
Measuring High-Growth, Recurring Revenue Businesses

Why conventional metrics for tracking the progress of a business are inadequate, and even misleading, for a large new class of companies that deliver technology as a service.

By David Cowan

A managing partner of Bessemer Venture Partners, David Cowan has led early stage investment rounds in technology service providers such as Postini; PSI-Net; Register.com; Verisign, which he co-founded and where he served as CFO and Chairman; Keynote, Telocity, Counterpane, Netli, Qualys, Cyota, and more recently Lifelock, LinkedIn and Perimeter eSecurity. Bessemer Venture Partners has also invested in other technology service vendors such as Endeca, Eloqua, Retail Solutions, SelectMinds, Intego and Cornerstone On Demand.

Introduction

In the old days before the internet, technology innovators commercialized their inventions primarily in the form of equipment or software. Microsoft, Intel, Sun, Oracle, Dell, Cisco, Seagate, Siebel, and most every other venture-backed startup of the late 20th century collected most revenue dollars soon after securing a purchase order, with only a minor portion of revenue coming from annual maintenance contracts.

But today, with the mass proliferation of always-connected computing devices, an increasing number of startups seize the opportunity to deliver technology in the form of perpetually-renewable automated services that either (i) operate network-based computers for their customers to access (e.g. Vonage, Akamai, Salesforce.com), or (ii) deliver streams of data—such as software iterations (e.g. McAfee, Websense), environmental measurements (Bloomberg, UPS package tracking), or entertainment and news media (e.g. WSJ.com, CNN/SI Fantasy Sports, XM Radio, Real Rhapsody Music Service, Tivo). Regardless of when the cash is collected for these subscription services, there is no value delivered up front, and so GAAP reasonably recognizes all their revenue ratably over time, month by month.

Of course, common business metrics evolved in the old days, before this marriage of technology and subscriptions. Now, as the business model changes around them, entrepreneurs and venture capitalists continue to depend upon the conventional metrics of high-tech product companies. Unfortunately, like other bad habits, this dependency often stunts their growth.

Startups with recurring revenue need different terminology and accounting metrics to paint a clear picture of their business and establish a framework for properly compensating performance, especially among the sales staff. Over the last thirteen years, while serving actively on the boards of many startups selling technology subscriptions, the author has participated in the construction of a new accounting metric that its adopters find addictive in its simplicity, clarity and utility.

Conventional Value Metrics in High Growth Technology Companies

It is easy to agree that businesses are worth the net present value of expected future earnings streams. High growth companies, however, maximize that value in the short term by prioritizing market share over net income and gross margins. That is why, in explosive markets, sales growth represents the most important metric of value accretion.

It is also easy to agree that technology is hard to deploy. The newest products tend to require some combination of customization, integration, testing, and training, and often this cycle depends upon the deployment of complementary products within the system. If anything goes wrong, consumers can return product or leave the channel with inventory that doesn't sell through. Enterprise customers usually have the practical ability—if not the contractual right—to reverse the purchase order, and certainly the vendor cannot know, until final product acceptance, how much sales expense it will incur until the cycle completes. To reserve against these risks, GAAP does not immediately recognize 100% of purchases as revenue.

But however long the deployment cycle takes, it represents the least risky stage of the sales cycle (unless of course the product doesn't work—an unsustainable problem). Once management knows how much product has been ordered, they know rather precisely how much revenue will ultimately follow. The catch-all “bookings number” is such a strong leading indicator of revenue that it trumps revenue itself as the most important metric of sales growth, and, consequently, value accretion in high-growth technology companies.

Indeed, variable compensation in these companies most often ties to bookings, from the junior telesales rep up to the CEO. In private companies, the operational portion of board meetings tends to revolve around the plan, forecast and actual achievement of bookings goals. And in public companies, stock prices rise and fall on perceived changes in bookings long before the associated GAAP revenue is even recognized.

Other sales growth metrics—such as returns and DSO—still warrant attention. And what constitutes a “booking” is certainly subject to debate, if not regular abuse, since FASB offers no guidance here to follow. But bookings indicate future value accretion so much more accurately than competing metrics that we find ways to navigate the swamp by establishing company-specific guidelines, and monitoring the variances between revenue and prior bookings to expose abuse and ambiguity.

“Break-even” is the pivotal time in a company's development when booked software licenses and equipment gross margins catch up to the R&D and sales expenses. But it is a milestone with many repeat visitors—it is painfully obvious, and relevant for this discussion, that one bad bookings quarter can plunge a company deep into the red.

