

Developing Your MVNO Business Case

By David Grigg

A mountain of information is available on business case preparation, most of it prepared by people much smarter than this author. I have, however, had a hand in launching and supporting over a dozen MVNOs. This real world experience has shaped my opinions and is the basis for some basic tips and suggestions for budding MVNOs as they plan and develop their business case.

In the first article titled 'MNVO

off as purported. In the process I'll offer some tools for crafting your own business model.

Begin at the end

What's your ultimate goal? Do you plan to grow your MVNO then cash out by selling or being acquired? Or do you plan to create a self-sustaining, cash generating business to be held either as a standalone enterprise or as profit center within an existing company? The answer, along with the amount of capital required, will likely influence what type of funding you pursue, be it equity, debt, or self-funding.

Depending on the amount of money involved and how much initial legwork you've done, venture capitalists will likely require majority interest in your company. They'll also expect rapid growth, intending to sell the MVNO as soon as feasible. This may or may not fit your plan, but before deciding on equity investors, examine your potential upside to see how much you might be giving up.

'I understand it isn't cheap to

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– The Next Big Reseller Opportunity' (March 15 issue), I heralded the handsome ROI of Mobile Virtual Network Operators. In this second installment in the series I'll step through a sample MVNO business model to see if it pays

Sample MVNO Prepaid Model. Months 1 through 3.			
	Month 1	Month 2	Month 3
Adds/Month	1,000	3,000	5,000
Active Units	1,000	3,940	8,704
ARPU (less taxes)	\$33.00	\$33.00	\$33.00
Gross Revenue	\$33,000.00	\$ 66,980.00	\$ 147,961.20
Avg Wholesale Cost/Unit	\$16.00	\$16.00	\$16.00
Avg Gross Profit/Unit	\$17.00	\$17.00	\$17.00
Avg Gross Margin	52%	52%	52%
Net Acquisition Cost/Unit	\$76.20	\$76.20	\$76.20
Net Acquisition Costs	\$76,200.00	\$ 228,600.00	\$ 381,000.00
Churn	6%	6%	6%
Maintenance/Unit	\$3.00	\$3.00	\$3.00
Maintenance	\$3,000.00	\$11,820.00	\$ 26,110.80
Net Income	(\$62,200.00)	(\$173,440.00)	(\$259,149.60)
CUMM Net Income	(\$62,200.00)	(\$235,640.00)	(\$494,789.60)

Chart B

Please check the accompanying sidebar for our spreadsheet definitions and a brief explanation of our numbers.

Sample MVNO Prepaid Model. Months 6 through 8.			
	Month 6	Month 7	Month 8
Adds/Month	5,000	5,000	5,000
Active Units	21,347	25,066	28,562
ARPU (less taxes)	\$33.00	\$33.00	\$33.00
Gross Revenue	\$362,900.21	\$426,126.19	\$485,558.62
Avg Wholesale Cost/Unit	\$16.00	\$16.00	\$16.00
Avg Profit/Unit	\$17.00	\$17.00	\$17.00
Avg Margin	52%	52%	52%
Net Acquisition Cost/Unit	\$76.20	\$76.20	\$76.20
Net Acquisition Costs	\$381,000.00	\$381,000.00	\$381,000.00
Churn	6%	6%	6%
Maintenance/Unit	\$3.00	\$3.00	\$3.00
Maintenance	\$ 64,041.21	\$75,198.74	\$85,686.82
Net Income	(\$82,141.01)	(\$30,072.55)	\$18,871.81
CUMM Net Income	(\$910,924.22)	(\$940,996.76)	(\$922,124.96)

Chart C

Sample Acquisition Costs			
	Retail Offer	Wholesale Cost	Net Cost
Handset	\$50.00	\$60.00	\$10.00
Activation Fee		\$5.00	\$5.00
Distribution		\$10.00	\$10.00
Marketing		\$25.00	\$25.00
Commission		\$25.00	\$25.00
Initial Included Minutes	20	\$1.20	\$1.20
Wholesale Rate/MoU	\$0.06		
Net Acquisition Costs			\$76.20

Chart A

	Month 13	Month 14
Net Revenue	\$222,912.83	\$256,678.06
CUMM Net Revenue	(\$190,434.40)	\$66,243.66

Chart D

launch an MVNO. How much money are we talking about?'

