the TAM.

Growth	Trends in ASP over time	Market sizing estimates
<p>Product market fit is a nebulous concept, but a company that isn't growing fast hasn't demonstrated it</p> <p>We review:</p> <ul style="list-style-type: none">■ Bookings growth■ MRR/ARR growth■ New logos	<p>ASP also informs the Go To Market options:</p> <p>A low ASP will not support long and expensive field sales cycles</p> <p>A high ASP might suggest that inbound marketing alone won't be enough</p>	<p>What defines an attractive market is equally complex...</p> <p>... but the Total Addressable Market must be large</p>



3. Is there product/market fit in an attractive market? continued

Useful metrics/analysis

Bookings growth	Leading indicator of growth rate (especially for early stage companies)	<i>Monthly or quarterly ACV</i>
MRR growth	Measures how quickly recurring revenue is growing	
Increasing ASP/ deal size	Measures if you are acquiring higher value customers. A high ASP makes high-touch sales strategies viable	
New MRR v Expansion MRR	Measures whether growth is coming from new or existing customers	
Quick ratio	Measures if you are growing at a healthy rate and have low enough churn	<i>(New MRR + Expansion MRR)/ Churned MRR + Contraction MRR)</i>
TAM	Total addressable market or market size	<i>Everyone worldwide who could buy your product</i>
SAM	Total serviceable addressable market size	<i>The market you can acquire with your product (e.g. geography, vertical etc.)</i>
SOM	Total serviceable obtainable market size	<i>Portion of the market you can get to use your product (e.g. SME vs Enterprise)</i>



4. Can the company scale?

Understanding the business model: Sales efficiency metrics, together with gross margin analysis and an understanding of the deployment model, give insight into the scalability, viability and efficiency of a SaaS business.

Understanding the Go To Market strategy: Every great business has to effective Go To Market strategy, but the impact on SaaS businesses is pronounced given the simplicity and profitability of delivering a standardised service over the web.

Key metric –cost versus value: As with consumer marketing businesses, SaaS companies review the sales and marketing costs to acquire a new customer against the lifetime value of the customer once it is won.

There is a huge amount of literature available on this topic (referenced in the Appendix).



4. Can the company scale? continued

Useful metrics/analysis

Blended CAC:	Measures how much you need to spend on sales and marketing to acquire a single customer	<i>S&M costs/# of new customers. Note: it is important to factor in the length of the sales cycle to the calculation</i>
Paid CAC:	Measures how much you need to spend on paid campaigns to acquire a single customer	<i>Paid S&M costs/# of new customers. Note: it is important to factor in the length of the sales cycle to the calculation</i>
Customer lifetime:	Measures the customer lifetime in months or years	<i>1/customer churn rate % e.g. a monthly churn rate of 3% indicates a customer lifetime value of 33 months</i>
LTV:	Measures how much each customer is contributing to your revenue and for how long, and guides you how much you should be spending to acquire them	<i>ARPA * gross margin * customer lifetime</i>
CAC payback (months):	Measures how long before a new customer pays for the costs of signing them up	<i>CAC/(ARPA * gross margin)</i>
LTV: CAC ratio:	Measures how much it costs to sign a customer up versus how much that customer is worth to the business	<i>LTV/CAC</i>
Magic number:	Measures for every £ in S&M spent, how many £ of ARR is created, essentially the profitability of the business model	<i>(Δ in subscription revenue between two quarters *4)/S&M spend for the earlier of the two quarters</i>



4. Can the company scale? continued

Useful metrics/analysis

S&M costs as a % of total revenue:	Measures rate of investment in growth	<i>S&M costs/total revenue</i>
Professional services as a % of total revenue:	Measures (1) the recurring nature of revenue, and (2) the total cost of service	<i>PS revenue/total revenue</i>
Attachment rate:	Measures professional services revenue as a % of first year ACV, essentially understanding the role professional services play in deployment, which has an effect on your Go To Market strategy	<i>PS revenue/ACV in year 1</i>
Gross capital consumption ratio:	Measures how much capital has been consumed to grow your ARR	<i>Gross cumulative capital consumed/ARR achieved. Note: Gross cumulative capital is defined as total cumulative equity raised plus debt drawn. If there is significant cash on the balance sheet then consider net cumulative capital (i.e. less surplus cash on the balance sheet)</i>



5. What is the company worth?

The \$\$\$ question.