Subscriptions: The New Business Model for Technology

To appreciate the appeal of subscription-based businesses, consider how the earnings and revenue multiples of *technology service vendors* (“TSV”) dwarf those of product companies.¹ In the software sector for example, traditional software companies are trading at 2-3x trailing revenues whereas their SaaS counterparts are trading at 5-6x trailing revenues. There are good reasons why the new business model is so sexy.

¹ To be clear, professional service companies are not TSV's—their service is neither automated nor, with rare exception, perpetually-renewable.

From the customer's perspective, subscriptions often deliver value you can't get in a box: security software that adapts to rapidly evolving threats; media streams too personalized to economically broadcast; software too complex to run in-house; networks too vast to reproduce. And they don't require an up-front commitment of capital to purchase.

From the investor's perspective, TSV's offer higher expectations of future earnings streams by promising far clearer visibility into future revenue, since even the fastest growing TSV has most of next quarter's revenues (and the next) already contracted. A growing product company faces increasing risk as it must outperform itself quarter after quarter, but a TSV is more like an engine with a flywheel, smoothly accelerating with the gentle application of force. The most valuable TSV's don't even need to stop for fuel—they grow organically from service usage expansion within their existing accounts. (Verisign, for example, grew steadily through the turn of the decade as its existing customers registered and secured new domain names.) And since TSV's must interact with their customers regularly, they are far better positioned than product vendors to introduce entirely new offerings into the installed base. (Keynote, for example, has grown steadily by acquiring tiny TSV's with services that can be upsold to Keynote's customers.)

The business model offers such compelling benefits that some conventional, offline software vendors (e.g. Endeca) go so far as to sell their licenses with one year terms, simulating the subscription base of a TSV.

On the downside, subscription services are harder to execute, since their customer support facility faces the constant threat of churn, and they require more capital in order to subsidize the delay in payment and the operation of a network and data center. Of course, these barriers to entry only amplify the value premium enjoyed by successful TSV's.

The TSV matures very differently from a product company, incurring three types of cost: development, operating, and variable. Development costs range from minimal to high, depending upon the company's decisions to make versus buy. Operating costs are somewhat fixed (or at least very lumpy), typically funding a highly available, fault-tolerant data center, with redundant facilities, disaster recovery, and lots of network bandwidth. The operating expense line can also cover data sources, including externally supplied feeds or the maintenance of geographically dispersed sensors. Variable costs are normally low—they may include storage and network bandwidth, but they are chiefly dominated by sales and support.

With more cost and no up-front payment, TSV's travel a longer, more expensive road to profitability, but once they arrive they are unlikely to regress. For this reason, the profitability milestone plays an even more prominent role in the life of a TSV.

The Mismatch

Despite having the business model of a magazine publisher, management teams of TSV's need the same operational skill sets and domain knowledge as those of high-tech product companies. And so TSV's are founded by entrepreneurs, and staffed by managers, trained in the culture of bookings. Herein lies the problem.

Bookings meaningfully foretell revenue in product companies, but not in TSVs. At the time of customer acquisition, it is impossible to even guess the revenue that will follow from a sale, since the contract is subject at any time to churn on the one hand and expansion of seats or services on the other. The only reliable prediction you can make from any sale is that the monthly revenue will in fact change over time.

Just as problematic, the bookings number often includes renewals and upsells (which may or may not happen at time of renewal). It does not make sense to track these numbers, along with new account sales, as one metric, in part because renewal bookings are far easier to get, and so the bookings metric has to be

decomposed into different line items. Even still, the “renewal booking” has to be presented in context of renewal opportunities, since an increase of 10% in bookings might simply have resulted from a 20% increase in accounts up for renewal, masking the increase in churn.

As a metric of value accretion, the bookings number shows a third weakness of smaller magnitude: TSVs attract value premiums based on the visibility and stability of recurring revenues, but the inevitable presence of non-recurring revenues from professional services, training, patent licenses, and other secondary opportunities pollute the bookings number with less valuable business.

And yet, sales vice-presidents accustomed to hammering away on bookings tend to see the proverbial nail, and so every purchase is somehow quantified as a booking.

Why It Matters

To appreciate the consequences of focusing on the wrong metric, consider the case of an actual TSV (with only minor simplifications), referred to here as Acme Systems. The reader is asked to digest a few paragraphs of detail, but with the promise of a scandalous conclusion...