Great question. The short answer is you need enough money to cover costs until you become cash-flow positive, or in other words, until you can sustain growth and operations solely on generated revenues without the need for outside funds. To find out what this means in hard dollars, let's create a hypothetical MNVO and run some

numbers.

For our MVNO we'll assume a simple prepaid offering consisting of a basic voice/SMS handset bundled with 20 minutes of initial usage for a suggested retail price of \$50. Our first task is to determine acquisition costs. Chart A lists some typical cost categories with sample values.

This is one way to look at acquisition costs and is not meant

	Month 17	Month 24	Month 36
Net Revenue	\$346,297.20	\$500,745.41	\$650,066.85
CUMM Net Revenue	\$1,019,210.58	\$4,099,188.58	\$11,187,819.31

Chart E

as definitive accounting methodology. You'll obviously arrive at your own number, but ours comes in at \$76.20. How realistic is this? We're using a GSM handset since they enjoy approximately a \$35 lower cost advantage over comparable handsets for other network technologies. (Cingular and T-Mobile are the U.S. GSM carriers with a nationwide footprint.) I know of MNVOs with acquisition costs as low as \$25 and others with costs in excess of \$200, thus mid \$70s falls somewhere in the middle. Keep in mind, the higher your acquisition costs, (1) the longer you need to keep each subscriber before they contribute to your profit, (2) the longer it will take to achieve positive cash-flow, and (3) the more money you'll need to sustain your business until it can be self-supporting. The lower your acquisition costs, the more attractive you'll be to venture capitalists and other investors. Acquisition costs above \$150 will be met with a cool reception from the lending community.

Our next task is to estimate revenues and cash flow, and for that we'll use the spreadsheet format in Chart B. Estimates were used for values requiring assumptions. Your numbers will obviously differ. An interactive version of this spreadsheet can be viewed at www.prepaidpress.com/mvnotools, or go to www.prepaidpress.com and click the MVNO Tools link. By plugging in different values for acquisition cost, ARPU, churn, and maintenance cost, you can see the

effects each change has on capital requirements and ROI. This is not intended as authoritative accounting methodology; use your own accounting experts for your modeling.



Keeping the spreadsheet definitions in mind, look at our 'CUMM Net Revenue' in Month 3. It indicates we'll need al-

most \$500,000 just to make it through our first three months. This is a big number considering we only have 8,700 subscribers. But we won't despair; things do get better. Let's look ahead at months 6 through 8 (Chart C).

Notice how Net Revenue changes between months 7 and 8 from negative \$30,000 to a positive \$19,000. Congratulations are in order because our model is no longer losing money, and in only 8 months. What's more, the CUMM Net Revenue bottoms out in month 7 at negative \$941,000; it begins to turn around in month 7 thanks to the positive revenue in the row above. In broad terms, this \$941,000 indicates the capital required until our cash flow turns positive. As noted in the sidebar,

this does not factor in start-up costs, G&A costs, or cash reserve requirements.

When substituting your own numbers, if at some point your negative CUMM Net Revenue doesn't turn positive, your model doesn't work - you will never be profitable.

Now lets jump ahead to months 13 and 14 in



Spreadsheet Definitions

'Adds/Month' -- new activations. Let's assume our marketing research tells us we can expect to activate 1,000 subscribers during our first month, ramping up to a steady 5,000 new monthly adds by month three. This short ramp-up period is aggressive for a real-world scenario, but not impossible for a well marketed offer.

'Active Units' -- total subscribers after factoring in churn.

'ARPU' -- Average Revenue Per Unit. Our \$33 per month is higher than the CTIA reported average prepaid ARPU of around \$27, although some MVNOs have ARPUs in excess of \$40.

'Avg Wholesale Cost/Unit' -- the charges incurred from our service providers for the \$33 of retail usage (our ARPU). In our example we estimate cost at \$16; your carrier determines actual wholesale rates.

'Avg Gross Profit/Unit' -- \$17, our wholesale cost of \$16 subtracted from our retail revenue of \$33.

'Avg Gross Margin' -- gross profit divided by sales revenue. Our 52% appears high, but is not out of the question for a prepaid offer. Actual margins are determined by the combination of (1) costs from your wholesale contracts, (2) revenues from your retail offerings, and (3) the average unused balance upon card/PIN expiration. It's reported that 78% of all prepaid cards expire with an unused balance, effectively lowering costs and improving margins.