To the extent we are using science rather than art, we typically focus on the metrics in the table opposite.

The last point (cash generation) is important – a fast growing company whose customers pay annually up front is going to be significantly cheaper to finance than one paid monthly in arrears, and so less capital will be required to build the same value.

ARR

ARR growth rate

GP %

EBITDASM

Gross churn

Revenue retention rate/net churn

ASP growth

TAM

CAC payback and LTV ratio

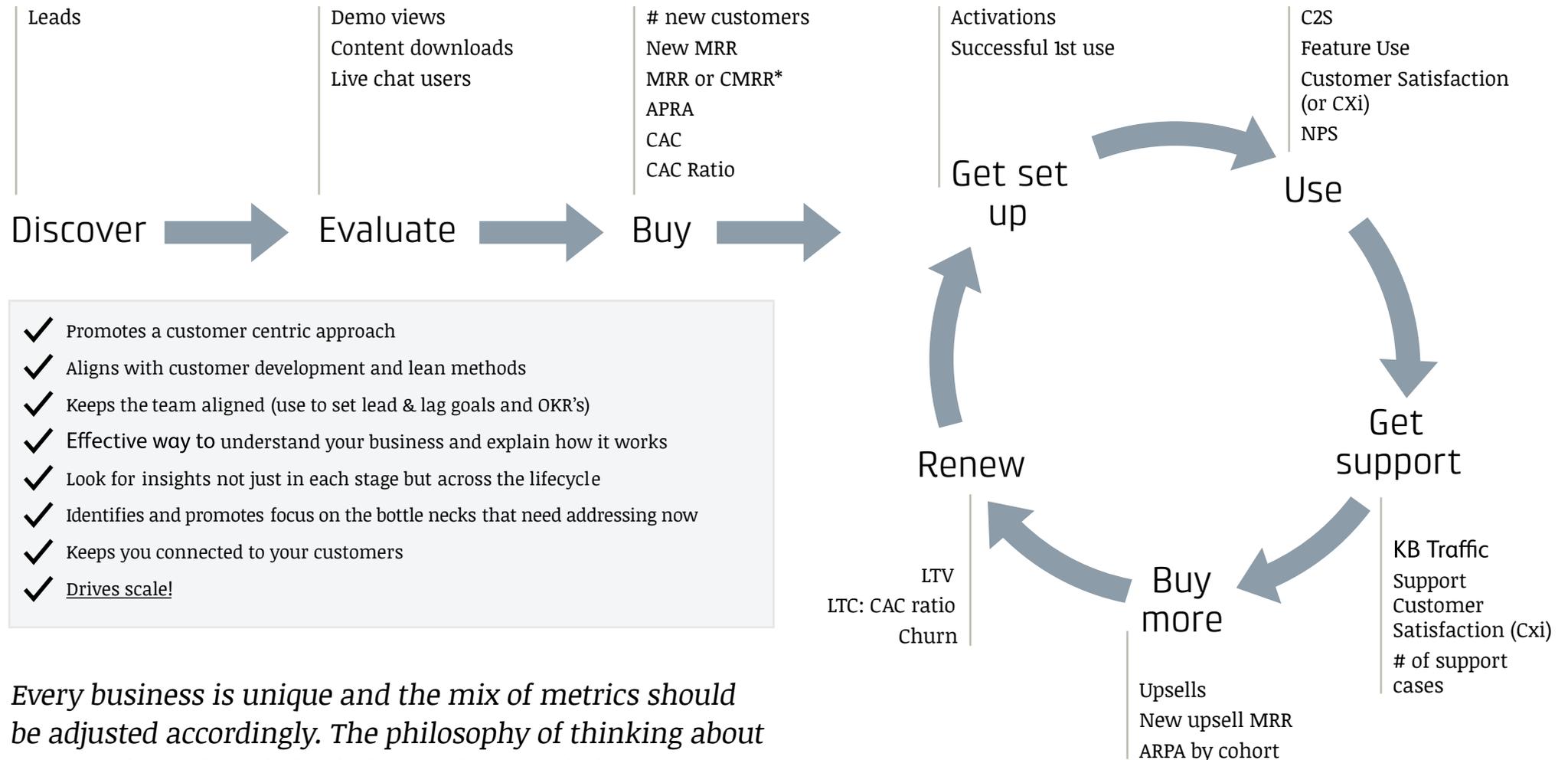
Cash generation

Appendix



What should SaaS businesses measure on an ongoing basis?