Acme sells flat-rate annual subscription contracts to enterprises, usually for \$120k or \$10k per month. Acme started the year with 45 customers, and in Q1 the company successfully renewed about \$1m of annual contracts, with no churn or price erosion, and added another 5 accounts. That brought Acme to about \$6 million of annual recurring revenue by the end of Q1 (though the accounts came on line at the end of the quarter, so only about \$1.35m of GAAP revenue had been recognized in Q1). The sales department was paid commissions for booking \$1.6 million (\$1m of renewal and \$600k of new business). Acme still had a long way to go to reach breakeven, and so management justified the operating loss with a commitment to increase bookings in Q2 by an admirable 25% quarter-over-quarter, to \$2 million.

Unfortunately, early in Q2, network glitches inflicted severe outages on Acme’s customers, and some new competitors—including a large public company—swooped in. 15 Acme accounts, representing almost exactly \$2 million of annual recurring revenue, were coming up for renewal in the quarter, including a couple of larger ones paying \$20k per month. Dissatisfied, the two large accounts switched vendors, as did 4 others, while another 2 accounts churned away simply for internal budget reasons. The eight churned contracts didn’t expire until nearly the end of Q2 (indeed, most new customers are signed up at the end of a quarter), so they continued to generate revenue through most of the quarter. Meanwhile, the competitive pressure enabled the remaining seven accounts to negotiate discounts averaging 20%, though three of the seven accounts did purchase additional services that actually increased each of their overall contracts by an average of \$10k per year.

The sales department obviously did not book any of the available \$480k from the two large accounts, or the \$720k from the other 6 churned accounts. However, the 7 renewing accounts, who had been paying \$120k each, did account for renewal bookings—4 of them signed an annual contract for \$96k each, and 3 for \$130k each, for a total booking of \$720k.

In addition, Acme closed 3 new deals, all with multi-year contracts (a new commission bonus had been offered for long term deals with the idea that it would reduce churn). One of them was a whopper—a five year deal worth \$1.78 million, including \$1.36 million for 8 months of implementation services, and a discounted subscription rate of \$7k per month. Closed early in the quarter, two months of consulting (\$340k) and subscription (\$14k) were recognizable in Q2. The other two new accounts were three year deals, each for \$8k per month, but not starting until Q3. New bookings therefore totaled \$2.36 million, and GAAP revenue for the quarter came in at \$1.834m (that’s \$1.48m from pre-existing accounts plus \$354k from the whopper).

So overall, how did Acme do in Q2? Let's see what the CEO had to say in his quarterly summary...

President's Letter to the Board of Directors

*Q2 was a terrific quarter for Acme Systems. We had strong bookings of **\$3.13 million** against a plan of \$2.0 million, representing 154% of plan, and a 93% increase over Q1 bookings of \$1.6 million. This good news stemmed in part from a large 5 year deal for our core service, including \$1.36 million of professional services. In fact I'm pleased to report that overall we locked in several longer term contracts this quarter. We also renewed 7 customers this quarter, 3 of whom were upsold additional services. GAAP revenue of \$1.83 million exceeded plan by 10%, and rose 35% from Q1! We did exceed the expense plan by 14%, but principally due to higher than expected sales commissions. In light of recent sales success, Management recommends that we accelerate the sales hiring plan.*

The summary above is factually accurate, and seems to provide compelling evidence for the CEO's optimistic recommendation. But with the benefit of more detail from the preceding paragraphs, the reader senses that something isn't right...

TSV's attract such high multiples because of the recurring nature of the revenue, which doesn't increase from non-recurring revenue, multi-year contracts, or churn-ridden renewals. To accrue value, a TSV must escalate its subscription revenue, first to cover the large fixed expenses and later to increase profit.

But Acme failed to do that in Q2. In fact, Acme had exited Q1 with \$500,000 of monthly recurring revenue, of which it lost \$40k from the two large accounts, \$60k from the other 6 churned accounts, and \$5.5k from the net changes to the 7 renewals. New accounts added \$23k of monthly revenue, bringing the company's post-Q2 monthly recurring business to \$417,500.

That's why the following summary of Q2 would have boded better for Acme....