'Net Acquisition Cost/Unit' -- earlier calculated to be \$76.40.

'Churn' -- the percent of subscriber attrition. It's estimated at a constant 6% in our example. (More on churn later in this article.)

'Maintenance/Unit' -- the ongoing direct costs to support the customer, such as Call Center, IVR, and billing. Our estimate is \$3.00 per sub per month.

'CUMM (cumulative) Net Revenue' (bottom row) -- a running total of how much we make or lose, and can be used as an indicator of capital requirements until we become cash flow positive. Before Finance Managers raise objections, I'll quickly mention this number does not include other start-up costs, G&A, or cash reserve requirements; these need to be factored independently.

Spreadsheet definitions



our model (Chart D).

This is where things begin to get interesting. Between month 13 and 14 the CUMM Net Revenue goes from negative \$190,400 to positive \$66,200. Without factoring in G&A and other start-up cost, our business is now in the black, and in only 14 months. This calls for popping the champagne cork. And it only gets better. Look at the Net Revenues and CUMM Net Revenue in months 17, 24 and 36 in Chart E.

With initial capitalization of around \$1,000,000, our monthly net revenue has accelerated to over \$500,000 with cumulative net revenue reaching \$4 million in two years and exceeding \$11 million in three years. How's that for a healthy ROI! Now you can un-

derstand why some insiders are so bullish on MVNOs. They've done the math.

Time to revisit your funding options

By plugging your numbers into the spreadsheet tool, you can now estimate what you might be giving up by using equity investors. If your model shows strong potential, you may want to structure your funding so you don't give away too much of your upside unless you have no other choice. If you don't want to sell, you may be better served by debt financing.

'Now that I know how to estimate my capital requirements and ROI, what other tips do you have for me?'

Profit Killer #1 - Churn

Want to improve your bottom line? Easy, lower your churn. Churn directly impacts your profitability. A subscriber's service life is finite and is shorter for prepaid than postpaid services. The 6% churn used in our example is quite low for prepaid, but is achievable.

To see the effect of churn on growth, use the Churn Calculator on www.prepaid-press.com/mvnotools.

Inducing your subscribers to remain on your service certainly pays off, but there's no shortcut — you need to stay close to the consumer, understanding their wants and needs better than they understand them, proactively staying ahead of the curve.

Churn Fighters:

- Hybrid plans – plans where a low balance automatically triggers an electronic payment and top-up – are effective because they preclude then need for the user to take any action.
- Loyalty programs can be effective if they're not overly expensive.
- Mobile coupons offering customized discounts or special offers redeemable at POS improves subscriber retention.
- Stored value cards appear to be a hot item for some MVNOs and can build loyalty.
- Most MVNOs recognize that the prepaid market is very relationship driven where good customer care and convenient, easy access to top-ups is critical. A positive POS experience helps cement your relationship with the prepaid consumer.
- Premium or custom content is a differentiator and a great anti-churn measure, but requires additional integration and capital investment. Exploring what's involved in enabling proprietary WAP, MMS (Multimedia Messaging Service), or similar type content is subject matter for another article or two.
- Although challenging for pre-

paid, by capturing user information you at least have a chance of winning them back should they leave. One way to achieve this is through the use of rebate forms that require consumers to provide contact information.

Profit Killer #2 - Complicated Pricing

Nothing hurts profit like a couple of lengthy calls to customer care from an account returning a few dollars a month in margin. There's a direct relationship between price complexity and the number of calls to customer care. This doesn't mean creative service offerings aren't a good thing – they can attract customers who stay on your service longer. Just realize the additional handholding and overhead required if these offerings are not easily understood.

Carrier focus, or lack thereof, equals opportunity

Carriers continue to focus on postpaid subscribers, leaving much of the prepaid market to MVNOs. I doubt this will continue forever and advise anyone considering offering prepaid wireless to go for it before you find yourself competing with the carriers and other MNVOs for the same customer.

This is the second of a three part series on how to become an MVNO. There is more to come. This article, as well as Part I can be found on The Prepaid Press website, www.prepaid-press.com. Our series on MVNOs concludes next month with 'What's a MVNE, and what can it do for me?'

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