A. Detailed Analysis: The Customer Lifecycle as a Dashboard *Process designed by Keith Wallington*



- ✓ Promotes a customer centric approach
- ✓ Aligns with customer development and lean methods
- ✓ Keeps the team aligned (use to set lead & lag goals and OKR's)
- ✓ Effective way to understand your business and explain how it works
- ✓ Look for insights not just in each stage but across the lifecycle
- ✓ Identifies and promotes focus on the bottle necks that need addressing now
- ✓ Keeps you connected to your customers
- ✓ Drives scale!

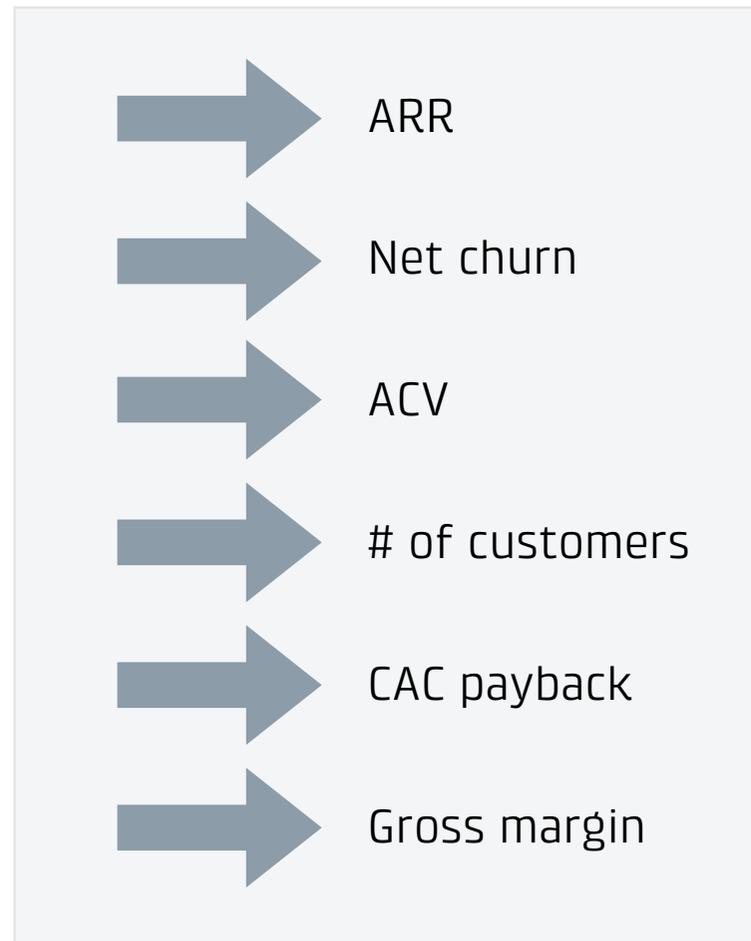
Every business is unique and the mix of metrics should be adjusted accordingly. The philosophy of thinking about your business in this holistic way is what is important.

*CMRR = MRR + committed signed contracts - churn (including predicted churn)



What should SaaS businesses measure on an ongoing basis? continued

B. High-level Analysis: The Top Metrics to Track





What does 'good' look like?