President's Letter to the Board of Directors

Q2 was surely Acme Systems' most disappointing quarter to date, as we faced scalability challenges and increased competition. Churn and poor sales productivity reduced Acme's customer count by 10% from 50 to 45, and our average monthly fee dropped from \$10k to \$9.28k (and only \$7.67k for new contracts). Most importantly, our annual recurring revenue dropped 16.6% from \$6 million to \$5 million, leaving us 30% short of the Q2 goal—even as expenses exceeded plan by 14%. Based on indications from dissatisfied customers, and continued pricing pressure, we should expect annual recurring revenue to continue dropping to as low as \$3.6 million by year end, a 40% decrease for the year. At this rate Acme will inevitably exhaust cash resources within 4 quarters. And so, at the upcoming board meeting, Management will present our recommendation to significantly downsize the operating plan for the remainder of the year. This should give us time to refresh our product strategy, upgrade our sales team, and craft a more scalable network before we have to raise capital.

This example of the contrast between different metrics is hardly extraordinary—technical problems, competitive pressure, personnel issues, disloyal distributors, economic downturns, and other surprises frequently contribute to churn, price erosion and poor sales productivity. In any given quarter, some indicators are likely to come in ahead of plan, and some behind. Unfortunately, very few companies know how to cull higher-level information from the mixed signals. Even when board members spend hours of the board meeting fishing for details behind the highly vague bookings number, they fail to reach a consensus around the simple question of whether or not it was a good quarter!

In addition, without a clear sense of what drives shareholder value, TSV's often run in circles crafting complex compensation plans that encourage renewals, new account generation, usage audits, longer contracts, faster cash collection, upsells, and higher prices—often at the same time. Each bonus program has an understandable objective, but the resulting hodge podge fails to align incentives correctly. And sales forces, of course, optimize their commissions, not company value.

Crafting the Right Metric

What TSV's need is a simple metric that reflects the state of the business as comprehensively as possible—as the bookings number does for high-tech product companies. Decisions can then be made based on what optimizes that metric within available resources.

Recurring revenue (RR) is the flywheel in the engine that drives value in a TSV. So the primary metric of value must derive somehow from RR. New accounts, higher pricing, lower churn and upsells all contribute to RR, so they simply become components of the primary metric.

Theoretically, it could work to track annual RR, but practically speaking it works better to track monthly recurring revenue (MRR), since the number changes dramatically each month. Also, expressing RR in monthly increments facilitates cash management, since monthly expense rates are highly volatile throughout the year.

The MRR metric would have greatly simplified the Acme example. A single report would reflect exactly what happened during the quarter without any confusion as to the relative impact of each line item...

	MRR	Customers	Account Name	Comments
At end of Q1	\$500,000	50		
New Accounts	\$7,000	1	AAA	
	\$8,000	1	BBB	
	\$8,000	1	CCC	
Churn	(\$20,000)	-1	DDD	lost to competitor
	(\$20,000)	-1	EEE	lost to competitor
	(\$10,000)	-1	FFF	lost to competitor
	(\$10,000)	-1	GGG	lost to competitor
	(\$10,000)	-1	HHH	lost to competitor
	(\$10,000)	-1	III	lost to competitor
	(\$10,000)	-1	JJJ	budget constraints
	(\$10,000)	-1	KKK	budget constraints
	(\$2,000)		LLL	20% discount on renewal
	(\$2,000)		MMM	20% discount on renewal
	(\$2,000)		NNN	20% discount on renewal
	(\$2,000)		OOO	20% discount on renewal
	(\$2,000)		PPP	20% discount on renewal
	(\$2,000)		QQQ	20% discount on renewal
	(\$2,000)		RRR	20% discount on renewal
Upsells	\$2,833		PPP	new service
	\$2,833		QQQ	new service
	\$2,833		RRR	new service
At end of Q2	\$417,500	45		

Applying MRR to Sales Compensation Plans

Sometimes it's easier to sell a new account than to save an old one, and sometimes it's not. Some reps know how to close new accounts, some choose to farm their accounts for upsell, while others simply manage to renew all their existing customers and even train them to expand usage. Rather than try to micro-manage decisions that are better delegated to the field rep, the TSV can compensate each rep based simply on *net change to MRR* for his or her territory. Leave it up to the rep to figure out, based on opportunity and skill sets, how to raise MRR by 10%. So long as it happens, it's relatively irrelevant as to whether it came principally from upsells, usage expansion, new accounts, or lack of churn.

Minor adjustments can still be made to the commission plan to accommodate second order objectives. Reps might earn a small bonus for faster cash payment schedules, and some very minor bonus for one time revenue. But the reps' top 3 priorities should be (i) MRR, (ii) MRR, and (iii) MRR.

Committed Monthly Recurring Revenue

The objective of a business valuation metric is to tune out the noise and effectively answer the question: if we were to turn off our sales force today, and manage to keep all our existing customers at a steady state, what is our long term revenue outlook? How has that changed in the last month/quarter/year? In the spirit of crafting the perfect answer, our MRR metric still needs a tweak...

For consumer businesses like Lifelock, a technology service can be provisioned immediately, but for enterprise customers, technology can be hard to deploy whether it's delivered as a product or a service. From the time that an enterprise customer signs up with a TSV, there can be a considerable delay before any revenue is recognized at all, while the TSV and customer configure their respective systems to establish a working connection. But since the deployment phase is the least risky stage of the sales cycle, it would be misleading to ignore purchase orders simply because they do not formally count as revenue accounts.

Conversely, if a revenue generating account is likely to churn, it would be misleading to represent that customer as a recurring revenue account.

So a more meaningful metric for enterprise-oriented TSV's would be Committed Monthly Recurring Revenue (CMRR). To be precise, CMRR equals all recurring revenue in the month, plus purchase orders for future recurring revenue, minus revenue that is likely to churn within the year.

The Acme example glossed over the implementation delay, but in reality 2 of the 3 new accounts were purchase orders—not yet revenue generators at end of Q2. Still, we want to factor those into our valuation as though they were already revenue accounts.

Conversely, Acme's network outages had led to some dissatisfaction among other customers who specifically expressed lack of intent to renew in later quarters. A CMRR report would account for those future defections, to capture more accurately changes in company value. (In the happy event that TSV's can later salvage accounts that had already been placed in the category of expected churn, those accounts should be added back to CMRR, reflecting the reality that the company's long term recurring revenue business has risen.)

	CMRR	Customers	Account Name	
At end of Q1	\$500,000	50		
New Accounts	\$7,000	1	AAA	
	\$8,000	1	BBB	In Deployment
	\$8,000	1	CCC	In Deployment
Churn	(\$20,000)	-1	DDD	lost to competitor
	(\$20,000)	-1	EEE	lost to competitor
	(\$10,000)	-1	FFF	lost to competitor
	(\$10,000)	-1	GGG	lost to competitor
	(\$10,000)	-1	HHH	lost to competitor
	(\$10,000)	-1	III	lost to competitor
	(\$10,000)	-1	JJJ	budget constraints
	(\$10,000)	-1	KKK	budget constraints
	(\$2,000)		LLL	20% discount on renewal
	(\$2,000)		MMM	20% discount on renewal
	(\$2,000)		NNN	20% discount on renewal
	(\$2,000)		OOO	20% discount on renewal
	(\$2,000)		PPP	20% discount on renewal
	(\$2,000)		QQQ	20% discount on renewal
	(\$2,000)		RRR	20% discount on renewal
Expected Churn	(\$10,000)	-1	SSS	Received written notification
	(\$10,000)	-1	TTT	Does not return calls
	(\$10,000)	-1	UUU	Ongoing technical issues
Upsells	\$2,833		PPP	new service
	\$2,833		QQQ	new service
	\$2,833		RRR	new service
At end of Q2	\$387,500	42		

In this case, the CMRR report is even more grave, as it accurately incorporates the negative developments associated with future churn. In most cases, though, CMRR is more favorable than MRR, since deployment delays are more common than churn.

Of course, CMRR includes the potentially subjective element of “expected churn” so it is imperative to establish clear guidelines as to what constitutes a bona fide purchase order, and what qualifies as expected churn. A sharp financial controller will maintain discipline around the guidelines, and certainly gamesmanship on anyone’s part will be exposed within a couple of quarters as surprise churn appears.

With consistent application, CMRR becomes the metric of choice for assessing a CEO’s performance in an enterprise-oriented TSV. A recommended practice is to allocate 2/3 of a CEO’s bonus on the ending CMRR, and a third of the bonus on ending cash. The cash-based bonus ensure prudent decisions on the way to building market share, especially given how much investment capital it takes for a TSV to break even.

Compensating the Sales Force

Even when CMRR makes sense for evaluating corporate performance and value, MRR is still the better metric on which to base sales commissions. This motivates the sales rep to shepherd a new account through the deployment phase. Furthermore, if a sales rep were compensated on CMRR, he or she would feel penalized for highlighting accounts at risk for churn, which would lead to greater churn than necessary. While it may make sense to offer very slight adjustments for favorable payment terms and one time revenue, net additions to MRR should dominate the sales rep’s thoughts.