These benchmarks are from the perspective of a venture investor

Gross churn	<12% per annum
Net churn	Negative is good (upsell is greater than gross churn)
Logo churn	<7% per annum
Renewal rate	>90%
ARR growth	50%+ (>£5m revenue), 100%+ (<£5m revenue)
Quick ratio	>4 means growing at healthy rate and low churn rate
CAC payback	<12 months (for earlier stage)
LTV: CAC ratio	>3x
Magic number	>0.5x
S&M costs as % of total revenue	c.40% at Series A stage
PS as a % of total revenue	Lower the better
Gross margin	>80%
EBITDASM	c.45–55%
NPS	>50 is impressive



Glossary

Key terms and definitions

ACV	Annual contract value	KB	Knowledge base
APRA	Average revenue per account (MRR divided by no. of active accounts)	LTV	Lifetime value
ARR	Annual recurring revenue	MAU	Monthly active users
ASP	Average selling price	MRR	Monthly recurring revenue
CAC	Customer acquisition cost	NPS	Net promoter score
C2S	Click to scan	OKR	Objectives and key results
CMRR	Committed monthly recurring revenue (existing MRR plus new bookings less downgrades & churn)	PS	Professional services
CXi	Customer experience index	S&M	Sales and marketing
DAU	Daily active users	TAM	Total addressable market
GTM	Go To Market		



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Key terms and links to source materials online

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Renewal rate	https://www.sethlevine.com/archives/2017/08/how-to-value-your-saas-company.html http://www.startupcfo.ca/2011/09/saas-math-activation-retention-and-churn/
NPS	http://tomtunguz.com/nps-benchmarks/ https://www.saastock.com/blog/view/genius-or-luck-what-it-takes-to-build-a-successful-smb-saas-business
Cohort analysis	http://christophjanz.blogspot.com/2014/03/cohort-analysis-practical-q-guest-post.html https://blog.intercom.com/retention-cohorts-and-visualisations/
Engagement/Usage	https://a16z.com/2015/08/21/16-metrics/ http://tomtunguz.com/your-startups-10-most-important-metrics/
Bookings growth	https://a16z.com/2015/08/21/16-metrics/ http://tomtunguz.com/your-startups-10-most-important-metrics/
MRR growth	http://tomtunguz.com/mrr-growth/



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Key terms and links to source materials online

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TAM	https://a16z.com/2015/09/23/16-more-metrics/
Paid CAC	https://www.slideshare.net/PointNineCap/9-worst-practices-insaas-metrics https://a16z.com/2015/08/21/16-metrics/
Blended CAC	http://www.forentrepreneurs.com/saas-metrics-2/ https://techvibes.com/2011/07/25/simple-saas-the-3-most-important-metrics-for-investors-2011-07-25
LTV	https://labs.openviewpartners.com/what-are-key-performance-indicators-6-saas-metrics-that-really-matter/#.Wd0F7WhSyUl
CAC payback (months)	http://www.forentrepreneurs.com/saas-metrics-2/ http://labs.openviewpartners.com/saas-sales-and-marketing-metrics/#.WaaVlciGOUk
LTV: CAC ratio	http://cracking-the-code.blogspot.co.uk/2014/01/refining-your-customer-acquisition-cost.html http://www.forentrepreneurs.com/saas-metrics-2/ https://kellblog.com/2014/07/30/the-ultimate-saas-metric-ltv-cac/



Sources continued

Key terms and links to source materials online

Magic number	https://www.scalevp.com/blog/magic-number-math http://www.thesaascfo.com/calculate-saas-magic-number/
S&M costs as a % of total revenue	https://labs.openviewpartners.com/saas-sales-budget/#.Wd0LHmhSyUk
Attachment rate	http://www.forentrepreneurs.com/2017-saas-survey-part-1/
Gross margin	https://davidcummings.org/2014/09/01/gross-margin-and-saas/ https://davidcummings.org/2016/10/16/gross-margin-as-part-of-lifetime-customer-value/
Rule of 40%	http://avc.com/2015/02/the-40-rule/ https://feld.com/archives/2015/02/rule-40-healthy-saas-company.html https://www.sethlevine.com/archives/2017/08/how-to-value-your-saas-company.html
Capital consumption ratio	http://www.forentrepreneurs.com/2017-saas-survey-part-1/ http://tomtunguz.com/box-ipo/ https://www.sethlevine.com/archives/2017/08/how-to-value-your-saas-company.html