As a TSV matures, it does not want to bog down its top performing sales reps with the job of renewing their growing account bases. So invariably the team splits into hunters for new accounts and farmers for renewals and upsells. Obviously, hunting takes more effort and resource than farming--the Vice-President Sales needs to determine the ratio between the two based on how easy it is to renew an account, and apply that ratio in the sales commissions. For example, \$1 of MRR might generate \$1 of commission for the first year, and 20 cents for each year of renewal. In this example, the new account sales rep can be compensated for longer term contracts by paying the “hunt commission” for year one and “farm commissions” for subsequent years (e.g. \$1.40 for a three year contract). In this way, the rep will apply the proper attention to closing long term contracts where the risk of churn has been mitigated.

CMRR as an Investment Tool

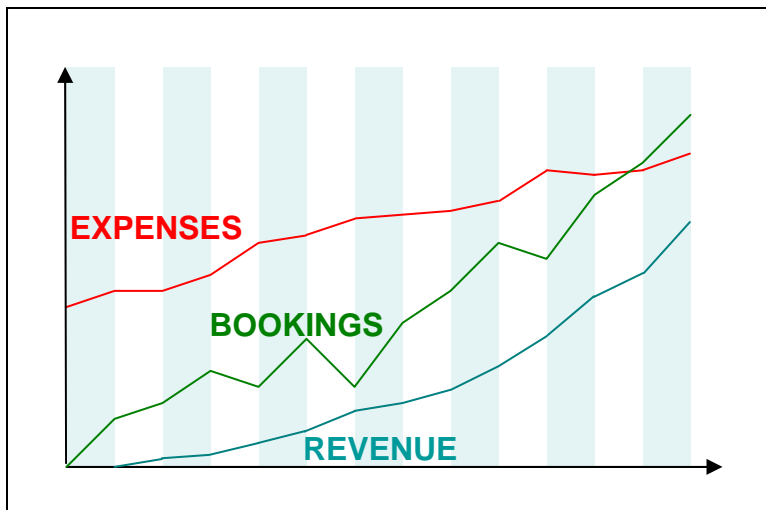
The Acme example illustrates the hazard of the bookings metric particularly well because the wrong metric is most dangerous when the business is in distress. In healthier quarters, when the business is growing, CMRR still paints a much clearer picture that enables better decisions with respect to employee assessment, compensation, operational planning, and financing. For investors, CMRR is a critical lens that clarifies valuation.

Without the CMRR metric, a TSV typically portrays its financial progress over several periods in the following format, borrowed from an actual venture capital investment presentation of a company referred to here as Foobar Services:



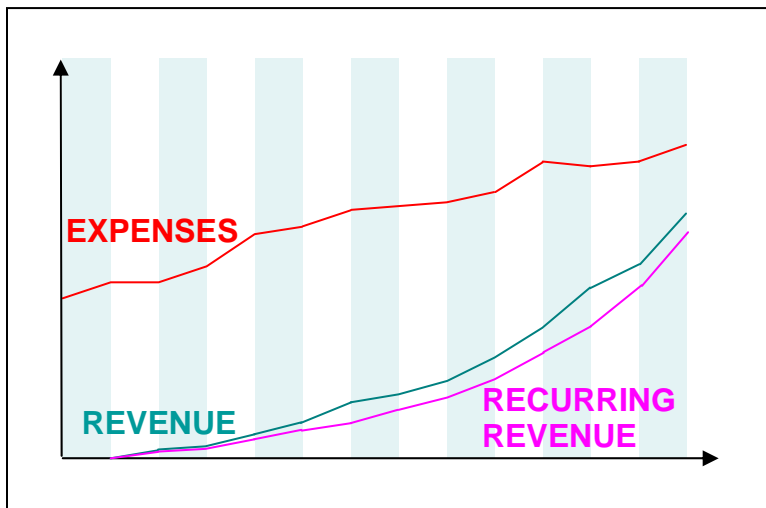
Foobar delights in showing bookings that now exceed expenses, even though the bookings number, like Acme’s, probably includes multi-year bookings, non-renewable revenue, and renewals with no offset for churn. As Acme demonstrated, the bookings number is about as meaningful as division by zero, horoscopes and election promises.

Fortunately, Foobar’s CFO had prepared a slide with GAAP revenue as a footnote for those nerdy auditors...

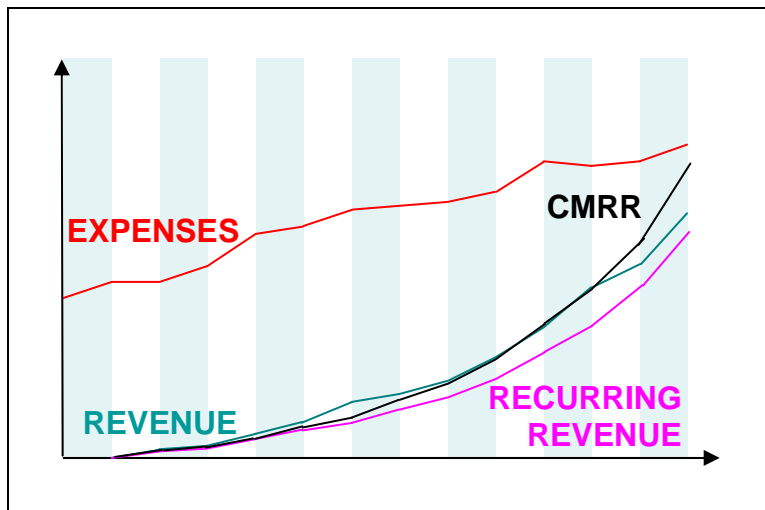


Typical for a TSV, Foobar grows its revenues every quarter, even when sales activity slows (e.g. even Acme's miserable Q2 showed increasing revenue). Foobar has a large fixed expense nut to cover, but indeed seems headed toward profitability, at which point the value of the business will quickly rise. For a venture investor, this could be the right time to invest, but more detail was needed.

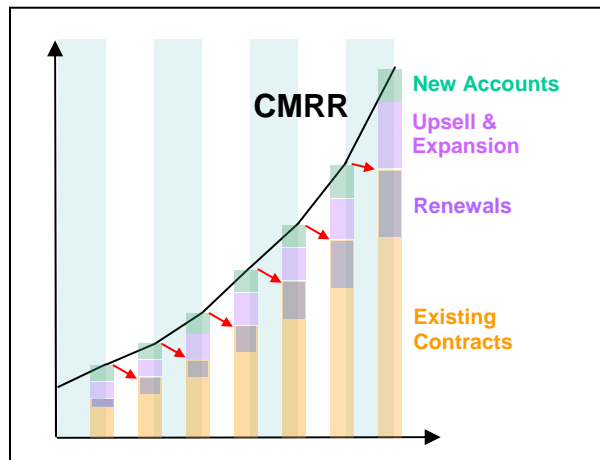
Ignoring the one-time revenues, one can see even more smoothness in the growth of Foobar's RR.



Allowing for contracted but as-of-yet unrecognized subscriptions, and eliminating the one account expected to churn, shows a CMRR number that outpaces MRR, due to long deployment cycles.



Though CMRR hasn't yet exceeded expenses, the trend line looks strong and, by the way, smoother than the so-called bookings line. The CMRR line not only provides clarity, but also reflects better on the company. In fact, a breakdown of CMRR over the prior 7 periods clearly shows that most of the growth is organic, a terrific indicator of traction and sales leverage...



This CMRR breakdown graph crisply communicates all the highlights of the business, including new accounts (green), organic growth (purple), renewals (blue), and account cancellations (red arrows). While there is some moderate degree of failure to renew, this TSV actually experiences negative churn, because upsells and service expansion more than offset the cancellations and reductions.

Try It, You will Like It

Any new accounting protocol is likely to elicit resistance. But—like hybrid cars, children-rearing and Tivo—CMRR is difficult to appreciate until it is experienced. TSV's who have tried reporting CMRR have all embraced it as their primary metric. The CMRR breakdown graph dramatically speeds up meetings, and, when applied to an individual sales territory, shines a clear, bright light on what's working. Except when required externally to report GAAP numbers, these companies now describe all internal results—down to individual wins and losses—in terms of CMRR.

Of course, as markets inevitably mature and slow, the TSV's with dominant market share must shift their businesses to a different metric: ***Committed Monthly Recurring Contribution*** (CMRC)!

For good reason, many tout the technology-as-a-service business model as one of the greatest dividends of the internet. But without adequate and meaningful measurement tools, TSV's will fade away with so many other dot-com fads.
